PEACE RIVER HYDRO PARTNERS

Site C Clean Energy Project
Acid Rock Drainage
and
Metal Leachate Management
2020 Annual Report

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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 2020 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, 2016a), which is included as Appendix E of the Construction Environmental Management Plan (CEMP; BC Hydro, 2016b). 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, 2020.

This report summarizes:

- 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 relocated surplus excavated material (RSEM) sediment pond dredgate and sludge removed from the mobile water treatment facility reactors and settling ponds (Section 2);
- Monitoring of surface water quality within the construction site (Section 3);
- Monitoring of groundwater quality and levels at RSEM Area R5A and R5B (Section 4);
- 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 5); and
- Conclusions and recommendations (Section 6).

Surface water quality monitoring for areas outside of PRHP's work areas, and in the Peace River, is undertaken by others on behalf of BC Hydro, and also 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 419,000 m^3 of bedrock was excavated in 2020. This included approximately 200,000 m^3 on the Left Bank, mostly from the Central Cofferdam, Diversion Tunnel Inlet Portal (DTIP) and Diversion Tunnel Outlet Portal (DTOP), and approximately 219,000 m^3 on the Right Bank, mostly from the Spillway Approach Channel and Dam and Core Buttress.

The material excavated in 2020 from the Left Bank was placed primarily in RSEM Area L5, which includes the L5 Extension and the RSEM Area L5 Starter Dyke. Relatively minor amounts were placed in L5 Garbage Creek and RSEM Area L6. All material excavated on the Right Bank in 2020 was placed in RSEM Area R5A.

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 2020, a total of 246 samples were collected for rinse pH analysis from various locations on the Left and Right Banks. Of these, 10% 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 identification of 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 Left and Right Banks.

Left Bank samples collected from exposed surfaces in AG material were identified in RSEM Area L5, the RSEM Area L5 Extension, the Central Cofferdam/Dam Core, the Left Bank Drainage Adit (LBDA), and the Left Bank Excavation (LBEX). Shotcrete has been applied to stabilize the steep benches excavated into the slopes above the portals, which serves to minimize contact with precipitation. AG material from the LBDA and Dam Core has been excavated and trucked to RSEM Area L5. A large section of RSEM Area L5 was covered with NPAG material in 2020 Q3 and Q4 and future placement of excavated PAG bedrock will be limited to smaller areas on the upper benches of the facility.

On the Right Bank, AG material was identified in the Approach Channel, RSEM Area R5A, and exposures within the RSEM Area R5B catchment. Portions of the AG bedrock exposed in the Approach Channel was excavated and placed in RSEM R5A, however, acidic exposures remain through much of the Approach Channel. A more extensive excavation is planned from the Approach Channel in 2021 that will remove AG material and expose unweathered surfaces. AG samples were scattered through several areas of RSEM Area R5A. Similar to RSEM Area L5, a major portion of RSEM Area R5A was covered with NPAG material in 2020 Q3 and Q4 and future placement of excavated PAG bedrock will be limited to upper benches in the southern portion of the facility. AG bedrock exposed in the RSEM Area R5B catchment are associated with natural bedrock exposures and inactive roads. The runoff from this area is collected in the R5B Sump, and treated, if necessary.

Surface Water Quality Monitoring

Surface water quality sampling was undertaken at a total of 61 stations in 2020, including 29 stations on the Left Bank and 32 stations on the Right Bank. Laboratory results for a total of 1,654 surface water quality samples obtained in 2020 from these stations are summarized in this report. 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, L6, R6 and R5B 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, Cd, Co, Cu and Zn are set out in Table 2 in the BC Hydro ARD/ML Management Plan (BC Hydro, 2016a). 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. The project-specific discharge limits for TSS, Cd, Cu and Zn are based on an assumed hardness of 50 mg/L as $CaCO_3$. The hardness of water discharged from the RSEM ponds, and in the Peace River is generally higher. Consequently, minor exceedances of discharge limits for these parameters do not necessarily reflect any meaningful effect on aquatic community health.

There were minor exceedances of water discharged from PAG-containing RSEM sediment ponds to the Peace River in 2020 as a result of snow melt and larger precipitation events. There were four of these events including: (i) a minor discharge of alkaline water from the

RSEM Area L5W pond on April 19th during a period of rapid snow melt; (ii) exceedances in discharge from the RSEM Area L5E, R5B and R6W following heavy rains in mid-June; (iii) exceedances in discharge from the RSEM Area L5E, R5A-B, R5B, and R6W ponds following very heavy rain in early July; and (iv) a one day exceedance in early November from the RSEM Area R6E pond discharge. These are discussed in detail in the Report.

Groundwater Monitoring

The RSEM Area R5A and R5B groundwater monitoring program that ran from 2016 September through 2020 July included quarterly monitoring of water quality and continuous monitoring of water levels. At each RSEM area, one upgradient well was installed to assess background conditions and three downgradient wells were installed to intersect potential seepage paths from the RSEM areas and monitor groundwater quality. All monitoring wells were screened in the sediments above the bedrock contact and were decommissioned September 23rd – 25th, 2020 by removing the surface monuments and sealing with bentonite.

Groundwater quality in the downgradient wells was evaluated with respect to compliance targets specified in the CEMP and the Groundwater Quality Mitigation Plan. In the event a compliance target was exceeded, remedial actions were triggered to ensure that groundwater seepage in these areas did not adversely affect Peace River water quality. Water level in the monitoring wells within the alluvial plain at both RSEMs closely reflected Peace River water level fluctuations during the program.

Groundwater quality in RSEM Area R5A groundwater wells suggested that PAG-contact seepage did not contribute to widespread degradation of groundwater quality adjacent to the facility during the monitoring period. Groundwater quality at two downgradient RSEM Area R5B groundwater wells were affected by seepage from PAG storage and remedial actions were undertaken to confirm that the seepage was of low risk to increase concentrations in the river above BC WQG.

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 exposure), 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.

Weathered PAG material was excavated or covered to minimize potential ARD/ML on both the Left and Right Banks. The large stockpile on the southeastern edge of the RSEM Area L5 that contributed to the RSEM Area L5 pond exceedances in June and July was graded and covered. Lower slopes of RSEM Area L5, L5 Extension and RSEM Area R5A were graded to design configuration with the placement of the final non-PAG cover layer, which has reduced the area of exposed PAG in both of these storage facilities. Portions of the AG bedrock exposed in the Approach Channel was excavated and placed in RSEM R5A in 2020, however, acidic exposures remain through much of the Approach Channel. A more extensive excavation is expected from the Approach Channel in 2021 that will remove AG material and reduce the exposure of weathered surfaces.

Water management is a secondary mitigation strategy. Non-contact run-off from above the project is diverted around the construction site. Contact water is managed so that as much as possible is retained within the site. Water that must be released is directed to RSEM sediment control ponds, from which it is discharged to the Peace River. AG bedrock exposed in the RSEM Area R5B catchment are associated with natural bedrock exposures and inactive roads. The runoff from exposures in this area and the Approach Channel will managed through storage in the newly constructed R5B Sump.

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. An MWTF was commissioned on the Right Bank near the west end of the Approach Channel in mid-2018. Water requiring treatment was transferred to a Pre-Treatment pond and treated by the MWTF prior to discharge via the RSEM Area R5B sediment pond. In May 2020, the MWTF was relocated to the RSEM R6 Area and discharge directed to the RSEM R6W sediment pond.

PAG-contact water from RSEM Area L6 was managed effectively in 2020, by trucking to the MWTF or retaining it within the site and avoiding discharge. Effective mitigation of ARD/ML and preventing exceedance of the project-specific discharge limits during snowmelt and storm events will require the continued excavation or covering of weathered PAG material, and adequate water retention capacity.

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Acronyms

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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
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
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 2020 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 (Revision 5.2, dated July 26, 2016; BC Hydro, 2016a) of BC Hydro's Construction Environmental Management Plan ('CEMP', Rev. 4, BC Hydro, 2016b). 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, since the last revision of the CEMP.

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, 2020.

The ARD/ML monitoring program includes five 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).
- Groundwater monitoring at Relocated Surplus Excavated Material (RSEM) areas R5A and R5B (Section 4).
- 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 5).
- Identifying relevant conclusions and recommendations (Section 6).

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 2020 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 does not include the results of monitoring undertaken in the Peace River, including monitoring in the Initial Dilution Zone (IDZ) downstream of RSEM sediment pond discharges to the Peace River, or surface water quality monitoring that is undertaken for purposes other than ARD/ML management. The results of monitoring in the Peace River may be noted or summarized only to provide context for exceedance of discharge limits and estimated metal loading from RSEM area sediment ponds. 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, the results of surface water quality monitoring are discussed in Section 3, and the results of groundwater monitoring in Section 4, as noted above. In addition, this report includes in Section 5.

- 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 5.1).
- The status in 2020 of the onset of ARD/ML (Section 5.2).
- 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 5.3).

- A comparison of measured and predicted metal concentrations at RSEM Area Pond discharges and an evaluation of ML/ARD risk levels (Section 5.4)
- 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 5.5).
- 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 5.6).

Section 6 summarizes conclusions related to the geochemical monitoring program (Section 6.1), the water quality monitoring program (Section 6.2), the groundwater monitoring program (Section 6.3) and mitigation (Section 6.4). Recommendations are outlined in Section 6.5.

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 freeze over. Intermittent thaws may occur (usually only lasting a few days) that diminish the snowpack.
- Spring – snow and ice melt from roughly to mid-March to mid-April (the timing and duration vary from year to year). This time of year is normally relatively dry.
- Summer – infrequent, relatively intense rainstorms occur, contrasting with otherwise warm and dry weather. These relatively large rain events account for a large proportion of annual precipitation.
- 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.

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 1-5).

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 2020 are presented in Table 1-1 below. Daily maximum and minimum temperature values for 2020 are also shown in Figure 1-1.

Table 1-1:
Comparison of 2019 Average Min. and Max. Temperatures at Site C Weather Station to Min. and Max. Temperatures at Fort St. John Airport (FSJA) Weather Station and Canadian Climate Normals at FSJA

	2020 Daily Average Temperature at Site C Station (°C)		2020 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	-12.1	-18.9	-11.5	-19.4	-8.7	-16.9
February	-1.6	-10.7	-2.7	-11.5	-5.1	-14.0
March	-2.3	-11.2	-3.7	-14.0	0.1	-9.2
April	8.5	-1.9	7.6	-4.1	9.1	-1.3
May	15.6	5.5	15.5	3.6	15.5	4.0
June	19.3	10.7	19.2	9.0	19.6	8.6
July	21.8	12.2	21.2	10.8	21.7	10.7
August	21.6	10.7	20.1	8.8	20.5	9.2
September	17.1	6.9	16.3	5.5	15.2	4.9
October	7.1	-1.6	5.7	-3.5	7.7	-0.6
November	-1.6	-9.4	-2.2	-10.9	-2.9	-10.2
December	-2.7	-9.1	-3.5	-10.3	-7.4	-15.3

In general, monthly average temperatures are a bit warmer at Site C than at FSJA. In 2020, monthly maximum and minimum temperatures were generally close to the long-term average, with no periods that were significantly warmer or colder. January, March, April and October were a bit colder at FSJA than the long-term average. February, September and December were a bit warmer.

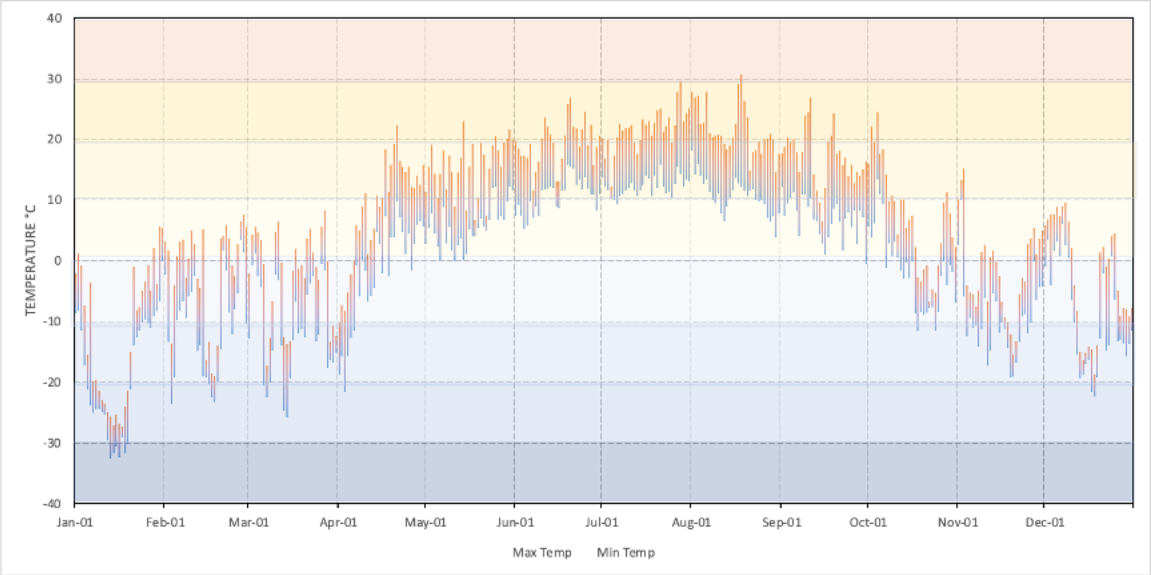


Figure 1-1: Daily Temperature Range at Site C – 2020

Daily temperature ranges indicate that there was a very cold period in the first half of January. The remainder of the winter period was characterized by relatively warm weather alternating with short periods of much colder weather. Temperatures did not begin to exceed the freezing level until the second week of April and did not drop consistently below freezing until mid-October. This second half of October was relatively warm (above freezing), and there was another warm period in early December.

1.3.2 Precipitation

Precipitation affected the timing and magnitude of surface water runoff that rinsed ARD/ML products from acid-generating rock in 2020. 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 1-2 below. Snow accumulated during freezing periods and melted during brief autumn and winter thaws and spring freshet when maximum daily temperatures were above 0 ºC.

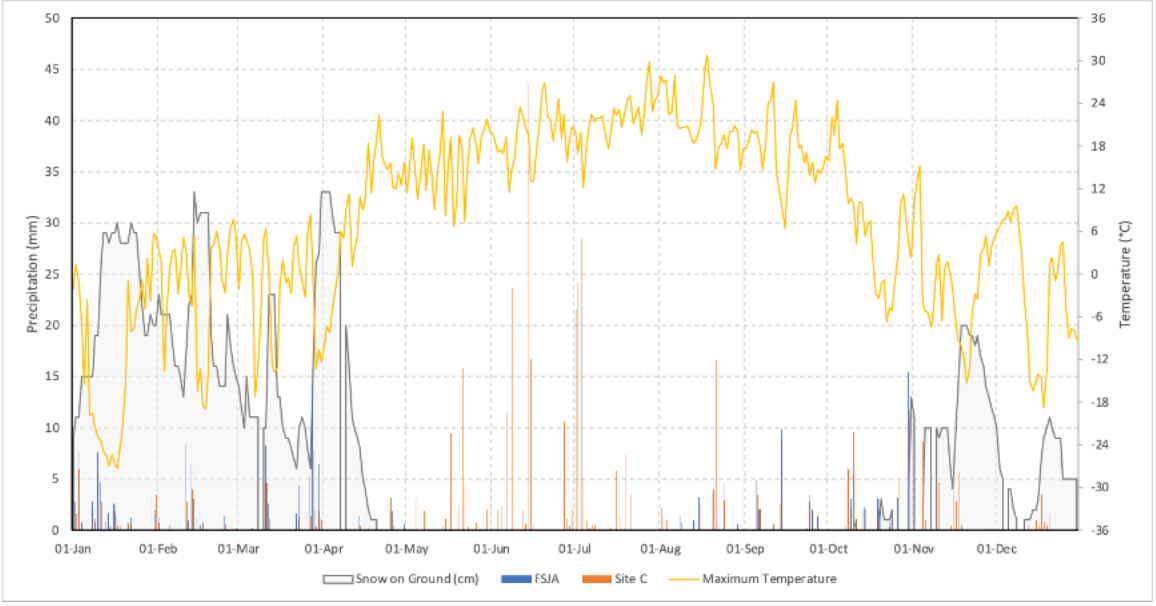


Figure 1-2: Maximum Temperature at Site C; Daily Precipitation – FSJAand Site C; and Snow on Ground at FSJA - 2020

There was a snowpack from the beginning of the year through to mid-April. The snowpack varied from about roughly 10-30 cm through the winter and reached a maximum depth of just over 30 cm in early April. The snowpack declined very rapidly in the second week of April.

There were several periods of heavy rain (>10 mm) from mid-May through early July, and then again in mid-August and late October. These larger events are noteworthy because they 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 the rainfall occurs. Events in the open water season in 2020 (as measured at the Site C weather station) included:

- 15.8 mm of rain on May 21.
- 11.5 mm on June 6 and 23.7 mm on June 8.
- 43.5 mm on June 14, and 16.7 mm on June 15.
- 10.6 mm on June 27.
- 21.5 mm on July 1, 24.2 mm on July 2 and 28.5 mm on July 3.
- 16.6 mm on August 21.
- 11.7 mm on October 30.

There were minor exceedances of end-of-pipe limits in discharge from RSEM ponds on from June 15-24, and from July 5-9, and again on November 3 (these are discussed in more detail in Section 5.4 below).

Monthly precipitation totals recorded at the FSJA and Site C weather stations are shown in Figure 1-3 below, along with the FSJA long-term monthly average precipitation from the 1981-2010 Canadian Climate Normals. Reliable measurements of precipitation were only available from the FSJA station from January through April, September and October. Data from these months is shown in the figure, and no data is shown for the remaining months (May through August, November and December).

Total monthly precipitation measured at Site C and FSJA in 2020 are generally similar to the long-term average in most months except:

- April and August, which were dry; and
- June and July, which were wetter than normal.

Overall, the total precipitation measured at Site C (458.3 mm) was close to the FSJA long-term average (445 mm).

Measurements of precipitation vary between the FSJA and Site C stations. The discrepancy may be due to three potential factors:

- The difference in elevation between the two sites. The higher elevation of the FSJA is expected to generally result in greater 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 FJSA as compared with Site C. Significantly higher precipitation is evident at both FSJA and at Site C 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.

There was a significant discrepancy in the measurements from the two stations in late March. Temperatures were warm during a period of heavy precipitation on March 27th (1.4 mm at Site C versus 4.8 mm at FSJA) and 28th (7.8 mm at Site C versus 14.2 at FJSA), for example. It is possible that this precipitation fell mostly as snow at the FSJA station, and rain at the Site C station, or the differences may be attributable to methodology noted above, or both.

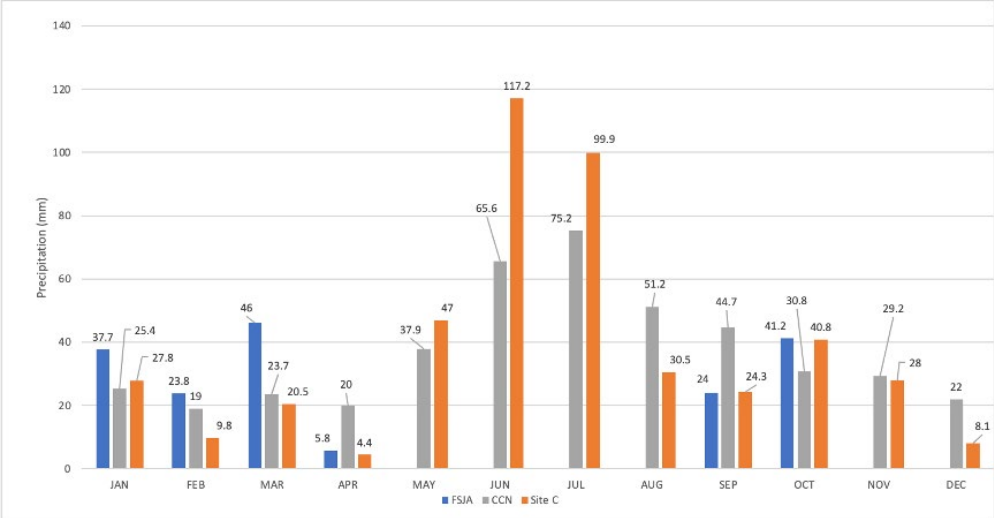


Figure 1-3: Monthly Precipitation at FSJA, Canadian Climate Normals (CCN) for FSJA and Monthly Precipitation at Site C – 2020 (Reliable data is not available from the FJSA station for May, June, July, August, November or December)

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 1-4 below (daily data is not tabulated in this report). The discharge values varied significantly through the year. More specifically:

- The flow in the Peace River varied between 1,000 m^3/s and 2,000 m^3/s from the beginning of the year until the middle of June (data is not available from May 17-25 inclusive).
- There were large spikes of short duration in discharge in mid-June and early July, which coincide with the large precipitation events that occurred at those times.
- The discharge remained at well above 2,000 m^3/s through July and August.
- The discharge decreased to roughly 1,000 m^3/s, this decrease in discharge was deliberately implemented to reduce flows when the river was diverted through the diversion tunnels at Site C.
- The flow rate then gradually increased to higher, but variable levels, between 1,000 m^3/s and 2,000 m^3/s for the remainder of the year.

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. (Ecofish, 2017a, 2017b) on behalf of BC Hydro. Water quality monitoring in the Peace River is also undertaken by Ecofish and reported monthly.

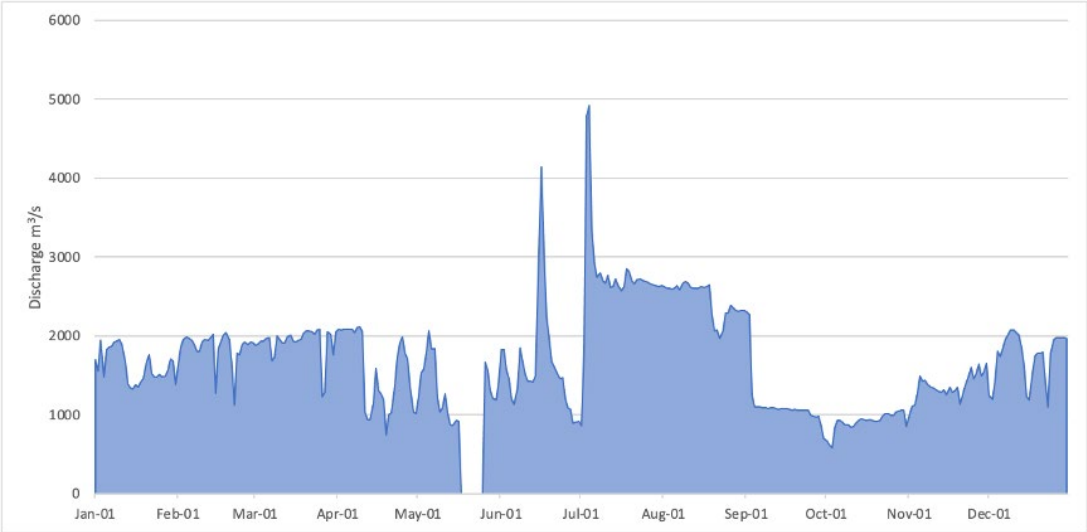


Figure 1-4: Average Daily Flow Rate at Peace River Near Taylor, Station 07FD002 (from Water Survey of Canada, 2020)

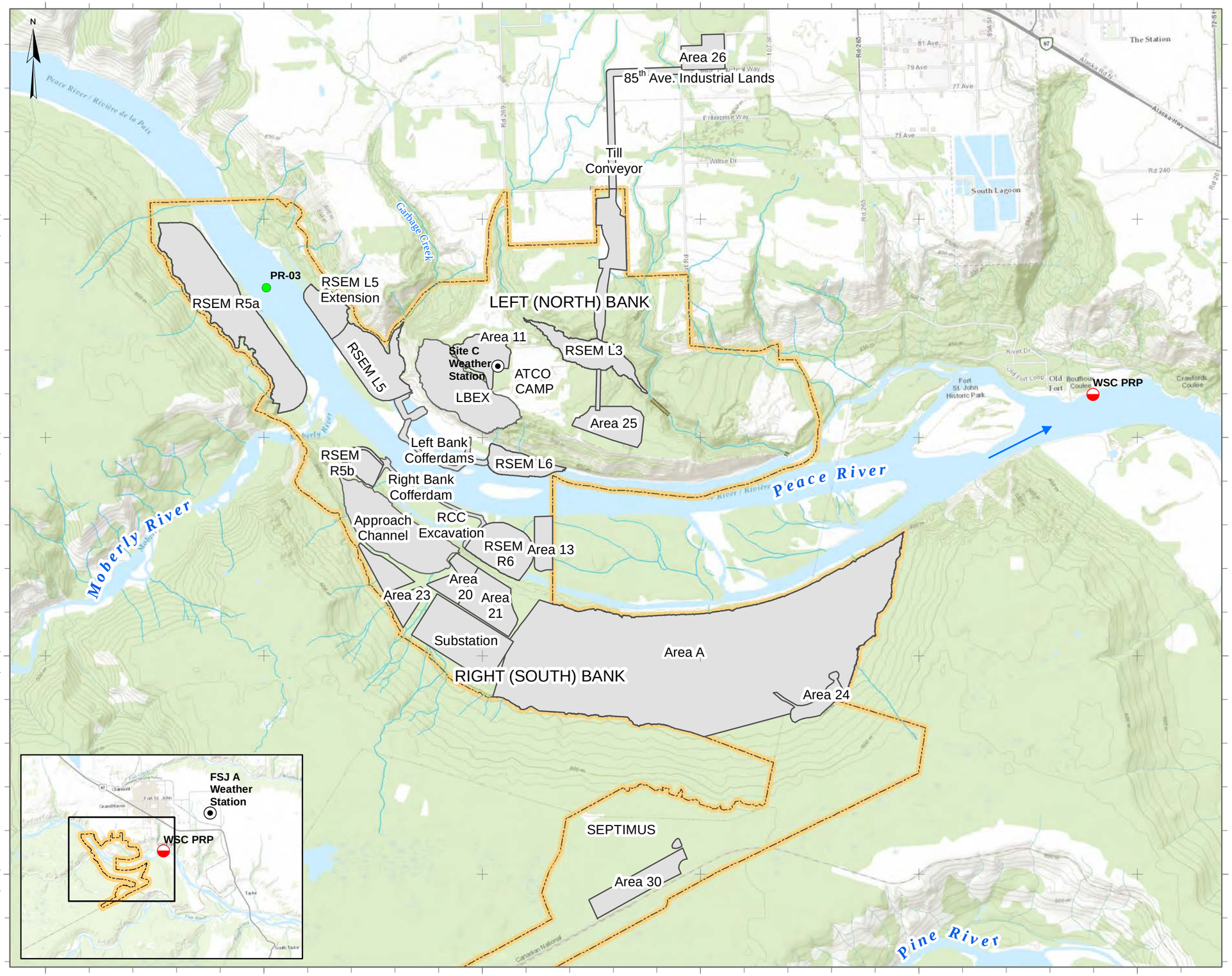
1.4 Construction Activity

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 will be dewatered, and the dam core will be placed and compacted. Once the dam core is in place, 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 2020 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 1-5.



Legend

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

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DRAWN BY: AL **VERSION:** 1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2020 Annual Report

TITLE:

Site Map of Site C Main Civil Works Area

PROJECT #: A416-1 *FIGURE:* 1-5

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

Path: *P:\@Drafting\SiteC\Drafting Figures\MXD\2020_Q4_Annual_Report\Fig 1_5_Overall_SiteMap_20200730.mxd*

The main excavations on the Left Bank in 2020 were from the Diversion Tunnels and behind the Cofferdam. The excavated material was placed in the RSEM Area L5, including the L5 Extension, or in the Dam Core.

On the Right Bank, a large volume of PAG material was excavated from the Dam and Core Buttress and Core Trench, and from the Approach Channel and Spillway. This material was all placed in RSEM Area R5A.

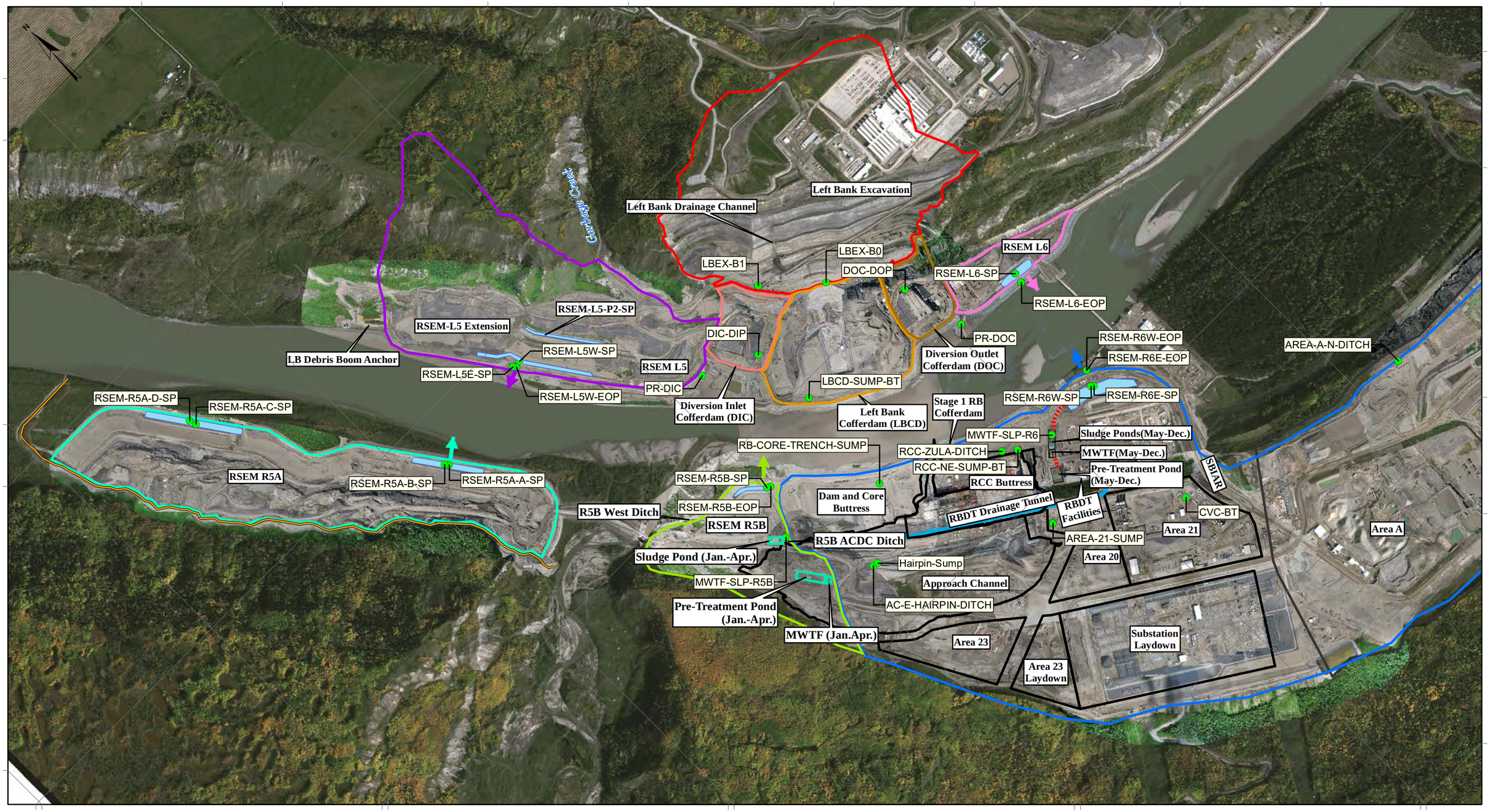
1.5 Water Management

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 1-6). 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. Source and destination locations for water movement are indicated in Figure 1-7.

1.5.1 Left Bank

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

- The combined RSEM Area L5 and LBEX catchments, from which contact water is conveyed to the RSEM Area L5 sediment control ponds. The RSEM Area L5 Extension is located within the RSEM Area L5 catchment. The Phase 1 RSEM Area L5 sediment control ponds were backfilled in 2020 Q3 and water management in this area has transitioned to the RSEM Area L5 Phase 2 ponds that are located at higher elevation within the RSEM;
- The Left Bank Cofferdam area, in which surface water runoff and cement contact water are collected in sumps, treated for pH and directed to the RSEM Area L5 sediment control pond; and
- The small RSEM Area L6, from which contact water is generally conveyed to the RSEM Area L6 sediment pond.



Legend

- Water Quality Monitoring Location
- Water Conveyance Pipe or Ditch
- Non-Contact Diversion
- RSEM-L5 Catchment
- RSEM-L6 Catchment
- LBCD Catchment
- DOC Catchment
- DIC Catchment
- Left Bank Excavation
- RSEM-R5A Catchment
- RSEM-R5B Catchment
- RSEM-R6 Catchment
- Sediment Pond

Note: Site C aerial imagery collected between September 2019 - June 2020

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

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Meters

CLIENT:
PEACE RIVER HYDRO PARTNERS
LORAX ENVIRONMENTAL

PROJECT:
Site C Clean Energy Project ARD/ML 2020 Annual Report

TITLE: RSEM Sediment Control Pond Catchments, Water Management Facilities and General Area Designations prior to River Diversion in October (Jan. – Sep.)

PROJECT #: A416-1 *FIGURE:* 1-6

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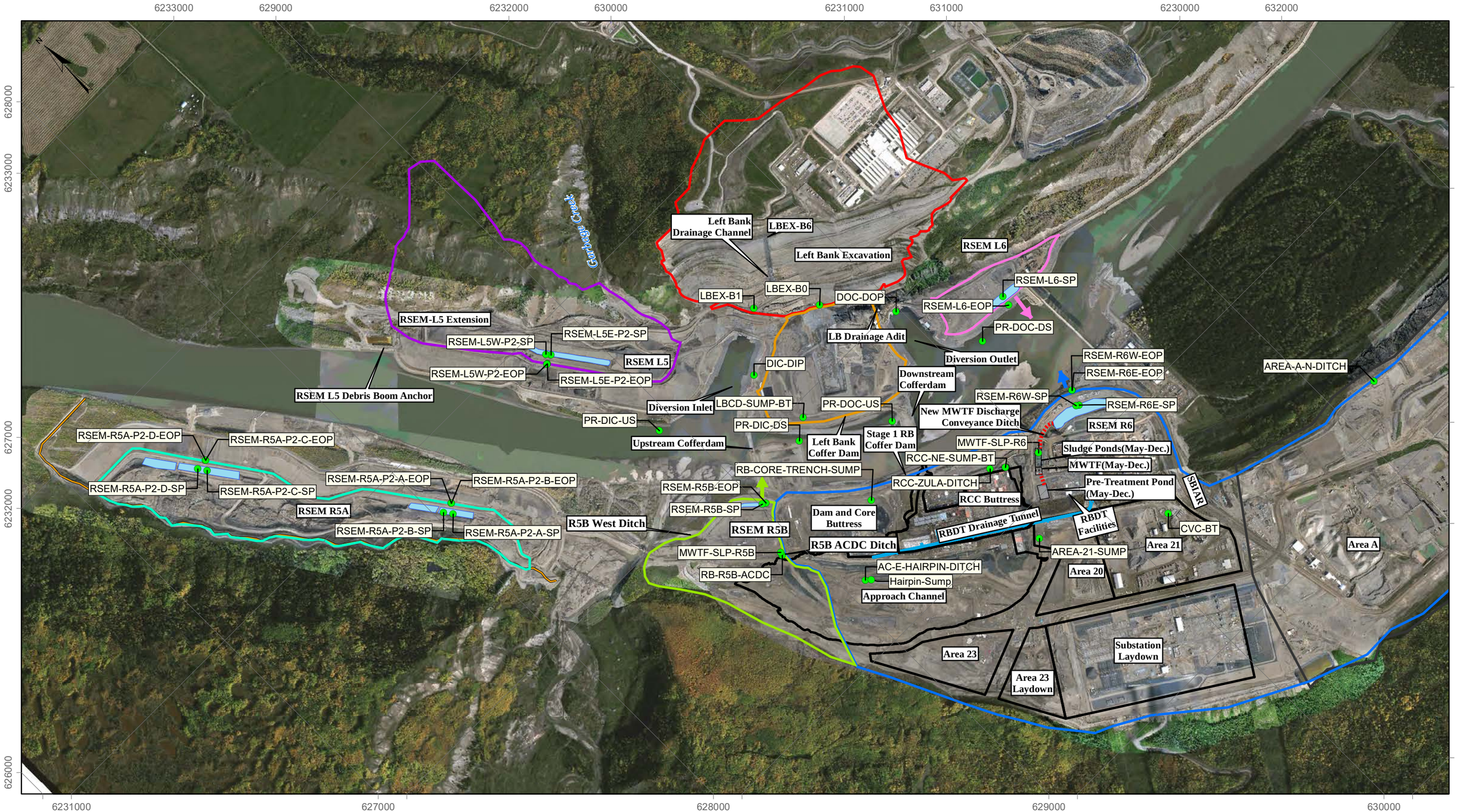

Legend

- Water Quality Sampling Location
- Water Conveyance Pipe
- Non-Contact Diversion
- RSEM-L5-P2 Catchment
- RSEM-L6 Catchment
- LBCD Catchment
- Left Bank Excavation
- RSEM-R5A-P2 Catchment
- RSEM-R5B Catchment
- RSEM-R6 Catchment
- Sediment Pond

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PEACE RIVER HYDRO PARTNERS
LORAX ENVIRONMENTAL

PROJECT:
Site C Clean Energy Project ARDML 2020 Annual Report

TITLE: RSEM Sediment Control Pond Catchments, Water Management Facilities and General Area Designations after River Diversion in October (Oct. – Dec)

PROJECT #: A416-1
FIGURE: 1-7

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1.5.2 Right Bank

There are four catchment areas within the construction site on the Right Bank:

- Area A from which, contact water is directed to North ditch and transferred to R6 East or R6 West sediment control ponds;
- RSEM Area R6 (which includes Area 20/21, the Right Bank Drainage Tunnel (RBDT) and associated facilities to the south, and Roller Compacted Concrete (RCC) Buttress Excavation to the west, adjacent to the future power house), as well as Area 23 and the Approach Channel, from which contact water is conveyed to the MWTF, and treated water is discharged from the RSEM Area R6 sediment ponds;
- RSEM Area R5B (which included the Approach Channel until contact water from this area was redirected after the MWTF was relocated to the RSEM-R6 catchment in late May);
- RSEM Area R5A (which includes the area where the majority of excavated PAG material is being deposited on the west side of the Moberly River), from which contact water is conveyed to the RSEM Area R5A sediment ponds. Water management transitioned in 2020 Q3 from Phase 1 ponds to the Phase 2 ponds that are located at higher elevation within the RSEM area.

The RSEM Area R5B sediment became obsolete after the MWTF was relocated in late May 2020 and will be decommissioned in 2021. A R5B sump is being constructed to store water from the former RSEM R5B sediment pond catchment. The R5B sump water will be pumped to the MWTF or RSEM R6 sediment pond.

1.6 RSEM Area Sediment Pond Discharge

1.6.1 Left Bank

A total of just over 67,000 m^3 of water was discharged from the Left Bank in 2020. The majority of this was from the RSEM Area L5E sediment control pond from May through July. The total volumes discharged from the Left Bank ponds are shown in Table 1-2 below, and the daily volumes for each pond are presented in Appendix 1-A.

Table 1-2:
Total Volume of PAG Contact Water Discharged from the Left Bank - 2020

Month	RSEM L5E	RSEM L5W	RSEM L6
January	0	0	0
February	0	0	0
March	0	0	0
April	2,587	85	0
May	20,413	0	0
June	13,032	0	2,642
July	25,917	1,389	0
August	173	0	0
September	1,037	0	0
October	0	0	0
November	0	0	0
December	0	0	0
TOTAL	**63,159**	**1,389**	**2,901**

RSEM L5E discharged daily from April through September, with peak discharge (greater than 10 L/s) occurring during major rain events in mid-May, mid-June, early July and late July. The daily discharge from RSEM L5E is shown in Figure 1-8 below.

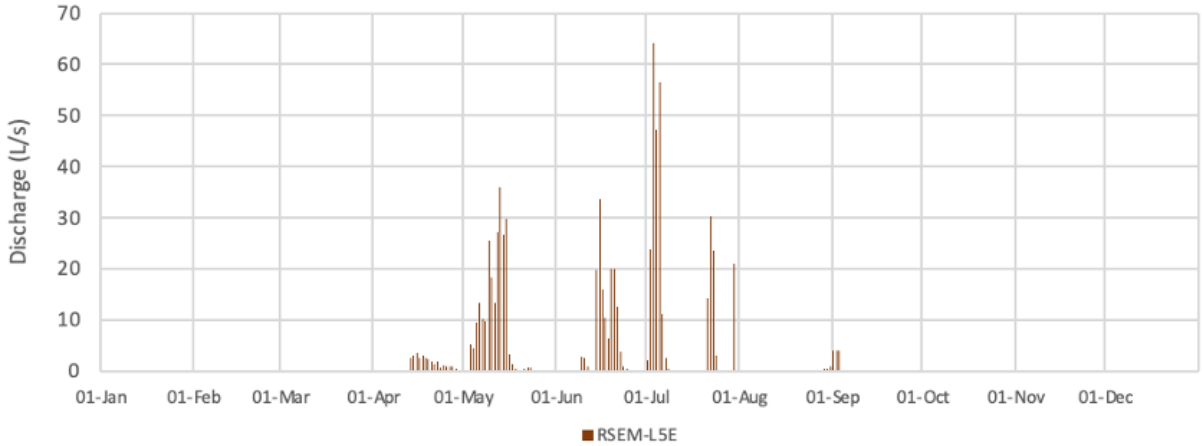


Figure 1-8: Average Daily Discharge from RSEM Area L5 East Sediment Control Pond (RSEM L5E) – 2020

1.6.2 Right Bank

A total volume of just over 700,000 m^3 of water was discharged from the Right Bank in 2020. This included roughly 346,000 m^3 from the RSEM Area R6 East Sediment Control Pond and roughly 271,000 m^3 from the RSEM Area R6 West Sediment Control Pond (RSEM R6E and RSEM R6W), and just over 86,000 m^3 from the RSEM Area R5B Sediment Control Pond (RSEM R5B). A relatively small volume (a little over 2,500 m^3) was also discharged from the RSEM Area R5A Sediment Control Ponds (RSEM R5A Ponds A to C) for a few days following large rain events in June and July. The total volumes discharged from the sediment control ponds on the Right Bank in 2020 are shown in Table 1-3 below. Daily volumes for each pond are presented in Appendix 1-A.

Table 1-3:
Total Volume of PAG Contact Water Discharged from Right Bank - 2020

Month	RSEM R5A	RSEM R5B	RSEM R6E	RSEM R6W
January	0	8,543	28,260	0
February	0	14,475	9,201	0
March	0	17,763	9,030	0
April	0	16,356	17,139	805
May	0	391	7,255	28,572
June	257	7,912	39,655	51,630
July	2,275	19,086	99,710	46,334
August	0	1,850	33,031	37,134
September	0	52	27,654	35,729
October	0	0	29,593	32,214
November	0	0	27,821	17,490
December	0	0	17,964	21,701
TOTAL	**2,533**	**86,428**	**346,313**	**271,610**

The individual and total average daily discharge rates to the Peace River from the Right Bank RSEM R5A, R5B, R6E and R6W ponds in 2020 are shown in Figure 1-9. Discharge from RSEM R5B was generally continuous until the end of August, at which point all contact water from the former RSEM-R5B catchment area was diverted to the RSEM-R6 Sediment Control Ponds. The daily average discharge rates for RSEM R5B are shown in Figure 1-10 below.

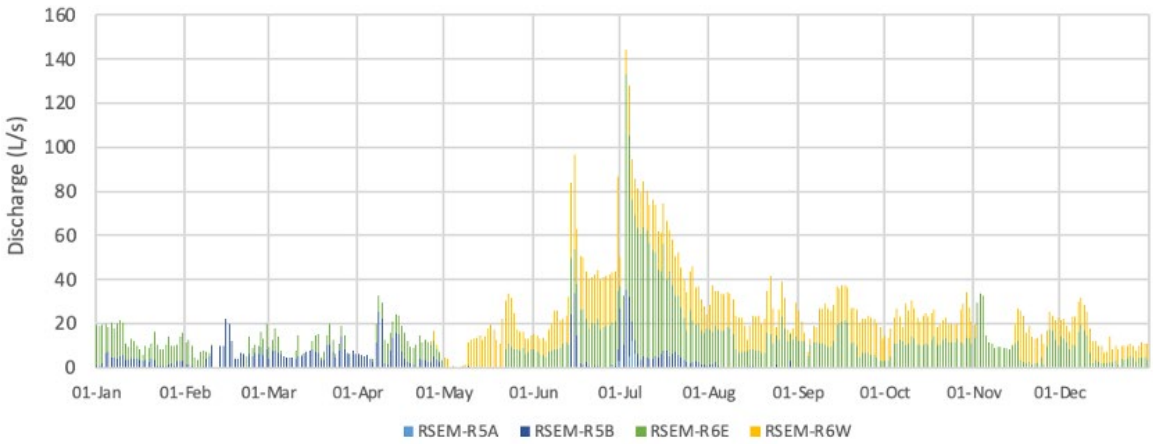


Figure 1-9: Total of Average Daily Discharge Rates from Right Bank Sediment Control Ponds – 2020

Note: Graph shows combined flow from RSEM R5A, R5B, R6W and R6E (stacked bars) on days when there was discharge from multiple ponds.

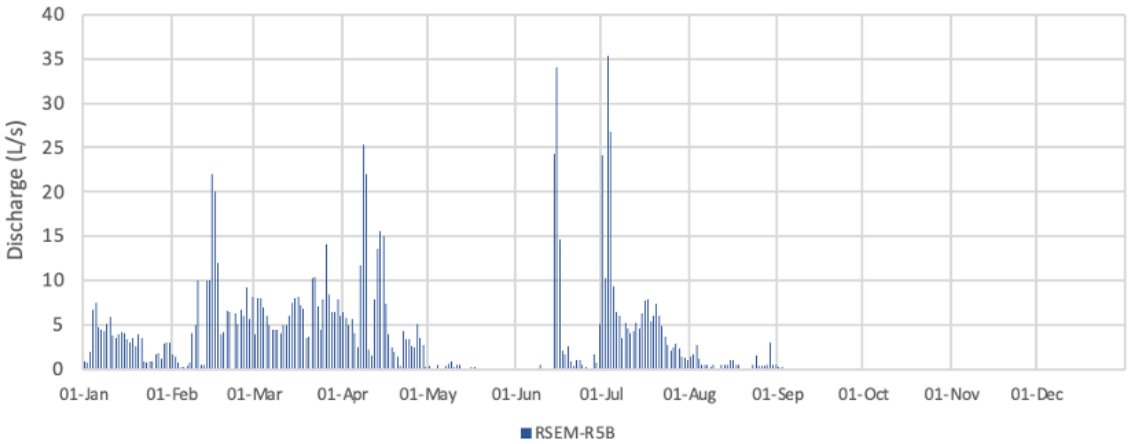
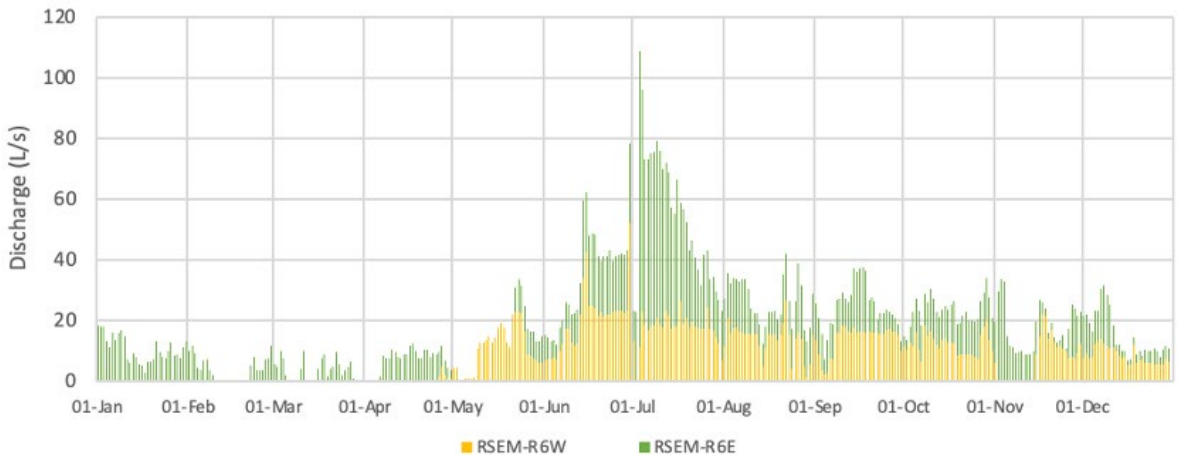


Figure 1-10: Discharge from RSEM-R5B Sediment Control Pond – 2020

A total of over 617,000 m^3 of water was discharged from the RSEM R6E and R6W ponds in 2020. Figure 1-11 below shows daily average total discharge rates from the ponds. Relatively small volumes of water were discharged from RSEM R6E during the winter months. There was generally continuous discharge from the RSEM-R6W pond from the time the MWTF was relocated at the end of May. There as also some discharge from the RSEM-R6E pond from mid-May. From mid-June 2020, the combined discharge from the RSEM R6E and R6W ponds was generally above 20 L/s until early November, and combined peak flows exceeded 40 L/s following the large storm events in mid-June and for approximately two weeks after the major rain event in early July.



Note: Graph shows combined flow from R6W above R6E as stacked bars on days when there was discharge from both.

Figure 1-11: Discharge from RSEM-R6 Sediment Control Ponds – 2020

1.7 Data Management

A large volume of monitoring data has been compiled since the ARD/ML monitoring program was initiated in autumn 2016. Data from the Bureau Veritas (BV, formerly Maxxam Analytics) laboratory in Burnaby, B.C. is 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. 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. A customized data entry program called CERES, developed by Lorax using Microsoft Access software, allows multiple PRHP staff to simultaneously enter field water quality, flow measurements and sample metadata while scrutinizing the data for potential transcriptions errors. The CERES data is further imported into EQWin to create 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
HYDRO PARTNERS

2. PAG Bedrock Monitoring

2.1 Purpose and Objectives

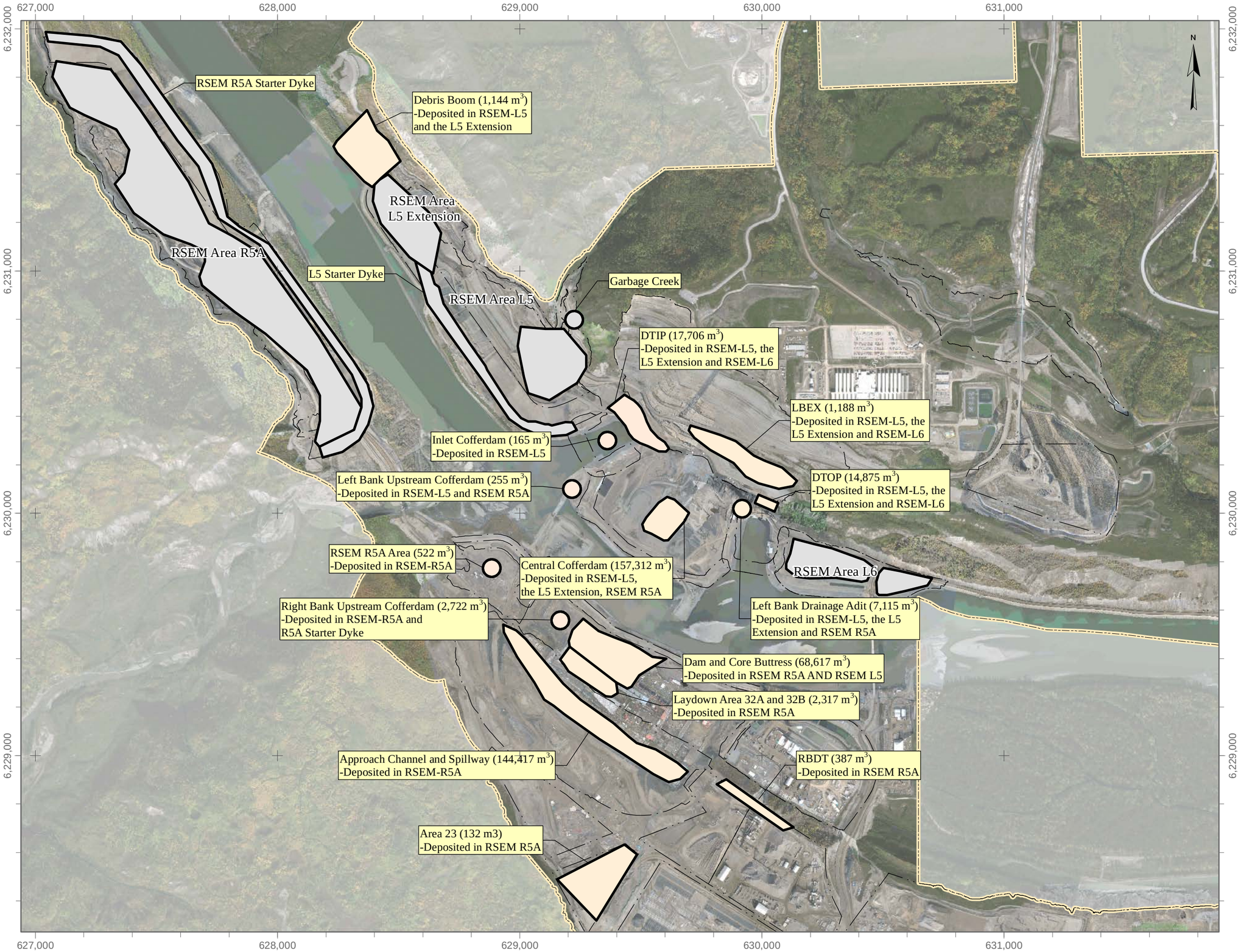
PRHP is required to monitor AG and PAG rock exposures and excavations in areas affected by work undertaken as part of the Main Civil Works Contract in accordance with the BC Hydro and PRHP Acid Rock Drainage and Metal Leaching Management Plans (Appendix E of the CEMP; BC Hydro, 2016a and Appendix A of 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 2020 is included in Section 2.2.

2.2 Material Balance

Bedrock material excavation and disposal was tracked throughout 2020. A total of 418,870 m^3 was excavated in 2020. This included 199,800 m^3 on the Left Bank, mostly from the Central Cofferdam, and 219,070 m^3 on the Right Bank, mostly from the Approach Channel and Spillway and the Dam and Core Buttress and Core Trench. Most of the material excavated on the Left Bank was placed in RSEM Area L5 and the RSEM Area L5 Extension. On the Right Bank, most material was placed in RSEM Area R5A and the RSEM Area R5A Stater Dyke. In general, material excavated on the Left and Right Banks is deposited on the same bank on which excavation occurs; however, once the river was diverted through the tunnels and a section of the river was dewatered some material was transported between banks. The locations of site facilities where excavation and monitoring have occurred are illustrated in Figure 2-1.



LEGEND

- Excavation Area
- Deposition Area

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

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PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2020 Annual Report

TITLE: Site Facility Layout Map Showing Excavations and Deposition Areas

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

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2.2.1 Left Bank

The largest excavations on the Left Bank in 2020 occurred as a result of construction activities around the Central Cofferdam. In 2020, 157,352 m^3 was excavated from the Central Cofferdam (Table 2-1). Excavation in the Central Cofferdam occurred throughout 2020, with the largest volumes excavated in January through March (Figure 2-2).

PAG bedrock was also excavated from a number of other locations on the Left Bank. These included the Diversion Tunnel Inlet Portal (DTIP; 17,706 m^3), Diversion Tunnel Outlet Portal (DTOP; 14,875 m^3), the Left Bank Drainage Adit (7,115 m^3), Left Bank Excavation (LBEX; 1,188 m^3), the Left Bank Debris Boom Anchor (1,144 m^3), the Left Bank Upstream Cofferdam (255 m^3), and the Inlet Cofferdam (165 m^3). The Left Bank Debris Boom Anchor area is located outside and adjacent to the western boundary of Main Civil Works RSEM Area L5 Extension (Figure 1-6).

In total, 203,407 m^3 of PAG material was stockpiled on the Left Bank in 2020. The majority of the PAG material was placed in RSEM Area L5 and the RSEM Area L5 Extension. Relatively minor amounts were placed in L5 Garbage Creek, the RSEM Area L5 Starter Dyke, and RSEM Area L6. At the end of the year, RSEM Area L5 contained 1,009,108 m^3, the RSEM Area L5 Extension contained 495,240 m^3, L5 Garbage Creek contained 24,240 m^3, RSEM Area L6 contained 64,345 m^3, and the RSEM Area L5 Starter Dyke contained 4,869 m^3 (Table 2-2; Figure 2-3). No material was added to the Left Bank Dam Core stockpile in 2020. There is 12,345 m^3 of PAG material remaining at this location.

Table 2-1:
Summary of excavated PAG volumes on the Left Bank in 2020

Excavation Site	Material Excavated (m^3)				
	Q1	Q2	Q3	Q4	Total
Diversion Tunnel Inlet Portal (DTIP)	4,280	13,381	45	0	17,706
Diversion Tunnel Outlet Portal (DTOP)	7,242	7,483	150	0	14,875
Left Bank Excavation (LBEX)	240	465	483	0	1,188
Central Cofferdam	130,670	1,962	11,025	13,695	157,352
Inlet Cofferdam	0	0	165	0	165
Left Bank Drainage Adit	975	285	3,060	2,795	7,115
Left Bank Debris Boom Anchor	0	1,144	0	0	1,144
Left Bank Upstream Cofferdam	0	0	0	255	255
Total	*143,407*	*24,720*	*14,928*	*16,745*	*199,800*

Note: Due to the frequency of data tabulation, "Q1" includes volumes excavated from January 5 to March 28, 2020, "Q2" includes volumes excavated from March 29 to June 27, 2020, "Q3" includes volumes excavated from June 28 to October 3, 2020, and "Q4" includes volumes excavated from October 4, 2020 to January 2, 2021.

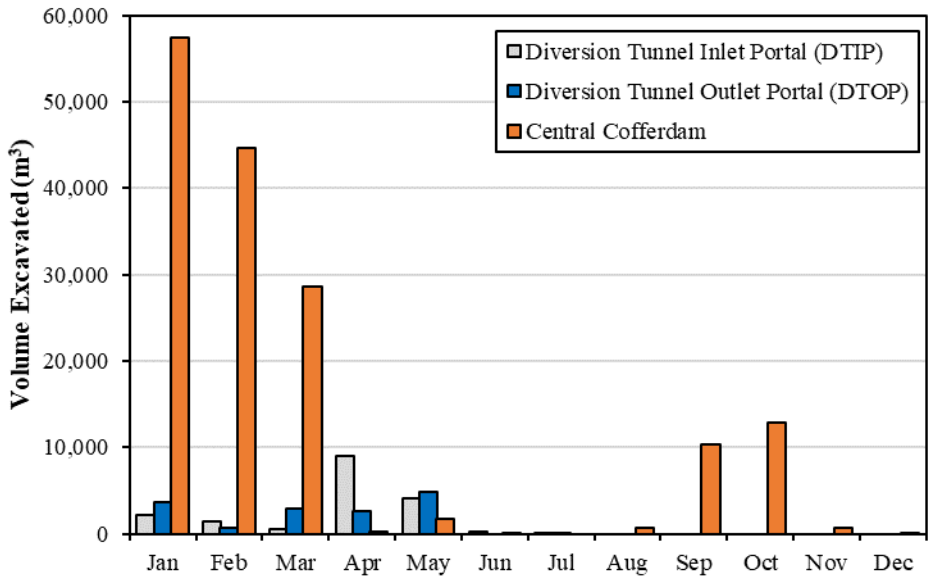


Figure 2-2: Overview of volumes excavated on the Left Bank in 2020 (the relatively minor volumes excavated from the LBEX (February to August – 1,188 m^3), the Left Bank Drainage Adit (February to December – 7,115 m^3), the Left Bank Debris Boom Anchor (May – 1,144 m^3), the Left Bank Upstream Cofferdam (October – 255 m^3), and the Inlet Cofferdam (August to September – 165 m^3) are not shown).

Table 2-2:
Cumulative volume of PAG material in Left Bank stockpiles at the end of each quarter in 2020

Stockpile	Cumulative Volume Stockpiled (m^3)			
	Q1	Q2	Q3	Q4
RSEM Area L5	957,898	979,417	989,341	1,009,108
RSEM Area L5 Extension	491,334	494,460	494,595	495,240
RSEM Area L6	64,345	64,345	64,345	64,345
L5 Garbage Creek	24,120	24,120	24,120	24,240
Left Bank Dam Core	12,345	12,345	12,345	12,345
RSEM Area L5 Starter Dyke	0	0	4,869	4,869
Cumulative total	*1,550,042*	*1,574,687*	*1,589,615*	*1,610,147*

Note: Due to the frequency of data tabulation, "Q1" includes volumes excavated from January 5 to March 28, 2020, "Q2" includes volumes excavated from March 29 to June 27, 2020, "Q3" includes volumes excavated from June 28 to October 3, 2020, and "Q4" includes volumes excavated from October 4, 2020 to January 2, 2021.

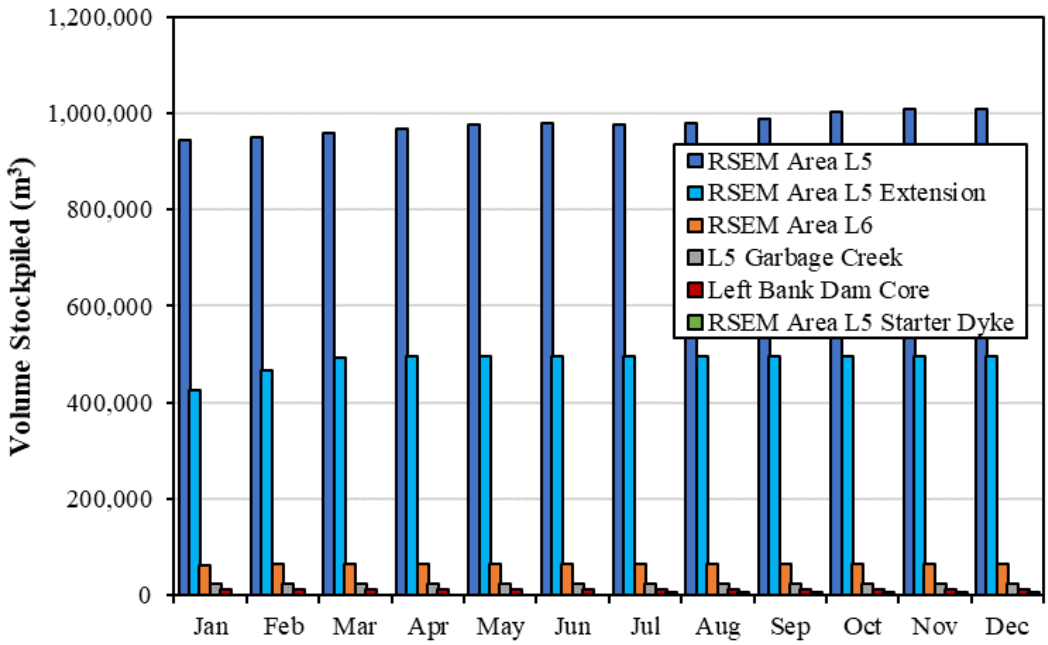


Figure 2-3: Overview of cumulative PAG material volumes stored on the Left Bank through 2020.

2.2.2 Right Bank

Excavations on the Right Bank of the Site C Project during 2020 amounted to a total of 219,158 m^3 of PAG bedrock. Most of this material was produced from excavations in the Approach Channel and Spillway (144,417 m^3) and Dam and Core Buttress and Core Trench (68,617 m^3) (Table 2-3). The remaining volume was excavated from the Right Bank Upstream Cofferdam (2,722 m^3), Laydown Areas 32A and 32B (2,361 m^3), RSEM Area R5B (522 m^3), the Right Bank Drainage Tunnel (RBDT; 387 m^3), and Area 23 (132 m^3). An overview of the PAG material movement from these locations is given in Figure 2-4.

Most of the material excavated on the Right Bank was deposited in RSEM Area R5A which, at the end of 2020, contained 5,456,423 m^3 of PAG rock (Table 2-4; Figure 2-5). Material deposition at the RSEM Area R5A Starter Dyke commenced in Q2 2020, and this area contained 57,232 m^3 by end of year. The PAG material previously deposited in RSEM Area R5B remains covered by NPAG material. No additional PAG material was placed at this location in 2020.

Table 2-3:
Summary of excavated PAG volumes on the Right Bank in 2020

Excavation Site	Material Excavated (m^3)				
	Q1	Q2	Q3	Q4	Total
Dam and Core Buttress (including Core Trench)	45	1,584	30,829	36,159	68,617
Approach Channel and Spillway	38,892	12,858	92,208	459	144,417
Right Bank Drainage Tunnel (RBDT)	120	0	0	267	387
RSEM Area R5B	0	0	60	462	522
Laydown Area 32A and 32B	0	0	2,361	0	2,361
Area 23	0	0	0	132	132
Right Bank Upstream Cofferdam	0	0	2,722	0	2,722
Total	*39,057*	*14,442*	*128,180*	*37,391*	*219,158*

Note: Due to the frequency of data tabulation, "Q1" includes volumes excavated from January 5 to March 28, 2020, "Q2" includes volumes excavated from March 29 to June 27, 2020, "Q3" includes volumes excavated from June 28 to October 3, 2020, and "Q4" includes volumes excavated from October 4, 2020 to January 2, 2021.

Table 2-4:
Summary of cumulative volume of PAG material in the Right Bank stockpiles at the end of each month in 2020

Stockpile	Cumulative Volume Stockpiled (m3)			
	Q1	Q2	Q3	Q4
RSEM Area R5A	5,337,311	5,341,553	5,422,731	5,456,423
RSEM Area R5A Starter Dyke	0	10,230	57,232	57,232
RSEM Area R5B	363,618	363,618	363,618	363,618
Cumulative total	*5,700,929*	*5,715,401*	*5,843,581*	*5,877,273*

Note: Due to the frequency of data tabulation, "Q1" includes volumes excavated from January 5 to March 28, 2020, "Q2" includes volumes excavated from March 29 to June 27, 2020, "Q3" includes volumes excavated from June 28 to October 3, 2020, and "Q4" includes volumes excavated from October 4, 2020 to January 2, 2021.

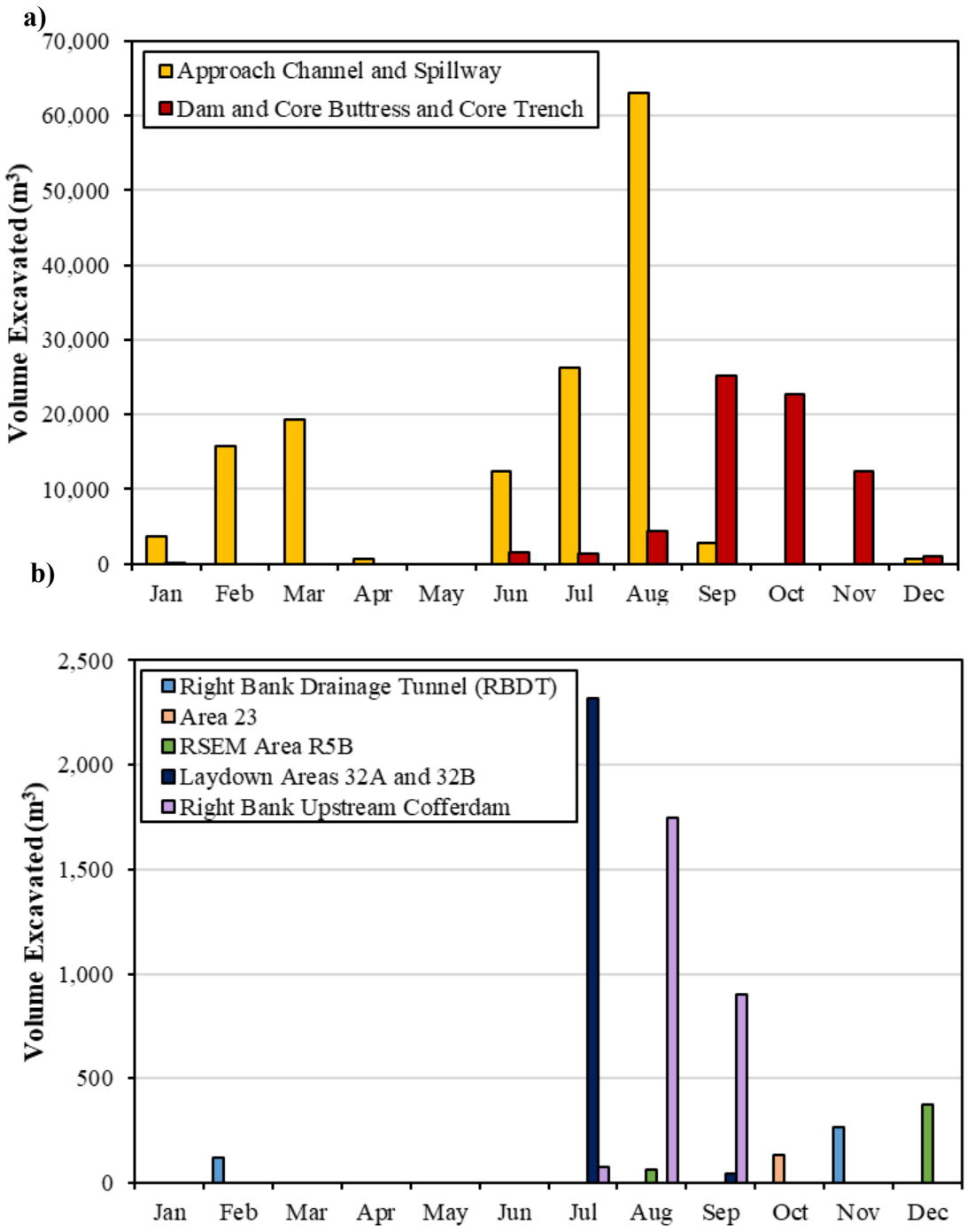


Figure 2-4: Overview of PAG bedrock excavations on the Right Bank in 2020, (a) shows major excavations and (b) shows minor excavations.

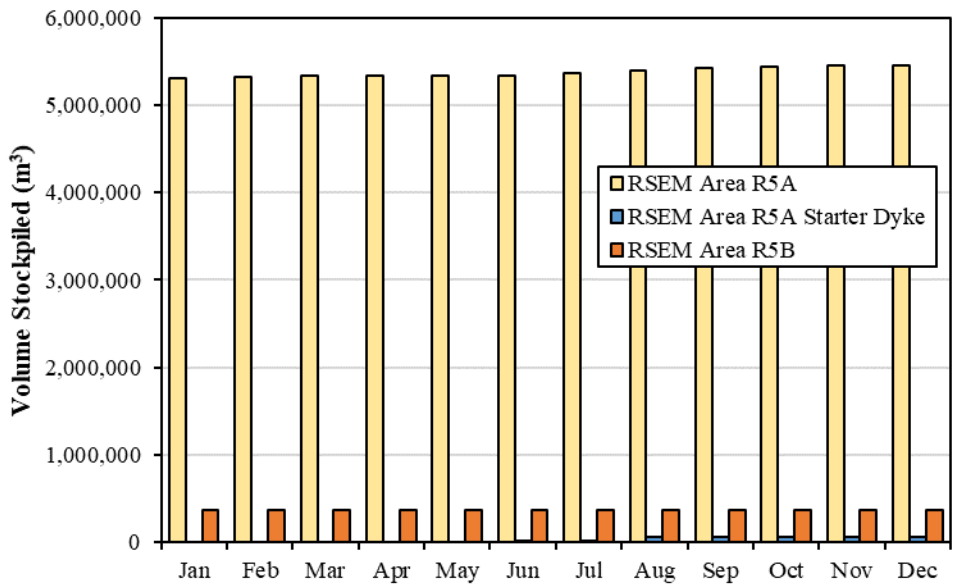


Figure 2-5: Overview of cumulative PAG material volumes stored in the RSEM R5A, RSEM Area R5A Starter Dyke, and RSEM R5B disposal areas in 2020

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 only conducted 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).

A revision to this management plan is that an annual ARD/ML Sampling Plan be developed in the first quarter of each calendar year based on current site conditions and the additional operational experience gained in the previous year. The 2020 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, 2020a). This sampling will direct material handling and storage strategies such as the placement of

a cover or fresh PAG within RSEM areas. Quarterly updates to this sampling plan were provided to PRHP in support of Q3 and Q4 sampling (Lorax, 2020b and 2020c).

In 2020, geochemical sampling was completed by PRHP personnel with guidance provided by Lorax personnel. The majority of the sampling occurred during three rounds of sampling which took place in April, late July/early August, and October. Additional samples were also collected in January and June. In total, 246 samples were analyzed for rinse pH (Table 2-5). Of these, 25 samples underwent more extensive geochemical testing including ABA and metals analysis.

Table 2-5:
Overview of Sample Distribution and Analyses Conducted

Location	Rinse pH	ABA and Metals
Left Bank		
RSEM Area L5	39	5
RSEM Area L5 Extension	25	2
Central Cofferdam and Dam Core	15	1
Left Bank Excavation (LBEX)	3	0
Garbage Creek Excavation	2	0
Left Bank Drainage Adit	1	0
Right Bank		
RSEM Area R5A	74	6
Approach Channel	43	7
Auxiliary Spillway	2	0
Approach Channel Drainage Channel	2	0
777 Haul Road	6	1
Right Bank Dam Core	13	0
Right Bank Upstream Cofferdam	2	0
RSEM Area R5B West	11	1
Exposure west of RSEM Area R5B	3	1
SBIAR	4	1
Area A	1	0
Total	**246**	**25**

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 traditional 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 2-6 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 2-6:
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 confirm that the field rinse pH measurements are sufficient to identify acidic samples; however, there was some discrepancy between field and laboratory measurements with rinse pH > 5.5 in 2020 Q1 (Figure 2-6). The rinse pH methods will be reviewed with field personnel prior to the first round of sampling in 2021 to ensure that the pH probe is properly calibrated prior to testing and that there is no contamination between samples.

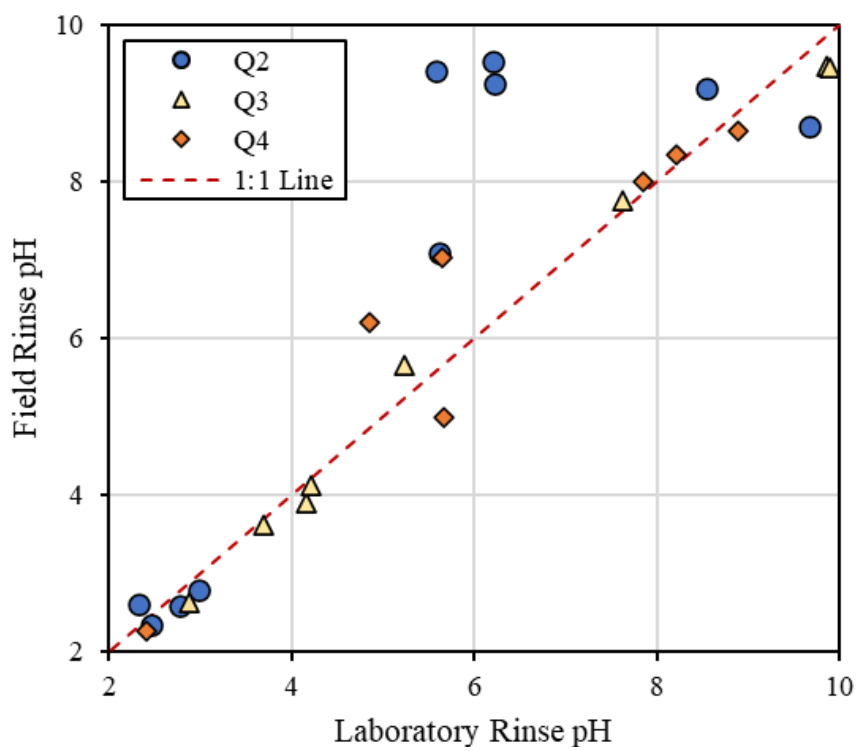


Figure 2-6: Comparison of 2020 field and laboratory rinse pH measurements

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). 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 2020 samples is shown in Appendix 2-B, Table 1.

2.4.1.1 Left Bank

In 2020, samples on the Left Bank were collected at RSEM Area L5 (n = 39), the RSEM Area L5 Extension (n = 26), the Central Cofferdam and Dam Core (n = 15), the LBEX (n = 2), the Garbage Creek Excavation (n = 2), and the Left Bank Drainage Adit (n = 1) (Figure 2-7).

Samples from RSEM Area L5 and the RSEM Area L5 Extension were collected from the locations where PAG material was visible at the surface. The area between the two sampling regions has been covered with overburden. Both of these stockpiles were sampled in Q2 through Q4 2020. The samples were generally classified as weathered bedrock, although the samples collected from the RSEM Area L5 Extension in June (n = 3) were classified as mixed shale and overburden with >50% shale, and those collected from RSEM Area L5 in June (n = 4) and from the RSEM Area L5 Extension in late October (n = 2) were classified as overburden (sand and gravel). The samples collected in late October were from areas that were actively being covered with overburden.

The majority of samples from RSEM Area L5 (32 of 39 samples) and the RSEM Area L5 Extension (20 of 26 samples) had neutral/alkaline rinse pH. Of the remaining samples from RSEM Area L5, four had rinse pH between 5.5 and 7 and three were acidic (rinse pH < 5.5). Acidic samples were only collected from RSEM Area L5 in 2020 Q2 and these were restricted to the lower slopes on the southeastern end of the RSEM Area L5 pile. This AG material is believed to have contributed to water quality exceedances of end of pipe discharge limits from the RSEM L5 sediment control pond in June. Three samples with rinse pH between 5.5 and 7.0 and three acidic samples were collected from the RSEM Area L5 Extension in 2020. Two of the acidic samples were collected in 2020 Q2 and one was collected in 2020 Q3. Work was initiated in 2020 Q3 to cover the AG material in RSEM

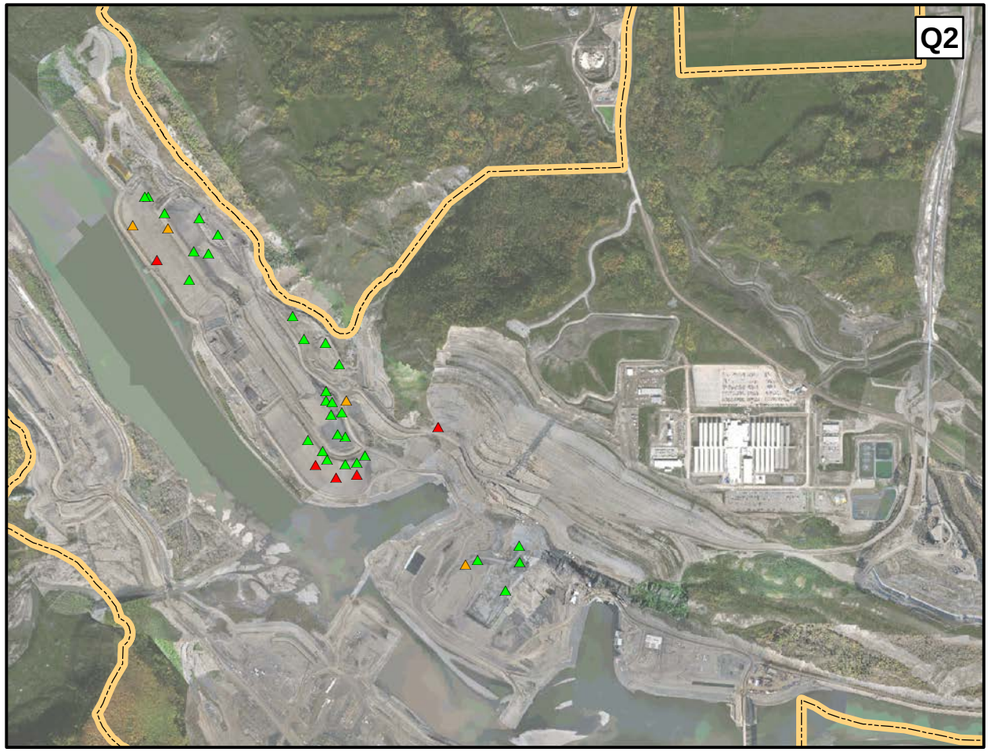
Area L5 and the RSEM Area L5 Extension with NPAG overburden in order to restrict runoff from the exposed PAG surface from entering the RSEM Area L5 sediment control ponds. No AG material was identified in 2020 Q4 in these areas; however, it is recommended that the areas are inspected in the spring following snowmelt to ensure that there is no exposed PAG material remaining at the surface.

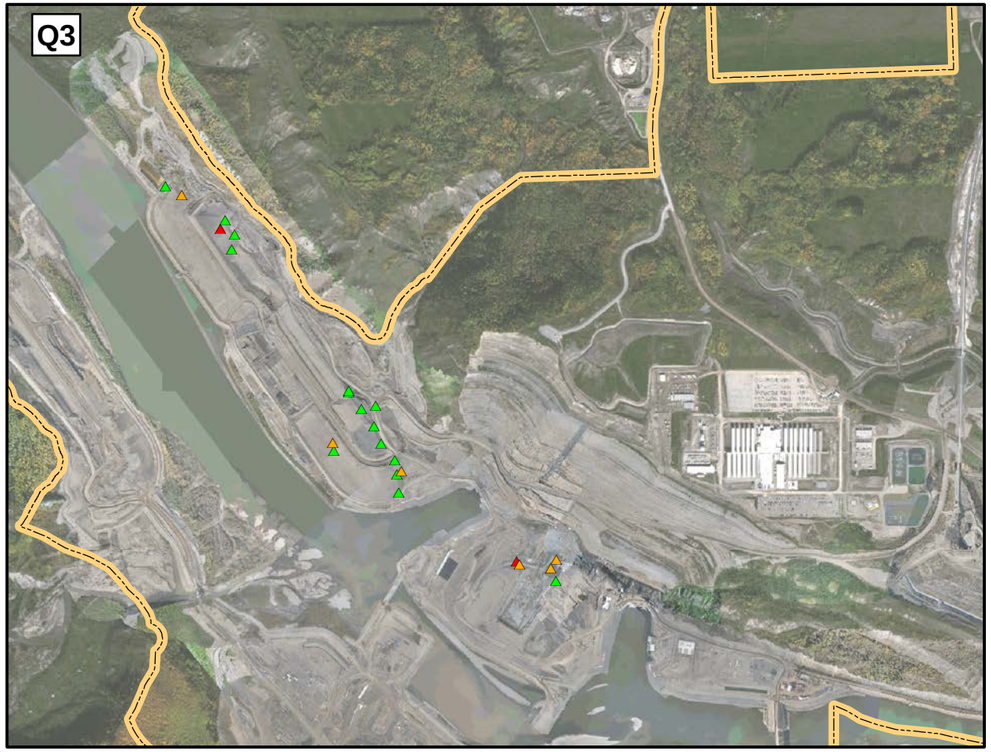
Two weathered bedrock samples were collected in 2020 Q4 from the Garbage Creek Excavation, which is located near the southeastern end of RSEM Area L5. Both of these samples were neutral. The exposed PAG material in this area was covered by the end of 2020.

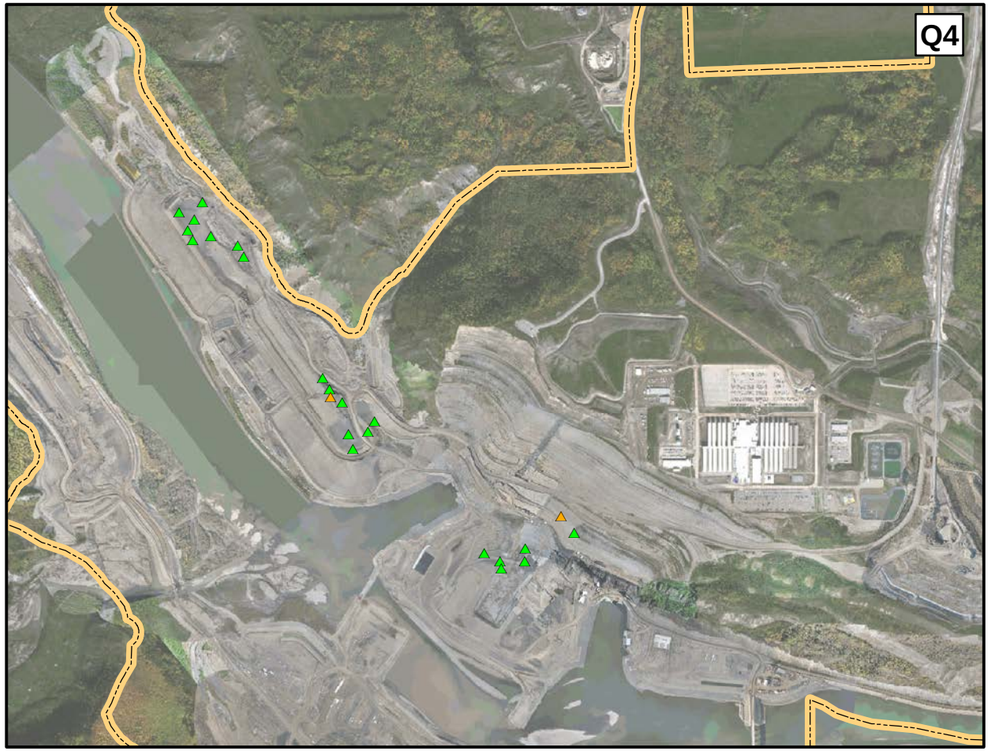
Excavation in the Central Cofferdam/Left Bank Dam Core has exposed bedrock surfaces. Ten of the 15 weathered bedrock samples collected in 2020 had neutral rinse pH (>7.0), while three samples had rinse pH between 5.5 and 7.0, and two samples were AG. The AG samples were collected in 2020 Q1 and Q3. All samples collected within the Central Cofferdam/Left Bank Dam Core in 2020 Q4 had neutral rinse pH. Continued monitoring of exposed PAG material within this excavation area is recommended as AG may develop with increased exposure.

An AG sample (rinse pH 5.05) was collected from the Left Bank Drainage Adit in 2020 Q1. No samples were collected from this area in 2002 Q2 through Q4. Further excavation of this exposure was recommended to exposed unweathered PAG bedrock. In addition, runoff from this exposure should be collected and transferred to the MWTF.

The majority of the material exposed in the LBEX is overburden; however, shale is exposed near the northwestern edge of the LBEX and at the base of the LBEX along Bench 0. In 2020 Q2, an AG sample (rinse pH 2.13) was collected from the minor shale exposure at the northwestern edge of the LBEX. This result confirms the results of previous sampling from this AG bedrock that has been exposed for several years. In 2020 Q4, two overburden samples were collected from along Bench 0. One of the samples had neutral rinse pH and one had a rinse pH between 5.5 and 7.0. Sampling of exposed bedrock along Bench 0 is recommended in 2021.







LEGEND

Rinse pH

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

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

1:20,000

0 200 400 Meters

DATE SAVED:	Jan 28, 2021
DRAWN BY:	GM
REVIEWED:	LF
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2020 Annual Report

TITLE:

Left Bank 2020
Rinse pH Sampling Results

PROJECT #: A416-1

FIGURE: 2-7

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Table 2-7:
Statistical Overview of Rinse pH for 2020 Sampling Locations

Location	Statistic	Q1	Q2	Q3	Q4	Overall
Left Bank						
RSEM Area L5 (n = 39)	Min	-	2.96	5.87	6.53	2.96
	Median	-	8.46	7.56	7.78	8.06
	Max	-	9.67	9.47	8.34	9.67
RSEM Area L5 Extension (n = 24)	Min	-	5.13	4.07	7.04	4.07
	Median	-	8.40	7.21	7.78	7.66
	Max	-	9.98	8.61	9.60	9.98
Central Cofferdam and Dam Core (n = 15)	Min	-	5.52	3.44	7.74	3.44
	Median	3.05	9.74	6.36	8.07	8.07
	Max	-	9.94	7.75	8.66	9.94
Left Bank Excavation (n = 3)		-	2.13	-	6.73	-
		-		-	7.15	-
Garbage Creek Excavation (n = 2)		-	-	-	7.34	-
		-	-	-	7.41	-
Left Bank Drainage Adit (n = 1)		5.05	-	-	-	-
Right Bank						
RSEM Area R5A (n = 74)	Min	-	3.48	5.65	3.33	3.33
	Median	-	8.58	7.28	7.52	7.77
	Max	-	9.73	9.11	8.32	9.73
Approach Channel (n = 43)	Min	-	2.20	2.34	2.27	2.20
	Median	-	6.43	3.13	2.57	3.33
	Max	-	7.82	7.65	7.34	7.82
777 Haul Road (n = 6)	Min	-	-	-	5.07	5.07
	Median	-	-	-	6.50	6.50
	Max	-	-	-	7.03	7.03
Approach Channel Drainage Channel (n = 2)		-	-	-	2.61	-
		-	-	-	2.69	-
Auxiliary Spillway (n = 2)		-	-	-	2.39	-
		-	-	-	2.66	-
RSEM R5B West Ditch Exposure (n = 11)	Min	-	-	3.69	3.71	3.69
	Median	-	-	4.63	5.10	5.10
	Max	-	-	7.37	7.62	7.62
Exposure west of RSEM Area R5B (n = 3)	Min	-	-	3.61	-	-
	Median	-	-	4.81	-	-
	Max	-	-	8.16	-	-
Right Bank Dam Core (n = 13)	Min	-	7.2	7.25	7.11	7.11
	Median	-	7.62	7.97	8.15	7.97
	Max	-	8.89	8.58	9.01	9.01
Right Bank Upstream Cofferdam (n = 2)		-	-	-	6.53	-
		-	-	-	6.73	-
SBIAR (n = 4)	Min	-	2.35	2.49	-	2.35
	Median	-	-	-	-	2.89
	Max	-	7.68	3.28	-	7.68
Area A (n = 1)		3.4	-	-	-	-

2.4.1.2 Right Bank

Right Bank sampling in 2020 focused on RSEM Area R5A (n = 74) and the Approach Channel (n = 43). Samples were also collected from the 777 Haul Road (n = 6), the Approach Channel Drainage Channel (n = 2), the Auxiliary Spillway (n = 2), RSEM R5B West Ditch Exposure (n = 11), the exposure west of RSEM Area R5B (n = 3), the Right Bank Dam Core (n = 13), the Right Bank Upstream Cofferdam (n = 2), the SBIAR (n = 4), and Area A (n = 1).

RSEM Area R5A was sampled in Q2 through Q4 2020 (Figure 2-8). All samples were classified as weathered bedrock, except for five overburden (sand/gravel) samples collected in late October. These five samples were collected from areas that were being actively covered with overburden. Overall, material placement in RSEM Area R5A has minimized the exposures of AG material at the surface through both placement of overburden and fresh PAG rock. The majority of samples collected in 2020 were neutral/alkaline (73% overall) and only two AG samples were collected. One of the AG samples was collected from along the southwestern edge of the stockpile in 2020 Q2 and the second AG sample was collected from the northern edge of the stockpile in 2020 Q4. Placement of fresh bedrock and/or overburden should continue in order to minimize the development of AG conditions in this RSEM area.

The Approach Channel was sampled in Q2 through Q4 2020 (Figure 2-9). In 2020 Q2, the Approach Channel samples had variable rinse pH values with four neutral samples, six samples with rinse pH between 5.5 and 7.0, and six AG samples. The majority of the samples collected in the Approach Channel in Q3 and Q4 were AG (22 of 27 samples, or 81%). In addition, two samples from the Auxiliary Spillway, located at the eastern end of the Approach Channel, were collected in 2020 Q4 and both were AG. In Q3 and Q4 samples with higher rinse pH values were restricted to one sample with rinse pH between 5.5 and 7.0 near the western end of the Approach Channel and three neutral samples and one sample with rinse pH between 5.5 and 7.0 near the eastern extent of the Approach Channel. All samples were classified as weathered bedrock.

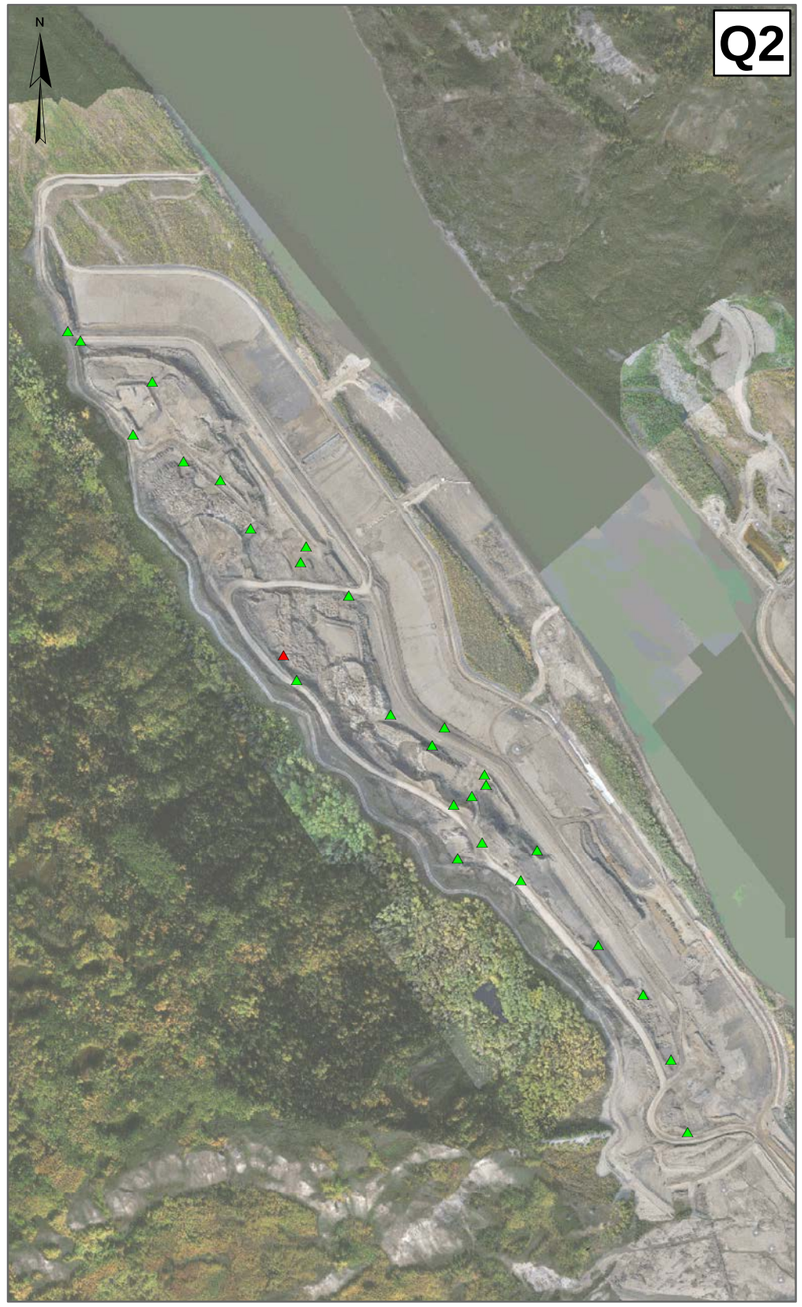
AG exposures in the western extent of the Approach Channel above the R5B-ACDC Ditch contributed to the June water quality exceedances of end of pipe discharge limits from the RSEM R5B sediment pond. Two weathered bedrock samples were collected from the ACDC in 2020 Q4 and both were AG. Continued excavation of the Approach Channel and the Auxiliary Channel is expected in 2021, which will expose fresh bedrock surfaces. Unweathered PAG bedrock has previously had a higher rinse pH (>7.0), with runoff from this material having acceptable water quality.

The PAG material exposed due to excavation along the 777 Haul Road was sampled in 2020 Q4. This area is located to the west of the Approach Channel, near the former location of the MWTF. One of the six samples was AG, four had rinse pH values between 5.5 and 7.0, and one was neutral. Continued monitoring of exposed PAG material along this exposure is recommended.

Samples were collected from two exposures near RSEM Area R5B. Eleven samples were collected from a PAG exposure along an old road located to the southwest of RSEM Area R5B in 2020 Q3 and Q4. Runoff from this exposure reports to the R5B West Ditch. Seven of the samples were AG, two samples had a rinse pH between 5.5 and 7.0, and two were neutral. The continued excavation of the Approach Channel will include excavation of this exposure, exposing fresh bedrock. Continued monitoring of this area is recommended. Three samples were collected from a natural PAG exposure located west of RSEM Area R5B adjacent to the Moberly River in 2020 Q3. Two of the samples were AG and the third was neutral. Extension of the diversion ditch and establishment of a large sump is being undertaken to address drainage from this bluff.

The Right Bank Dam Core was sampled in Q2 through Q4 2020 (Figure 2-9). All samples from this area were neutral. Continued monitoring of this area is recommended. In 2020 Q4, two overburden (sand/gravel) samples were collected from the Right Bank Upstream Cofferdam. Both samples had rinse pH between 5.5 and 7.0. If bedrock is exposed in this area, sampling in 2021 is recommended.

The SBIAR was sampled in 2020 Q2 and Q3. Three of the four samples were AG. The SBIAR slopes are currently managed by BC Hydro. One sample was collected in 2020 Q1 from exposed rock in Area A and had rinse pH < 5.5. The exposed PAG bedrock in Area A was covered by the end of 2020 Q1.



LEGEND

Rinse pH

- ▲ <5.5
- ▲ 5.5-7
- ▲ >7

Notes: No samples were collected for rinse pH testing in Q1 2020

DATE SAVED:	Jan 27, 2021
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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
ARD/ML 2020 Annual Report

TITLE:

RSEM Area R5A 2020
Rinse pH Sampling Results

PROJECT #: A416-1

FIGURE: 2-8

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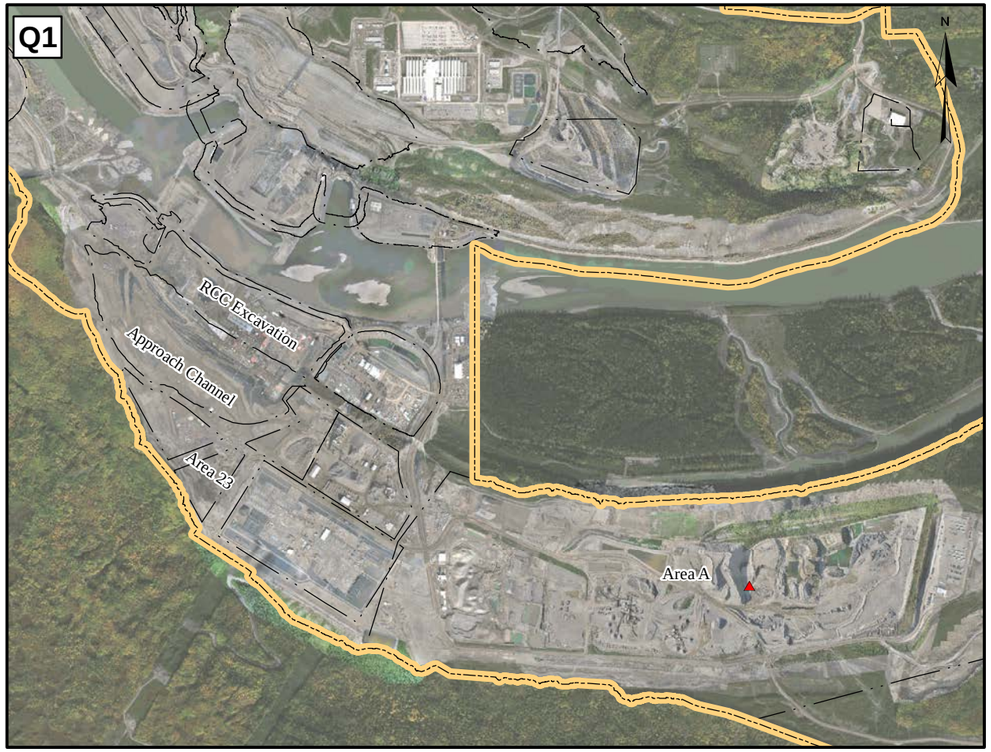

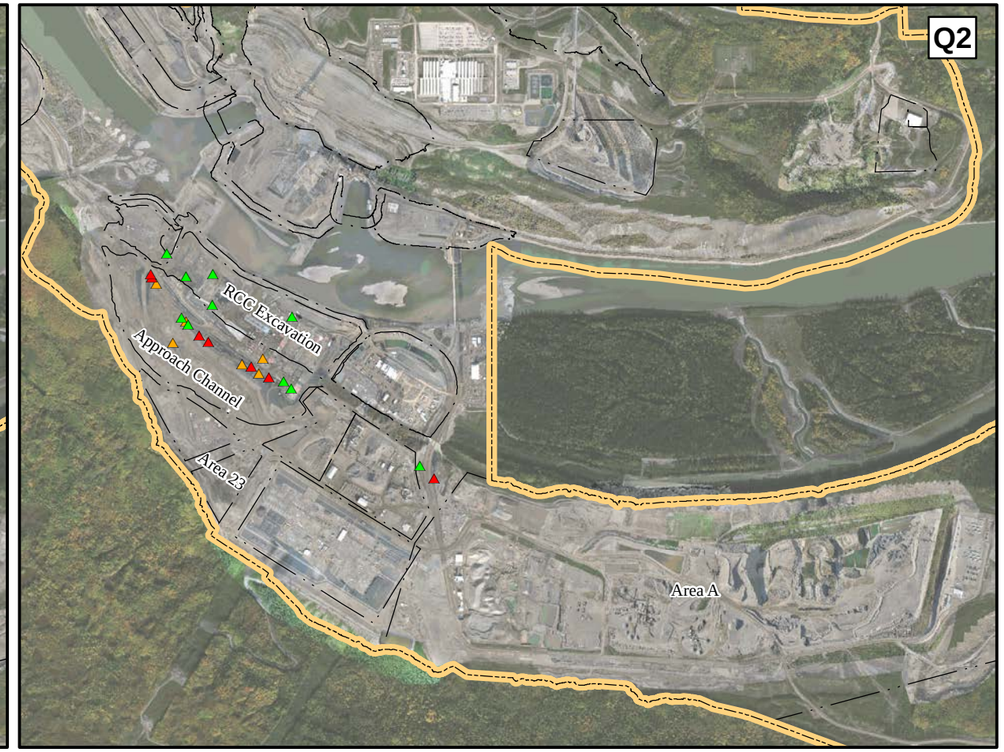

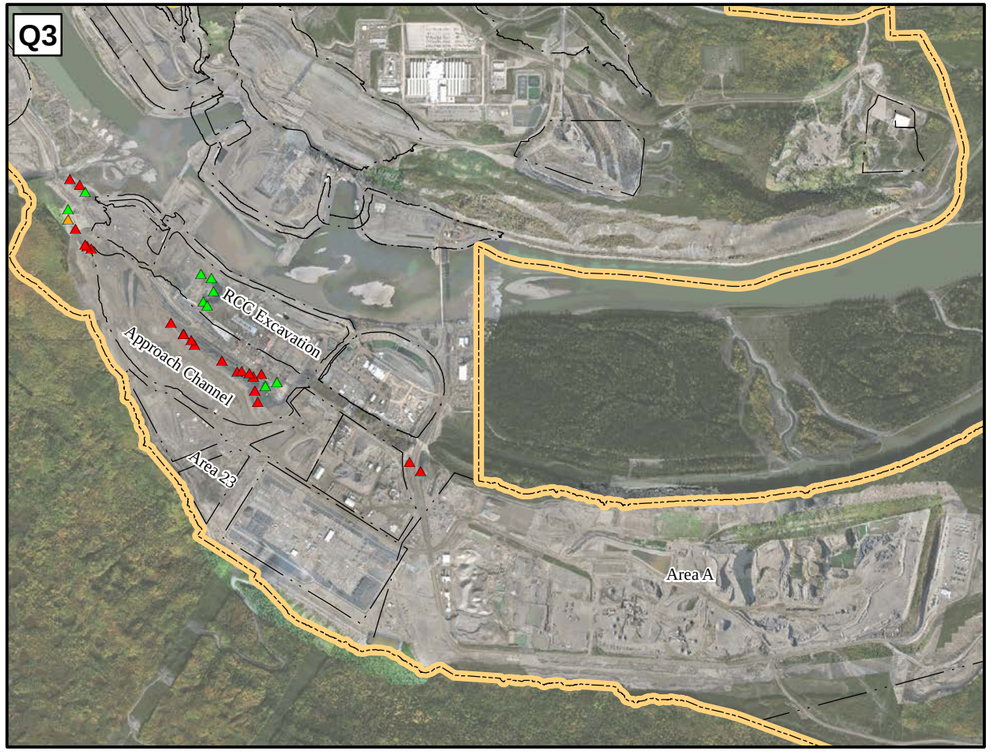

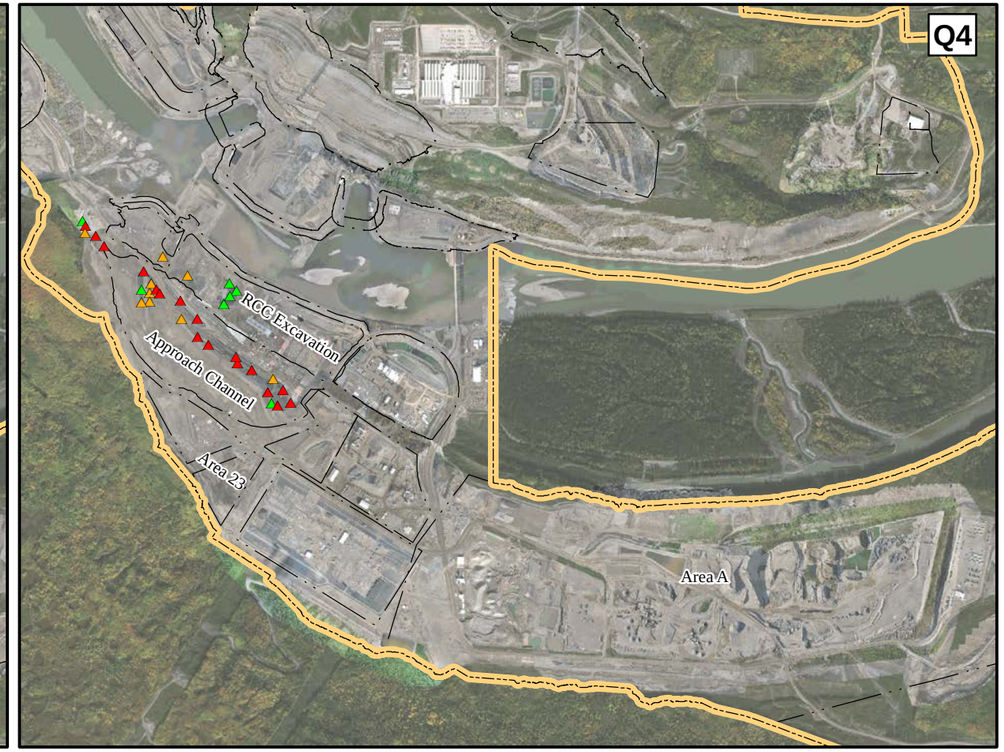

LEGEND

Rinse pH

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

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DATE SAVED:	Jan 28, 2021
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PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2020 Annual Report

TITLE: Approach Channel, RSEM Area R5B, and Right Bank Dam Core 2020 Rinse pH Sampling Results

PROJECT #: A416-1

FIGURE: 2-9

P:\@Drafting\SiteC\Drafting Figures\MXD\2020_Q4_Annual_Report\Fig_2-9_RB Rinse pH Q1-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 2020. 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 2.2.1). Metal enrichment is determined by comparing metal concentrations to average upper continental crustal abundance (ACA) as per Rudnick and Gao (2014) (Table 2-8).

Table 2-8:
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

Eight of the 85 samples collected on the Left Bank in 2020 were submitted for further geochemical analysis, including samples from RSEM Area L5 (n = 5), RSEM Area L5 Extension (n = 2), and the Central Cofferdam and Dam Core (n = 1). The Q2 RSEM Area L5 Extension sample and both Q3 RSEM Area L5 samples had rinse pH values that were at least 0.9 pH units greater than the paste pH values. This indicates that there is stored acidity within the particles that is released when pulverized for the paste pH analysis. In contrast, one of the Q2 RSEM Area L5 samples had a lower rinse pH relative to paste pH, indicating stored buffering capacity. Both rinse and paste pH values are circumneutral to alkaline for the majority of samples (Table 2-9). Only one sample collected from RSEM Area L5 in April had a rinse pH value below 7.0. The paste pH of this sample was above 7.0.

The total S for 2020 Left Bank samples ranges from 0.57 wt.% (RSEM Area L5 Extension) to 1.1 wt.% (RSEM Area L5) (Table 2-9). 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 2020 Left Bank samples is present dominantly as sulphide S (0.46 – 0.72 wt.%) with lesser sulphate S (≤0.12 wt.%) and non-extractable S (≤0.35 wt.%) (Figure 2-10). Due to the presence of an acidic sulphate salt precipitate in some samples previously collected at site, the total S is typically used to calculate the AP. Modified NP is relatively low (<30 kg $CaCO_3$/t) in all samples. All Left Bank samples submitted for ABA were classified as PAG with rinse pH > 5.5 and NPR < 2 (Figure 2-11).

Table 2-9:
Summary of 2020 Left Bank ABA Results

Area	Sample Date	Rinse pH	Paste pH	Total-S	Sulphate-S	Sulphide-S	Non-Extractable S	TAP	SAP	Modified NP	NPR[a]
		pH Units	pH Units	wt%	wt%	wt%	wt%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	
RSEM Area L5 (n = 5)	Min	6.21	7.8	0.7	0.02	0.51	0.14	21.9	19.4	13.5	0.39
	Median	8.54	8.42	0.89	0.04	0.62	0.25	27.8	22.2	14.6	0.49
	Max	9.89	8.96	1.13	0.09	0.72	0.35	35.3	23.4	25.2	1.02
RSEM Area L5 Extension (n = 2)	24-Apr-20	9.67	8.44	0.57	0.02	0.46	0.09	17.8	17.2	17.8	1.00
	07-Oct-20	7.84	8.02	0.93	0.12	0.54	0.27	29.1	16.9	25.0	0.86
Central Cofferdam/ Dam Core	07-Oct-20	8.88	9.09	0.80	0.04	0.48	0.28	25.0	15.0	18.8	0.75

Notes:
SAP - Sulphide Acid Potential; TAP - Total S Acid Potential; NPR - Net Potential Ratio
All Left Bank samples submitted for ABA are classified as weathered bedrock
[a]NPR is calculated as Modified NP / TAP
Grey shading indicates an NPR < 2.0

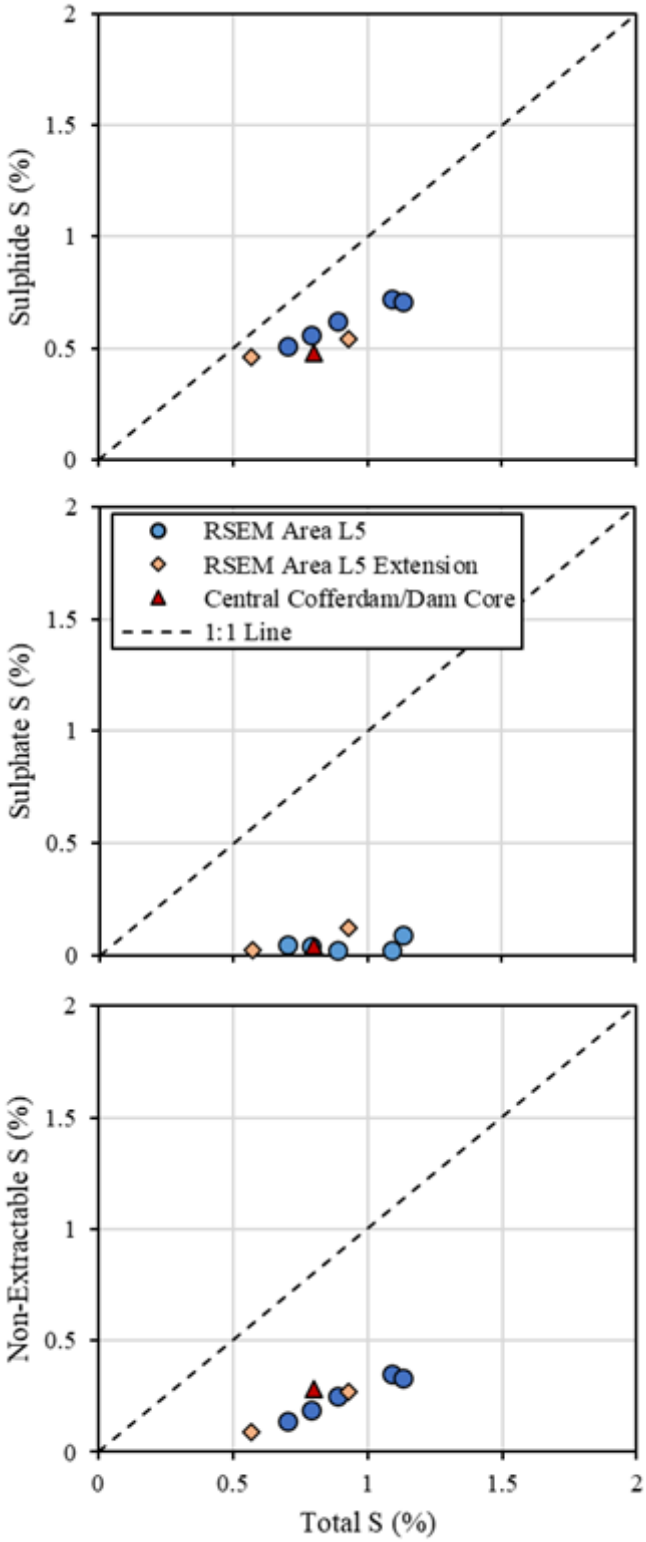


Figure 2-10: Sulphur species *versus* Total Sulphur for 2020 Left Bank samples

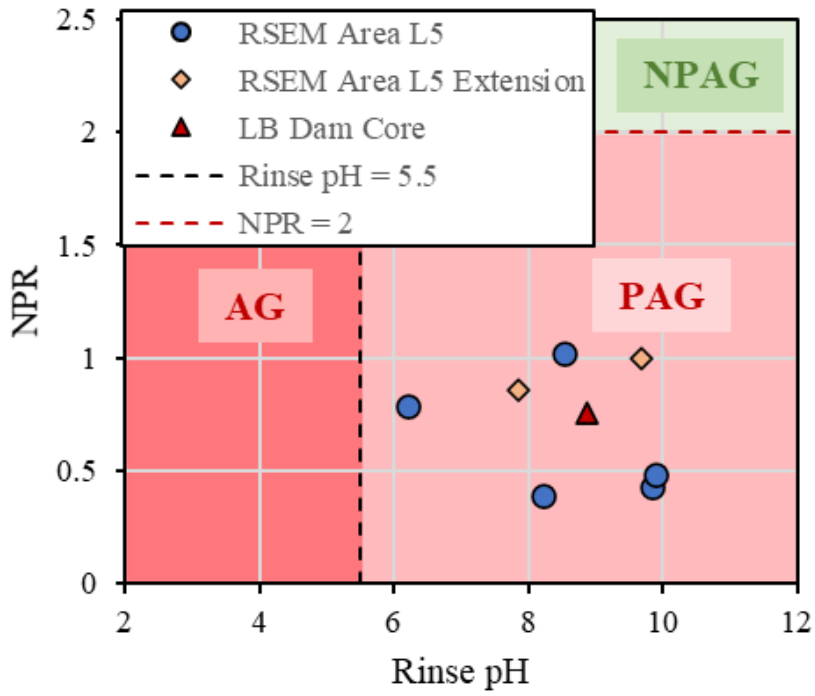


Figure 2-11: NPR *versus* Rinse pH for 2020 Left Bank samples
Note: NPAG: NPR > 2; PAG: NPR ≤ 2; AG: NPR ≤ 2 and rinse pH < 5.5.

Metals and metalloids generally exceeding 3x the ACA give an indication of metal enrichment. Ag and Se were above at least 3x the ACA in all eight samples, Cd was above 3x the ACA in five samples, and As was above the ACA in one sample collected in 2020 on the Left Bank (Table 2-10). 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.

Table 2-10:
Summary of 2020 Left Bank Solid Phase Metals Results

Element	Units	RSEM Area L5 (n = 5)			L5EX-2020-Apr-24-05	L5EX-2020-Oct-07-08	LBDC-2020-Oct-07-64
		Min	Median	Max			
Ag	ppb	304	307	374	260	316	306
Al	%	0.85	0.99	1.2	0.91	0.83	0.96
As	ppm	10.7	12.5	13.9	10.1	18.4	12.9
Au	ppb	0.2	0.8	1.3	0.3	1.5	0.3
Ba	ppm	223	370	465	396	410	567
Ca	%	0.65	0.7	1.14	0.72	1.07	0.92
Cd	ppm	0.23	0.28	0.34	0.27	0.37	0.28
Co	ppm	7.9	9.5	10.5	10.1	10.0	10.4
Cr	ppm	18.2	24.4	31.9	18.9	30.1	24.3
Cu	ppm	25.7	28.6	31.1	25.2	29.6	29.8
Fe	%	1.71	2.24	2.43	1.89	2.47	2.04
Hg	ppm	0.065	0.083	0.095	0.069	0.113	0.082
K	%	0.24	0.26	0.32	0.22	0.22	0.26
Mg	%	0.29	0.3	0.33	0.26	0.32	0.29
Mn	ppm	69	138	142	111	169	116
Mo	ppm	0.57	1.06	1.54	0.52	1.25	0.78
Na	%	0.183	0.206	0.252	0.224	0.202	0.218
Ni	ppm	26.1	26.2	31.8	23.9	28.4	27.4
P	%	0.074	0.097	0.113	0.098	0.084	0.094
Pb	ppm	13.6	15.3	15.7	12.3	13.4	13.6
Sb	ppm	0.1	0.11	0.22	0.12	0.27	0.23
Se	ppm	0.6	1.1	1.3	0.9	4.1	0.9
Sr	ppm	58.4	74.3	88.3	70.6	75.1	76.9
Th	ppm	6.1	6.7	7.2	6.8	6.6	7.7
Tl	ppm	0.04	0.05	0.15	0.05	0.11	0.11
U	ppm	1.2	1.4	1.6	1.5	1.5	1.7
V	ppm	25	28	32	24	24	25
Zn	ppm	106	115	121	112	98.4	118

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 Right Bank

Seventeen of the 150 samples collected on the Right Bank in 2020 were submitted for further geochemical analyses. This included samples from RSEM Area R5A (n = 6), the Approach Channel (n = 7), the 777 Haul Road (n = 1), the RSEM Area R5B West Ditch Exposure (n = 1), the exposure west of RSEM Area R5B (n = 1), and the SBIAR (n = 1). A summary of the geochemical results for the Right Bank samples that were submitted for the additional analyses are included in Table 2-11.

The majority of the Right Bank samples had slightly higher paste pH values in comparison to rinse pH values. In particular, four of the samples from Q2 and one sample from Q3 had paste pH values that were over 1 pH unit greater than the rinse pH measurements. This includes one sample from RSEM Area R5A which had an acidic rinse pH (pH 5.24) and neutral paste pH (pH 7.78). A higher paste pH value indicates that there may be stored neutralization capacity within the particle clasts that is released during pulverization.

The RSEM Area R5A samples have variable rinse and paste pH values, ranging from acidic to circumneutral. The majority of the Approach Channel samples had acidic rinse and paste pH values (pH < 5.5), although one sample had slightly higher pH (rinse pH – 5.7, paste pH 5.9). The sample from the 777 Haul Road excavation had rinse and paste pH measurements of 5.7 and 5.6, respectively. The two samples from exposures near RSEM Area R5B and the SBIAR sample had acidic rinse and paste pH values.

The total S content of the bedrock samples collected from shale exposures and stockpiles on the Right Bank ranged from 0.37 wt.% (RSEM Area R5A) to 1.94 wt.% (Approach Channel) (median: 1.18 wt.%). Sulphide is the dominant form of sulphur for the majority of these samples and ranges from <0.01 to 1.28 wt.% (Figure 2-12). However, two samples from the Approach Channel, the two samples from exposures near RSEM Area R5B, and the SBIAR sample had a higher proportion of sulphate S relative to sulphide S and non-extractable S. 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. Non-extractable S makes up a quarter of the total S balance on average for the samples collected on the Right Bank.

Modified NP was low (<11 kg $CaCO_3$/t) in all 2020 Right Bank samples, except for one sample from RSEM Area R5A which had higher modified NP (55 kg $CaCO_3$/t). This higher modified NP value is higher than that which is typically associated with bedrock excavated on site. 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 2-13. This plot illustrates that the majority of the Right Bank samples submitted for further analysis are AG; however, three of the RSEM Area R5A samples and the 777 Haul Road sample have rinse pH values above 5.5 and are classified as PAG, and the RSEM Area R5A sample with high modified NP is NPAG.

With respect to metals and metalloids, Ag and Se are above 3x the ACA in all 17 of the Right Bank samples (Table 2-12). In addition, As, Cd, and Mo are above 3x the ACA in at least six of the samples. The Ag and Cd values are also above 10x the ACA in one sample each and Se contents are above 10x the ACA in 16 of 17 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 2-11:
Summary of 2020 Right Bank ABA Results

Sample ID	Sample Date	Rinse pH	Paste pH	Total-S	Sulphate-S	Sulphide-S	Non-Extractable S	TAP	SAP	Modified NP	NPR[a]
		pH Units	pH Units	wt%	wt%	wt%	wt%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	
RSEM Area R5A (n = 6)	Min	4.85	4.99	0.37	0.03	0.25	0.09	11.6	9.7	3.00	0.05
	Median	5.6	7.575	1.14	0.065	0.77	0.27	35.6	25.7	6.50	0.32
	Max	7.63	8.29	1.92	0.13	1.28	0.58	60.0	47.5	55.30	2.72
Approach Channel (n = 7)	Min	2.32	2.56	1.01	0.13	0.13	0.11	31.6	4.1	-17.50	-0.38
	Median	2.88	4.12	1.48	0.29	0.72	0.36	46.3	22.8	-1.20	-0.03
	Max	5.67	5.88	1.94	0.91	0.88	0.52	60.6	30.9	5.50	0.15
777 Haul Road (n = 1)	07-Oct-20	5.65	5.56	1.81	0.14	1.15	0.52	56.6	35.9	8.20	0.14
Exposure West of RSEM Area R5B (n = 1)	30-Jul-20	3.69	4.29	0.45	0.35	0.01	0.09	14.1	0.3	-5.10	-0.36
RSEM Area R5AB West Ditch exposure (n = 1)	05-Aug-20	4.21	4.28	0.91	0.70	<0.01	0.21	28.4	<0.3	-5.80	-0.20
SBIAR (n = 1)	30-Apr-20	2.47	2.95	0.70	0.59	0.03	0.08	21.9	3.4	-8.60	-0.39

Notes:
Modified NP – Modified Neutralization Potential, NPR – Net Potential Ratio
All Right Bank samples submitted for ABA are classified as weathered bedrock, except for the 777 Haul Road sample which is classified as fresh bedrock
[a]NPR is calculated as Mod. NP / TAP
Grey shading indicates an NPR < 2.0

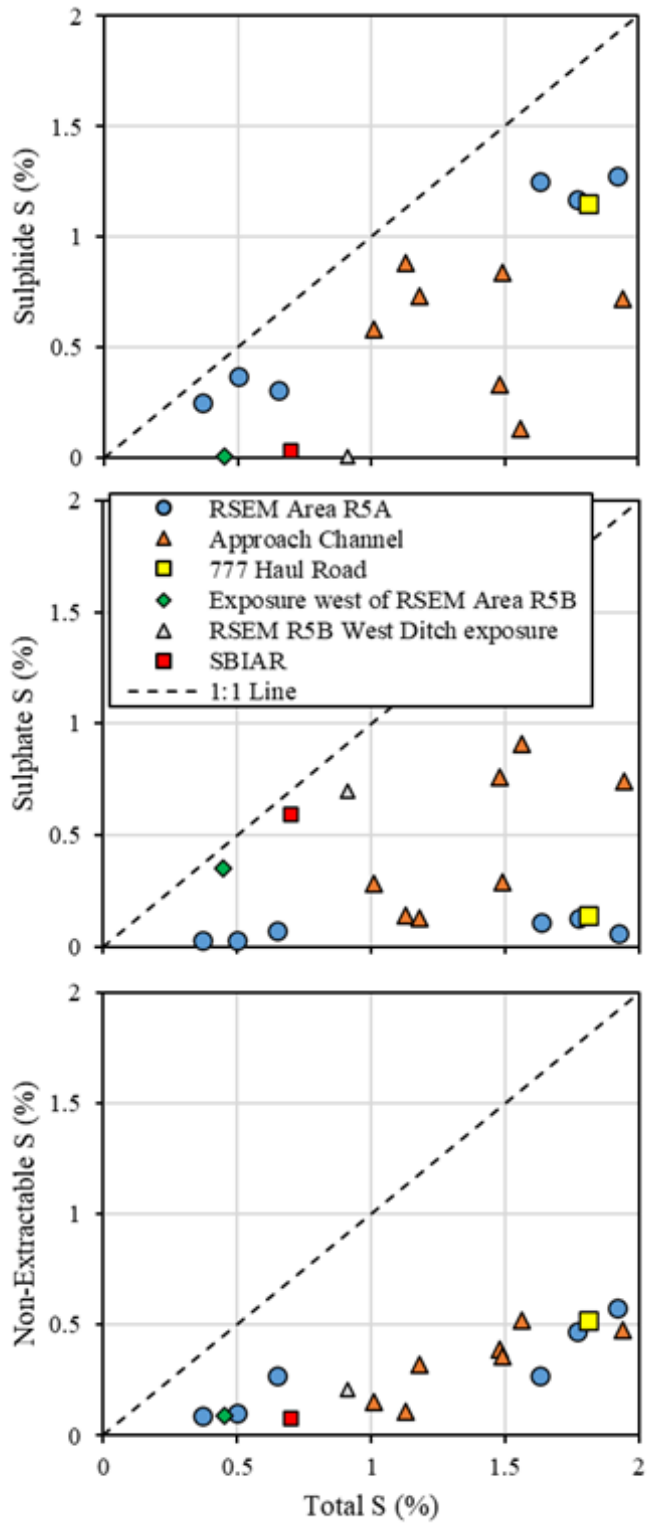


Figure 2-12: Sulphur species *versus* Total Sulphur for 2020 Right Bank samples

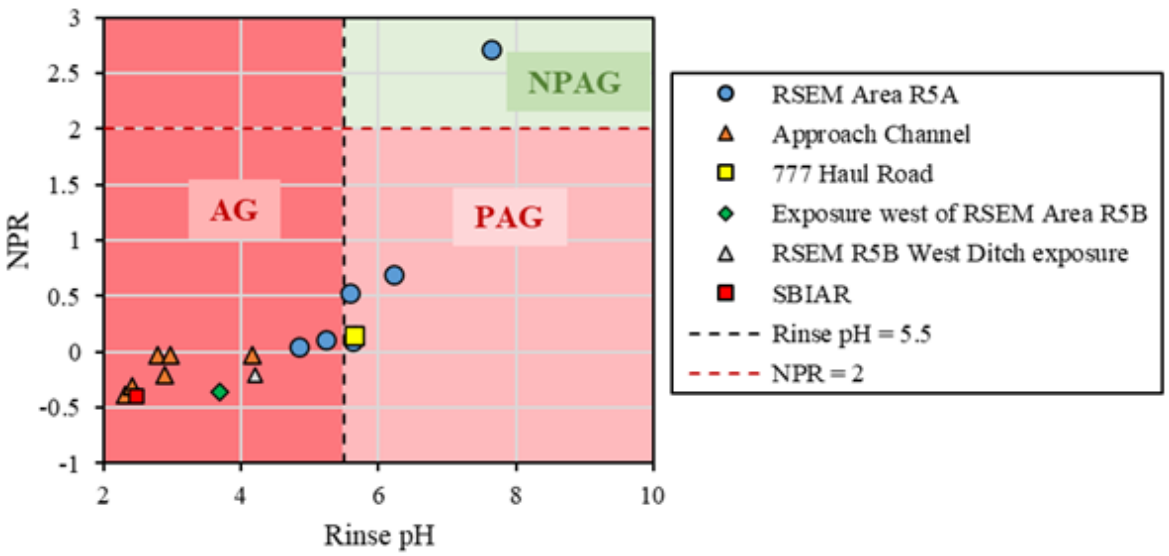


Figure 2-13: NPR *versus* Rinse pH for 2020 Right Bank samples

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

Table 2-12:
Summary of 2020 Right Bank Solid Phase Metals Results

Element	Units	RSEM Area R5A (n = 6)			Approach Channel (n = 7)			777 Haul Road	Exposure West of RSEM Area R5B	RSEM Area R5B West Ditch exposure	SBIAR
		Min	Median	Max	Min	Median	Max	(n = 1)	(n = 1)	(n = 1)	(n = 1)
Ag	ppb	234	347	545	357	425	471	448	513	283	432
Al	%	0.8	0.925	0.96	0.88	0.97	1.07	0.86	0.85	0.73	0.86
As	ppm	8.3	12.05	15.4	11.5	12.6	16.9	14.2	6.6	15.8	9.5
Au	ppb	0.9	0.95	2.8	0.4	1.1	2.5	0.5	1.3	2.1	3.3
Ba	ppm	83.9	359	469	119	209	493	343	480	310	200
Ca	%	0.32	0.395	2.1	0.28	0.31	0.45	0.53	0.11	0.08	0.41
Cd	ppm	0.22	0.675	0.86	0.31	0.51	0.75	0.93	0.09	0.02	0.15
Co	ppm	7.2	8.95	10.8	6.1	8.1	10.2	9.4	2.5	2.6	2.4
Cr	ppm	16.8	20.5	83.8	16.5	20.8	47	17.9	18.9	17.6	26.9
Cu	ppm	23.1	31.3	38.5	29	35.2	43.4	37.3	32.0	30.9	20.6
Fe	%	1.46	2.175	2.38	1.7	1.99	2.5	2.32	1.60	4.10	1.54
Hg	ppm	0.045	0.0595	0.094	0.064	0.095	0.103	0.093	0.1	0.096	0.075
K	%	0.21	0.245	0.28	0.27	0.29	0.33	0.25	0.33	0.36	0.31
Mg	%	0.26	0.305	0.52	0.21	0.26	0.3	0.32	0.14	0.06	0.17
Mn	ppm	61	95.5	265	45	56	60	79	14	14	38
Mo	ppm	0.49	2.815	5.03	1.29	3.73	4.51	4.58	3.47	4.87	3.21
Na	%	0.017	0.104	0.218	0.016	0.033	0.221	0.074	0.048	0.185	0.020
Ni	ppm	23.2	30.65	36.3	23.5	30.9	38	34.3	6.9	4.8	9.6
P	%	0.06	0.072	0.13	0.049	0.068	0.072	0.068	0.049	0.058	0.035
Pb	ppm	10.8	16.55	19.1	15.1	16.7	18	17.9	18.0	16.5	16.8
Sb	ppm	0.08	0.11	0.2	0.06	0.08	0.18	0.16	0.11	0.10	0.08
Se	ppm	0.5	1.4	1.8	1.1	1.5	2.0	1.8	1.2	1.7	1.5
Sr	ppm	41.1	62.6	68.2	29.3	41.6	85.3	64.7	39.5	132	27.8
Th	ppm	4.6	6.6	8	4.6	6.6	7.7	7.4	7.6	5.5	2.5
Tl	ppm	0.04	0.09	0.22	0.07	0.11	0.25	0.24	0.20	0.22	0.12
U	ppm	1	1.25	1.7	0.9	1.3	1.6	1.3	0.9	0.8	0.4
V	ppm	23	26.5	36	26	28	32	25	32	31	29
Zn	ppm	95	144	159	89.8	124	164	155	71.1	96.1	41.7

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 Dredgeate Sediment Monitoring

The accumulated sediment at the bottom of sediment control ponds that may be removed by dredging is referred to as dredgeate. Decommissioning of the Phase I sediment control ponds and the Phase I MWTF ponds was required in advance of commissioning of the river diversion tunnels. In anticipation of the increasing water levels upstream of the dam, PRHP environmental monitors collected sediment samples from the Phase I RSEM Area sediment control ponds including the RSEM R5A Ponds A, B, C and D; RSEM R5B Pond; RSEM L5 West Pond and RSEM L5 East Pond. Sediment samples were also collected from the Phase I MWTF Pre-Treatment and MWTF Sludge ponds located adjacent to RSEM Area R5B as well as the MWTF reactor sludge. The geochemical characteristics and hydrocarbon content of the samples were analysed to inform long-term management plans for dredgeate for the Phase I facilities decommissioned in 2020.

This section discusses the accumulated sediments from the PAG contact RSEM sediment control ponds, the MWTF collection and settling ponds in Q2 2020, and the MWTF reactor sludge in Q4 2020. The sediment screening approach and regulatory context is discussed in section 2.5.1. The results of chemical characterization are presented in section 2.5.2 for the RSEM sediment control ponds and the MWTF materials are discussed in Section 2.5.3. 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."

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 RSEM Sediment Control Pond Results

Dredgeate samples were collected from the RSEM Area L5 sediment control ponds on the Left Bank and from the RSEM Area R5B and R5A sediment control ponds on the Right Bank. The total metal content of the dredgeate samples collected from the PAG-containing RSEM sediment control ponds have been screened against the lowest CSR standard for industrial lands as noted above. In addition, the total metal content of these samples has been screened against the range of concentrations measured in the PAG bedrock and non-PAG overburden materials, which are materials that have been approved for storage in the RSEM Areas. The list of metal(oid)s and the corresponding screening values for the Left Bank samples are presented in Table 2-13; and Table 2-14 presents the Right Bank sample results.

Concentrations for most metals in both Left Bank dredgeate samples were below the applicable CSR Soil Standard (Table 2-13). However, the total metal(oid) content of arsenic, selenium and zinc exceeded the CSR Soil Standard in dredgeate samples from both RSEM L5 West and L5 East sediment control ponds. Similarly, the CSR Soil Standard for cadmium was exceeded in the RSEM L5 East sample and sodium was exceeded in the

RSEM L5 West sample. Although the metal(oid) content noted above exceeded the CSR Soil Standards, the concentrations were within the range measured from PAG bedrock and NPAG overburden materials that has been approved for disposal in RSEM Area L5.

Concentrations for most metal(oid)s in the Right Bank RSEM sediment control pond dredgeate samples were below the applicable CSR Soil Standard (Table 2-14). Only selenium exceeded the standard in the RSEM R5A pond A, B and D samples and sodium in pond C and D samples. The RSEM Area R5B sediment control pond dredgeate sample had concentrations of arsenic, cadmium, selenium and zinc that exceeded their respective CSR Soil Standard. Similar to the Left Bank samples, the Right Bank dredgeate metal(oid) concentrations were within the range concentrations measured in PAG bedrock and NPAG overburden material with the exception of zinc in the RSEM R5B dredgeate sample. A review of the zinc CSR Standard used to screen the RSEM R5B dredgeate sample indicates that the 150 mg/kg standard was developed for samples with pH < 6.0, which is overly conservative given the characteristics of the sample and the long-term flooded storage location in RSEM Area R5B. The ABA characteristics of the dredgeate sample indicates that the sample is non-acid generating and flooded storage severely limits the development of ARD. The sample's zinc content was below the next most stringent zinc Standard (250 mg/kg) that was developed for "Groundwater flow to surface water used by freshwater aquatic life" at pH 6.0 – 6.5.

The hydrocarbon content of the sediment dredgeate samples collected from the PAG-containing RSEM sediment control ponds were below the CSR standards noted in Section 2.5.1 used to screen the samples. The results are summarized in Table 2-15.

The leachable toxic waste metal evaluation of the sediment dredgeate samples collected from the PAG-containing RSEM sediment control ponds is summarized in Table 2-16 and the regulated leachable metal(oids) were below the HWR leachate standards noted in Section 2.5.1 used to screen the samples.

Table 2-13:
Total Metal Content of Left Bank Phase I Sediment Control Pond Dredgeate

Parameter	Units	RSEM-L5W Dredgeate	RSEM-L5E Dredgeate	PAG Material deposited in RSEM Area L5 [1]				NPAG Material (Left Bank) [2]				CSR Soil Standard [3]	CSR Notes
		2020-05-14 12:30 PM	2020-05-17 03:00 PM	n	Minimum	Median	Maximum	n	Minimum	Median	Maximum		
Moisture	%	44	46	-	-	-	-	-	-	-	-	-	No standard in Schedule 3.1
pH	pH	8.38	7.94	137	3.6	8.15	9.8	20	7.4	8.195	8.79	-	No standard in Schedule 3.1
Total Metals													
Aluminum (Al)	mg/kg	9940	11,800	17	5,300	8,600	11,200	20	6,800	12,400	22,700	250,000	Schedule 3.1 Part 2; IL
Antimony (Sb)	mg/kg	1.76	1.63	17	0.14	0.27	0.66	20	0.46	0.735	1.32	40	Schedule 3.1 Part 3; IL
Arsenic (As)	mg/kg	**13.4**	**12.5**	17	8.6	14	27.8	20	6.3	7.9	13.9	10	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Barium (Ba)	mg/kg	619	457	17	126	280	491	20	301	347.5	655	1,500	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates
Beryllium (Be)	mg/kg	0.70	0.74	-	-	-	-	-	-	-	-	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 6.5 (lowest CSR standard)
Bismuth (Bi)	mg/kg	0.22	0.25	17	0.18	0.26	1.49	20	0.08	0.185	0.34	-	No standard in Schedule 3.1
Boron (B)	mg/kg	-	6.2	17	<20	<20	20	20	<20	<20	<20	1,000,000	Schedule 3.1 Part 2; IL (> 1,000,000 mg/kg)
Cadmium (Cd)	mg/kg	0.902	**1.23**	17	0.25	0.46	1.22	20	0.58	1.035	1.24	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 7 (lowest CSR standard)
Calcium (Ca)	mg/kg	33700	31,200	17	2,800	5,200	9,900	20	8,700	37,450	50,300	-	No standard in Schedule 3.1
Chromium (Cr)	mg/kg	22.7	28	17	12.9	22.3	32.7	20	35.2	41.2	104	60	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Cobalt (Co)	mg/kg	16.3	13.9	17	4.8	9.2	19.3	20	8.1	12.9	19.1	25	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Copper (Cu)	mg/kg	43.4	42.4	17	24	31.4	39	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	33100	38,800	17	15,600	22,200	39,200	20	20,300	26,150	40,200	150,000	Schedule 3.1 Part 2; IL
Mercury (Hg)	mg/kg	0.08	0.089	17	0.000090	0.075	0.128	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
Lead (Pb)	mg/kg	15.4	15.9	17	10.9	15.3	24.7	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	14.8	16.7	-	-	-	-	-	-	-	-	450	Schedule 3.1 Part 2; IL
Magnesium (Mg)	mg/kg	7020	8,720	17	1500	2,700	6,200	20	3,900	12,200	15,000	-	No standard in Schedule 3.1
Manganese (Mn)	mg/kg	501	592	17	62	119	290	20	275	458	728	2,000	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Molybdenum (Mo)	mg/kg	4.17	3.59	17	0.62	4.74	9.36	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	50.3	47.4	17	14.3	27.6	60.9	20	24.3	40.25	66.7	90	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.0 (lowest CSR standard); std varies with receiving water hardness, receiving hardness > 180 mg/L is assumed
Phosphorous (P)	mg/kg	892	924	17	530	720	1140	20	810	895	1,350	-	No standard in Schedule 3.1
Potassium (K)	mg/kg	1770	1590	17	1,900	2,300	2,900	20	900	1,900	3,300	-	No standard in Schedule 3.1
Selenium (Se)	mg/kg	**1.27**	**1.46**	17	0.4	1.2	2.1	20	0.1	0.8	1.7	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Silver (Ag)	mg/kg	0.266	0.315	17	197	330	540	20	85	219	378	40	Schedule 3.1 Part 3; IL
Sodium (Na)	mg/kg	**1020**	197	17	270	1790	2,610	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	124	99.1	17	41.6	61.5	89.7	20	65.6	102	130	-	No standard in Schedule 3.1
Thallium (Tl)	mg/kg	0.198	0.214	17	0.03	0.13	0.28	20	0.08	0.185	0.3	25	Schedule 3.1 Part 3; IL
Tin (Sn)	mg/kg	2.34	0.6	-	-	-	-	-	-	-	-	300	Schedule 3.1 Part 3; IL
Titanium (Ti)	mg/kg	44.6	60.9	17	10	10	50	20	50	170	290	-	No standard in Schedule 3.1
Tungsten (W)	mg/kg	-	<0.50	17	0.06	0.1	0.1	20	<0.1	<0.1	<0.1	200	Schedule 3.1 Part 2; IL
Uranium (U)	mg/kg	1.5	1.62	17	0.93	1.4	2.6	20	0.6	1.35	1.7	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Vanadium (V)	mg/kg	37.8	46.1	17	20	26	29	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	**192**	**150**	17	55.7	118	201	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

[1] ABA and rinse pH test results for geochemistry samples collected in 2018. Site C Clean Energy Project Acid Rock Drainage and Metal Leachate July 2017 - October 2109.
[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 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.
Bold text indicates the dredgeate exceeded the applicable CSR Soil Standard.

Table 2-14:
Total Metal Content of Right Bank Phase I Sediment Control Pond Dredgeate

Parameter	Units	RSEM-R5A-A Dredgeate	RSEM-R5A-B Dredgeate	RSEM-R5A-C Dredgeate	RSEM-R5A-D Dredgeate	RSEM-R5B Dredgeate	PAG Material deposited in RSEM Area R5A [1]				NPAG Material (Left Bank) [2]				CSR Soil Standard [3]	CSR Notes
		2020-05-14	2020-05-14	2020-05-14	2020-05-14	2020-05-17	n	Minimum	Median	Maximum	n	Minimum	Median	Maximum		
Moisture	%	38	65	30	49	58	-	-	-	-	-	-	-	-	-	No standard in Schedule 3.1
pH	pH	8.12	7.12	8.32	8.37	8.31	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	10500	11900	6500	8980	8,470	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	1.22	1.63	0.9	1.13	1.51	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	11.6	13.7	7.79	9.96	**12.1**	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	565	660	351	472	467	12	237	399.5	580	20	301	347.5	655	1,500	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates
Beryllium (Be)	mg/kg	0.75	0.84	0.4	0.60	0.82	1	0.76	0.76	0.76	-	-	-	-	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 6.5 (lowest CSR standard)
Bismuth (Bi)	mg/kg	0.23	0.24	0.14	0.18	0.17	12	0.22	0.29	0.34	20	0.08	0.185	0.34	-	No standard in Schedule 3.1
Cadmium (Cd)	mg/kg	0.579	0.743	0.471	0.58	**1.2**	12	0.15	0.33	0.43	20	0.58	1.035	1.24	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 7 (lowest CSR standard)
Calcium (Ca)	mg/kg	16800	20500	22700	28800	53,300	12	1,600	3,350	6,400	20	8,700	37,450	50,300	-	No standard in Schedule 3.1
Chromium (Cr)	mg/kg	22.4	24.3	24.7	19.8	43.2	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	11.8	13.4	8.43	10.7	20.3	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	32.7	38.2	20.6	28	36.2	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	32200	35600	21400	28000	36,500	12	13,200	18,800	23,400	20	20,300	26,150	40,200	150,000	Schedule 3.1 Part 2; IL
Mercury (Hg)	mg/kg	0.075	0.096	<0.050	0.065	0.069	12	0.000060	0.083	0.107	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
Lead (Pb)	mg/kg	14	16.2	8.71	11.3	11.8	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	16.4	18.1	8.56	13.3	14.7	1	21.3	21.3	21.3	-	-	-	-	450	Schedule 3.1 Part 2; IL
Magnesium (Mg)	mg/kg	5450	5790	4460	6230	6,480	12	500	2,350	3,100	20	3,900	12,200	15,000	-	No standard in Schedule 3.1
Manganese (Mn)	mg/kg	363	519	243	415	559	12	10	86.5	154	20	275	458	728	2,000	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Molybdenum (Mo)	mg/kg	3.25	4.15	2.27	2.69	4.01	12	0.46	1.3	14.4	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	36.8	40.9	30.7	32.7	72.9	12	3.9	25.3	38.6	20	24.3	40.25	66.7	90	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.0 (lowest CSR standard); std varies with receiving water hardness, receiving hardness > 180 mg/L is assumed
Phosphorous (P)	mg/kg	879	972	666	829	1250	12	570	710	970	20	810	895	1,350	-	No standard in Schedule 3.1
Potassium (K)	mg/kg	1910	2200	1130	1670	1310	12	2,000	2,700	3,400	20	900	1,900	3,300	-	No standard in Schedule 3.1
Selenium (Se)	mg/kg	**1.04**	**1.25**	0.88	**1.17**	**1.63**	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	0.235	0.271	0.158	0.209	0.197	12	0.28	0.3565	0.473	20	85	219	378	40	Schedule 3.1 Part 3; IL
Sodium (Na)	mg/kg	251	619	**1690**	**1960**	492	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	74.4	82.8	72.8	77.6	105	12	44.5	58.6	74.1	20	65.6	102	130	-	No standard in Schedule 3.1
Thallium (Tl)	mg/kg	0.132	0.284	0.116	0.157	0.197	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	0.71	0.85	0.45	0.66	0.90	1	0.7	0.7	0.7	-	-	-	-	300	Schedule 3.1 Part 3; IL
Titanium (Ti)	mg/kg	22.1	22.6	50.3	31.2	41.7	12	10	10	<50	20	50	170	290	-	No standard in Schedule 3.1
Uranium (U)	mg/kg	1.32	1.62	0.909	1.19	1.5	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	35.6	43.1	25.8	33.4	36.4	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	120	129	78.4	102	**227**	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

[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 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.
Bold Text indicates the dredgeate exceeded the applicable CSR Soil Standard.

Table 2-15:
Hydrocarbon Content of the Phase I Sediment Control Pond Dredgeate

Parameter	Units	RSEM-L5W Dredgeate	RSEM-L5E Dredgeate	RSEM-R5A-A Dredgeate	RSEM-R5A-B Dredgeate	RSEM-R5A-C Dredgeate	RSEM-R5A-D Dredgeate	RSEM-R5B Dredgeate	CSR Soil Standard [1]	CSR Notes
		2020-05-14 12:30 PM	2020-05-17 03:00 PM	2020-05-14	2020-05-14	2020-05-14	2020-05-14	2020-05-17		
Non-Halogenated Hydrocarbons										
VPH (VH6 to 10 - BTEX)	mg/kg	<8.6	<8.6	<8.6	<37	<8.6	<8.6	<28	200	Schedule 3.1 Part 3; IL
Benzene	mg/kg	0.032	<0.0050	0.034	0.110	0.024	0.037	<0.016	2.5	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Toluene	mg/kg	0.16	<0.050	0.150	0.380	0.100	0.170	<0.16	0.5	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Ethylbenzene	mg/kg	0.068	<0.010	0.078	0.230	0.045	0.064	<0.032	200	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
MTBE	mg/kg	<0.10	<0.10	<0.10	<0.43	<0.2	<0.23	<0.32	20,000	Schedule 3.1 Part 2; IL
Styrene	mg/kg	0.31	<0.030	<0.030	<0.13	<0.061	<0.068	<0.097	50	Schedule 3.1 Part 3; IL
Xylenes (Total)	mg/kg	0.095	<0.057	0.29	0.68	<0.11	0.14	<0.18	20	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Extractable Hydrocarbons										
LEPH (C10-C19 less PAH)	mg/kg	110	<100	<100	<290	<100	<100	<240	2,000	Schedule 3.1 Part 3; IL
HEPH (C19-C32 less PAH)	mg/kg	240	<100	150	<290	<100	230	<240	5,000	Schedule 3.1 Part 3; IL
Total Oil and Grease	mg/kg	<100	<100	<100	<300	<100	<100	<240	-	No standard in Schedule 3.1
Total PAH	mg/kg	1.1	0.3	1.00	1.10	0.77	0.91	0.24	-	No standard in Schedule 3.1
Acenaphthylene	mg/kg	<0.0050	<0.0050	<0.0050	<0.014	<0.0050	<0.0050	<0.011	-	No standard in Schedule 3.1
Acenaphthene	mg/kg	0.017	<0.0050	0.012	<0.014	0.011	0.012	<0.011	15,000	Schedule 3.1 Part 2; IL
Anthracene	mg/kg	<0.0040	<0.0040	<0.0040	<0.011	<0.0040	<0.0040	<0.0088	30	Schedule 3.1 Part 1; IL-toxicity to soil inverebrates; no standard groundwater (AL-freshwater)
Benzo(a)anthracene	mg/kg	0.018	<0.010	0.019	<0.027	0.013	0.016	<0.022	10	Schedule 3.1 Part 3; IL
Benzo(b&j)fluoranthene	mg/kg	0.047	0.038	0.052	0.047	0.037	0.046	0.027	10	Schedule 3.1 Part 3; IL
Benzo(k)fluoranthene	mg/kg	<0.010	<0.010	<0.010	<0.027	<0.010	<0.010	<0.022	10	Schedule 3.1 Part 3; IL
Benzo(a)pyrene	mg/kg	0.021	<0.010	0.027	<0.027	0.017	0.02	<0.022	50	Schedule 3.1 Part 1; IL-human intake of soil; no standard groundwater (AL-freshwater)
Chrysene	mg/kg	0.035	0.024	0.036	0.034	0.026	0.033	<0.022	4,500	Schedule 3.1 Part 2; IL
Dibenz(a,h)anthracene	mg/kg	<0.020	<0.020	<0.020	<0.054	<0.020	<0.020	<0.044	10	Schedule 3.1 Part 3; IL
Fluoranthene	mg/kg	0.034	0.018	0.033	0.030	0.024	0.027	<0.022	200	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates; no standard groundwater (AL-freshwater)
Fluorene	mg/kg	0.044	<0.010	0.027	0.045	0.030	0.035	<0.022	9,500	Schedule 3.1 Part 2; IL
Indeno(1,2,3-cd)pyrene	mg/kg	<0.020	<0.020	<0.020	<0.054	<0.020	<0.020	<0.044	10	Schedule 3.1 Part 3; IL
1-Methylnaphthalene	mg/kg	0.19	0.053	0.23	0.26	0.16	0.19	0.057	1,000	Schedule 3.1 Part 2; IL
2-Methylnaphthalene	mg/kg	0.3	0.066	0.30	0.39	0.24	0.28	0.078	950	Schedule 3.1 Part 2; IL
Naphthalene	mg/kg	0.19	0.034	0.17	0.24	0.13	0.17	0.043	20	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates
Phenanthrene	mg/kg	0.21	0.065	0.17	0.16	0.13	0.14	0.061	50	Schedule 3.1 Part 3; IL
Pyrene	mg/kg	0.064	0.035	0.064	0.051	0.044	0.049	0.026	100	Schedule 3.1 Part 3; IL
Quinoline	mg/kg	<0.020	<0.020	<0.020	<0.054	<0.020	<0.020	<0.044	10	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.
Yellow highlight indicates the dredgeate exceeds the applicable CSR Soil Standard.

Table 2-16:
Leachable Toxic Metal Content of the Phase I Sediment Control Pond Dredgeate

Parameter (TCLP Leachate)	RSEM-L5W Dredgeate	RSEM-L5E Dredgeate	RSEM-R5A-A Dredgeate	RSEM-R5A-B Dredgeate	RSEM-R5A-C Dredgeate	RSEM-R5A-D Dredgeate	RSEM-R5B Dredgeate	HWR Leachable Toxic Waste Standard [1]
	2020-05-14	2020-05-17	2020-05-14	2020-05-14	2020-05-14	2020-05-14	2020-05-17	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Metals								
Arsenic (As)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5
Barium (Ba)	1	2	2.6	1.9	<1.0	<1.0	1.6	100
Boron (B)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	500
Cadmium (Cd)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.5
Chromium (Cr)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5
Copper (Cu)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	100
Lead (Pb)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5
Mercury (Hg)	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.1
Selenium (Se)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1
Silver (Ag)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	5
Uranium (U)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	10
Zinc (Zn)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	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.
Yellow highlight indicates the dredgeate exceeds the applicable HWR Leachable Toxic Waste Standard.

The geochemical assessment of the sediment control pond dredgeate samples indicates that it is appropriate to dispose the dredgeate sediments within a PAG RSEM Area using appropriate placement procedures. Although several metal(oid) concentrations exceeded the CSR standard, these concentrations remained within the range reported for operational PAG monitoring and baseline NPAG monitoring. The metal content of the dredgeate samples is consistent with the dredgeate sediment being derived from fine particulate transported as TSS from RSEM areas to the pond. Given that the RSEMs are approved as PAG bedrock repositories it follows that sediment derived from PAG bedrock could also be stored in these facilities either by removal and transfer through dredging or *in situ* backfilling and capping of the Phase I RSEM sediment control ponds prior to flooding. The dredgeate samples had hydrocarbon content below the CSR standards and the TCLP leachable metal concentrations were below the applicable HWR leachate standards.

2.5.3 MWTF Pre-Treatment Pond and Sludge Pond Results

The dredgeate from the MWTF Pre-Treatment Pond and MWTF Sludge Pond is managed in accordance with Section 7.2.4 of Appendix E (BC Hydro, 2016a) which addresses the disposal of accumulated sediment from a PAG contact sediment pond, as previously described in Section 2.5.1. Samples of dredgeate sediment were collected mid-May during decommissioning of the Phase I MWTF collection and settling ponds located in the RSEM Area R5B, specifically, the MWTF Pre-Treatment Pond where PAG-contact water requiring treatment was accumulated, and the MWTF Sludge Pond which was used to settle solids from treated water prior to pH adjustment and discharge. A sludge sample was collected in late October from the MWTF reactors that are used to mix lime and reagents with the influent. The MWTF is further described in Section 5.3.3 and Figure 5-5 and Figure 5-6 shows the MWTF facilities layout near RSEM Area R5B.

The total metal content of the samples collected from the MWTF ponds and reactors have been screened against the lowest CSR standard for industrial lands as noted previously in Section 2.5.1. In addition, the total metal content of these samples has been screened against the range of concentrations measured in the PAG bedrock and non-PAG overburden materials, which are materials that have been approved for storage in the RSEM Areas. The list of metal(oid)s and the corresponding screening values for the MWTF dredgeate samples are presented in Table 2-17. The full set of analytical results for the MWTF dredgeate samples are provided in Appendix 2-C.

Concentrations for most metals in the MWTF dredgeate samples were below the applicable CSR Soil Standard (Table 2-17). However, the total metal(oid) content of arsenic, selenium and sodium exceeded the CSR Soil Standard in dredgeate sediments from both MWTF ponds and sodium also exceeded the Standard in the reactor sample. The CSR standard was

also exceeded for cadmium in the MWTF Pre-Treatment Pond sediment and zinc in the MWTF Sludge Pond sediment. The concentrations of the above noted parameters that exceeded the CSR Soil Standards were within the range measured from PAG bedrock and NPAG overburden materials approved for disposal in RSEM Area R5A, with the exception of zinc which was very slightly above the observed upper concentration range in the MWTF Sludge Pond sediment (Table 2-17). As previously noted, the zinc CSR Standard is pH dependent. The lowest Zn standard (150 mg/kg) developed for samples with pH < 6.0 is considered conservative for screening the MWTF Sludge Pond sediment due to the presence of residual lime sludge from the treatment process which would be acid neutralizing. The sample's zinc content was below the next most stringent zinc Standard (250 mg/kg) that was developed for "Groundwater flow to surface water used by freshwater aquatic life" at pH 6.0 – 6.5.

The hydrocarbon content of the dredgeate sediment samples collected from the MWTF Pre-Treatment and MWTF Sludge ponds were below the CSR standards noted in Section 2.5.1 that were used to screen the samples, as shown in Table 2-18.

The leachable toxic waste evaluation of the sediment dredgeate samples collected from the MWTF Pre-Treatment and MWTF Sludge ponds is summarized in Table 2-19 and the regulated metal(oid)s were below the HWR leachate standards noted in Section 2.5.1 used to screen the samples.

A previous characterization of MWTF Sludge Pond sediments and evaluation of disposal options (Lorax, 2019) determined that placing MWTF Sludge Pond dredgeate in RSEM Area R5A is an appropriate management strategy. The 2020 geochemical assessment of the MWTF Pre-Treatment Pond and MWTF Sludge Pond dredgeate samples similarly indicates that it is appropriate to dispose the dredgeate sediments from both the MWTF Pre-Treatment Pond and the MWTF Sludge Pond within a PAG RSEM Area using appropriate placement procedures. Although several metal(oid) concentrations exceeded the CSR standard, these concentrations remained within the range reported for operational PAG monitoring and baseline NPAG monitoring. The metal content of the dredgeate samples is consistent with the dredgeate sediment being derived from fine particulate transported as TSS from excavation and RSEM areas to the MWTF Pre-Treatment Pond and subsequently through the MWTF to the MWTF Sludge Pond, as well as influence from lime sludge that also settles in the sludge pond. Given that the RSEMs are approved as PAG bedrock repositories it follows that sediment derived from PAG bedrock could also be stored in these facilities. Approximately 4 m^3 of reactor sludge disposed in RSEM Area R5a using a dewatering bag on November 9. The MWTF dredgeate and reactor samples had hydrocarbon content below the CSR standards and the TCLP leachable metal concentrations were below the applicable HWR leachate standards.

Table 2-17:
Total Metal Content of Right Bank MWTF Pre-Treatment Pond and Sludge Pond Dredgeate

Parameter	Units	MWTF Pre-Treatment Pond Dredgeate	MWTF Sludge Pond Dredgeate	MWTF Reactor Sludge	PAG Material deposited in RSEM Area R5A [1]				NPAG Material (Left Bank) [2]				CSR Soil Standard [3]	CSR Notes
		2020-05-16 02:00 PM	2020-05-14 11:45 AM	2020-10-27 4:15 PM	n	Minimum	Median	Maximum	n	Minimum	Median	Maximum		
Moisture	%	65	71	38	-	-	-	-	-	-	-	-	-	No standard in Schedule 3.1
pH	pH	8.27	8.56	11.2	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	10,300	9,470	1460	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	1.28	1.06	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	**11.5**	**10.7**	1.71	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	751	666	192	12	237	399.5	580	20	301	347.5	655	1,500	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates
Beryllium (Be)	mg/kg	0.88	0.69	<0.20	1	0.76	0.76	0.76	-	-	-	-	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 6.5 (lowest CSR standard)
Bismuth (Bi)	mg/kg	0.21	0.18	<0.10	12	0.22	0.29	0.34	20	0.08	0.185	0.34	-	No standard in Schedule 3.1
Boron (B)	mg/kg	11.6	-	-	7	<20	<20	20	20	<20	<20	<20	1,000,000	Schedule 3.1 Part 2; IL (> 1,000,000 mg/kg)
Cadmium (Cd)	mg/kg	**1.15**	0.798	0.576	12	0.15	0.33	0.43	20	0.58	1.035	1.24	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 7 (lowest CSR standard)
Calcium (Ca)	mg/kg	51,700	94,600	383,000	12	1,600	3,350	6,400	20	8,700	37,450	50,300	-	No standard in Schedule 3.1
Chromium (Cr)	mg/kg	24.8	19.2	1.74	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	22.2	18.6	13.3	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	43.5	33.6	2.96	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	29,200	26,200	1570	12	13,200	18,800	23,400	20	20,300	26,150	40,200	150,000	Schedule 3.1 Part 2; IL
Mercury (Hg)	mg/kg	0.064	0.055	<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 to soil invertebrates and plants, no standard for groundwater
Lead (Pb)	mg/kg	12.7	11	0.8	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	18	17.2	5.22	1	21.3	21.3	21.3	-	-	-	-	450	Schedule 3.1 Part 2; IL
Magnesium (Mg)	mg/kg	5,460	7,030	9,150	12	500	2,350	3,100	20	3,900	12,200	15,000	-	No standard in Schedule 3.1
Manganese (Mn)	mg/kg	563	464	443	12	10	86.5	154	20	275	458	728	2,000	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Molybdenum (Mo)	mg/kg	4.59	2.49	0.17	12	0.46	1.3	14.4	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	67.6	62.6	59.5	12	3.9	25.3	38.6	20	24.3	40.25	66.7	90	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.0 (lowest CSR standard); std varies with receiving water hardness, receiving hardness > 180 mg/L is assumed
Phosphorous (P)	mg/kg	873	830	57	12	570	710	970	20	810	895	1,350	-	No standard in Schedule 3.1
Potassium (K)	mg/kg	1950	1950	282	12	2,000	2,700	3,400	20	900	1,900	3,300	-	No standard in Schedule 3.1
Selenium (Se)	mg/kg	**1.41**	**1.25**	<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	0.215	0.191	<0.050	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	**1160**	**1560**	**1230**	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	173	293	1020	12	44.5	58.6	74.1	20	65.6	102	130	-	No standard in Schedule 3.1
Thallium (Tl)	mg/kg	0.115	0.107	<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	2.31	1.44	0.19	1	0.7	0.7	0.7	-	-	-	-	300	Schedule 3.1 Part 3; IL
Titanium (Ti)	mg/kg	24	23.6	24.7	12	10	10	<50	20	50	170	290	-	No standard in Schedule 3.1
Uranium (U)	mg/kg	<0.50	2.94	4.19	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	1.76	32.1	5.3	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	35.6	**179**	42.2	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

[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.
Bold text indicates the dredgeate exceeded the applicable CSR Soil Standard.

Table 2-18:
Hydrocarbon Content of the Right Bank Area R5B MWTF Pre-Treatment Pond and Sludge Pond Dredgeate

Parameter	Units	MWTF Pre-Treatment Pond Dredgeate	MWTF Sludge Pond Dredgeate	MWTF Reactor Sludge	CSR Soil Standard [1]	CSR Notes
		2020-05-16 02:00 PM	2020-05-14 11:45 AM	2020-10-27 4:15 PM		
Non-Halogenated Hydrocarbons						
VPH (VH6 to 10 - BTEX)	mg/kg	<32	<38	<8.6	200	Schedule 3.1 Part 3; IL
Benzene	mg/kg	0.068	0.120	<0.0050	2.5	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Toluene	mg/kg	0.260	0.340	<0.050	0.5	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Ethylbenzene	mg/kg	0.130	0.200	<0.010	200	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
MTBE	mg/kg	<0.37	<0.44	<0.10	20,000	Schedule 3.1 Part 2; IL
Styrene	mg/kg	0.11	0.45	<0.030	50	Schedule 3.1 Part 3; IL
Xylenes (Total)	mg/kg	0.39	0.63	<0.057	20	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Extractable Hydrocarbons						
LEPH (C10-C19 less PAH)	mg/kg	<290	<340	<100	2,000	Schedule 3.1 Part 3; IL
HEPH (C19-C32 less PAH)	mg/kg	<290	<340	<100	5,000	Schedule 3.1 Part 3; IL
Total Oil and Grease	mg/kg	<300	<350	<100	-	No standard in Schedule 3.1
Total PAH	mg/kg	1.6	1.3	<0.050	-	No standard in Schedule 3.1
Acenaphthylene	mg/kg	<0.014	<0.016	<0.0050	-	No standard in Schedule 3.1
Acenaphthene	mg/kg	<0.015	<0.016	<0.0050	15,000	Schedule 3.1 Part 2; IL
Anthracene	mg/kg	<0.011	<0.013	<0.0040	30	Schedule 3.1 Part 1; IL-toxicity to soil inverebrates; no standard groundwater (AL-freshwater)
Benzo(a)anthracene	mg/kg	<0.027	<0.032	<0.010	10	Schedule 3.1 Part 3; IL
Benzo(b&j)fluoranthene	mg/kg	0.056	0.043	<0.010	10	Schedule 3.1 Part 3; IL
Benzo(k)fluoranthene	mg/kg	<0.027	<0.032	<0.010	10	Schedule 3.1 Part 3; IL
Benzo(g,h,i)perylene	mg/kg	0.094	0.079	<0.020	-	No standard in Schedule 3.1
Benzo(a)pyrene	mg/kg	<0.027	<0.032	<0.010	50	Schedule 3.1 Part 1; IL-human intake of soil; no standard groundwater (AL-freshwater)
Chrysene	mg/kg	<0.027	<0.032	<0.010	4,500	Schedule 3.1 Part 2; IL
Dibenz(a,h)anthracene	mg/kg	<0.054	<0.064	<0.020	10	Schedule 3.1 Part 3; IL
Fluoranthene	mg/kg	0.040	<0.032	<0.010	200	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates; no standard groundwater (AL-freshwater)
Fluorene	mg/kg	0.074	0.047	<0.010	9,500	Schedule 3.1 Part 2; IL
Indeno(1,2,3-cd)pyrene	mg/kg	<0.054	<0.064	<0.020	10	Schedule 3.1 Part 3; IL
1-Methylnaphthalene	mg/kg	0.39	0.32	<0.010	1,000	Schedule 3.1 Part 2; IL
2-Methylnaphthalene	mg/kg	0.6	0.51	<0.010	950	Schedule 3.1 Part 2; IL
Naphthalene	mg/kg	0.410	0.350	<0.010	20	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates
Phenanthrene	mg/kg	0.250	0.170	<0.010	50	Schedule 3.1 Part 3; IL
Pyrene	mg/kg	0.077	0.055	<0.010	100	Schedule 3.1 Part 3; IL
Quinoline	mg/kg	<0.054	<0.064	<0.010	10	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 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.
Bold text indicates the dredgeate exceeds the applicable CSR Soil Standard.

Table 2-19:
Leachable Toxic Metal Content of the Phase I Sediment Control Pond Dredgeate

Parameter (TCLP Leachate)	MWTF Pre-Treatment Pond Dredgeate	MWTF Sludge Pond Dredgeate	MWTF Reactor Sludge	HWR Leachable Toxic Waste Standard [1]
	2020-05-16 02:00 PM	2020-05-14 11:45 AM	2020-10-27 4:15 PM	
	mg/L	mg/L	mg/L	mg/L
Metals				
Arsenic (As)	<0.50	<0.50	<0.50	2.5
Barium (Ba)	1.6	1	1.1	100
Boron (B)	<1.0	<1.0	<1.0	500
Cadmium (Cd)	<0.10	<0.10	<0.10	0.5
Chromium (Cr)	<0.50	<0.50	<0.50	5
Copper (Cu)	<1.0	<1.0	<1.0	100
Lead (Pb)	<0.50	<0.50	<0.50	5
Mercury (Hg)	<0.020	<0.020	<0.020	0.1
Selenium (Se)	<0.10	<0.10	<0.10	1
Silver (Ag)	<0.50	<0.50	<0.50	5
Uranium (U)	<0.20	<0.20	<0.20	10
Zinc (Zn)	<1.0	<1.0	<1.0	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.
Bold text indicates the dredgeate exceeds the applicable HWR Leachable Toxic Waste 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

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. 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 3.2.4.7);
- 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 3.2.4);

- 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 3.2.4);
- Daily, weekly or periodic field measurements and analytical samples of water quality at upstream sumps and ditches(Section 3.2.2 through Section 3.2.4); and,
- Current turbidity and TSS relationships for PAG containing RSEM sediment control ponds (Section 5.1).

Analytical measurements include general water chemistry and total and dissolved metals. All analyses were completed by BV at their laboratory in Burnaby, B.C., which is accredited by the Standards Council of Canada (SCC). The approach used to screen water quality results is presented in Section 3.2.1.

The results of the 2020 ARD program are summarized below for the Left Bank (Section 3.2.2) and the Right Bank (Section 3.2.3). 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 early in the construction phase are no longer in use. 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 2020 is discussed for each respective area in the sections below.

The Quality Assurance/Quality Control (QA/QC) monitoring results are summarized in Section 3.2.4. Notably, comparison of *in situ* field measurements to analytical measurements in PAG-contact areas and in RSEM ponds are described in Section 0 for all field parameters. The *in situ* field measurements and *in situ* sonde measurements are compared in Section 3.2.4.7.

Tabulated water quality results for the 2020 ARD program are provided in:

- Appendix 3-A – 2020 *In Situ* Continuous Sonde Measurement Water Quality Data (*i.e.*, continuously logged measurements from in-pond fixed probes);
- Appendix 3-B – 2020 *In Situ* Field Measurement Water Quality Data;
- Appendix 3-C – 2020 Analytical Sample and Field Duplicate Water Quality Data; and
- Appendix 3-D – 2020 Analytical Field Blank Water Quality Data

Water quality at stations within the construction site upgradient of RSEM sediment ponds are compared to RSEM end of pipe limits by PRHP to inform water management. Water that accumulates at these stations is 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. Consequently, water quality at these stations that exceeds RSEM end of pipe limits does not indicate non-compliance with RSEM end of pipe limits. It indicates only that water management is required. The RSEM end of pipe 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 habitat. RSEM sediment pond discharge is assessed independently.

The water quality screening approach is described below in Section 3.2.1 and the results of the 2020 ARD program are summarized for the Left Bank (Section 3.2.2) and the Right Bank (Section 3.2.3), followed by an overview of the program Quality Assurance/Quality Control (QA/QC) monitoring results in Section 3.2.4.

3.2.1 Water Quality Screening Approach

Results from PAG-containing RSEM sediment control ponds have been compared against the end of pipe (EOP) 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). Discharges from RSEM Area R5A ponds were also compared to British Columbia Water Quality Guidelines (WQG) for the protection of aquatic life (BC ENV, 2019a). The RSEM EOP limits are reproduced in Table 3-1 for reference.

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

Parameter	Units	End-of-Pipe Discharge Limit
TSS	mg/L	BC Water Quality Guidelines[1]
pH	pH units	6.0 – 9.0
Cadmium	mg/L	0.00029
Cobalt		0.55
Copper		0.011
Zinc		0.033

[1] Approved British Columbia Water Quality Guidelines for the Protection of Aquatic Life (2019)

Water quality at stations within the construction site upgradient of RSEM sediment ponds are compared to RSEM EOP limits to inform water management. Water that accumulates at these stations is 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. Consequently, water quality at these stations that exceeds RSEM

EOP limits does not indicate non-compliance with CEMP requirements. It indicates only that water management may be required. 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 habitat. 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.

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

Active discharge from the Phase 1 RSEM Area R5A sediment control ponds was permitted by pumping from Pond A to the Peace River main stem if discharge water quality meets the RSEM EOP limits indicated in Table 3-1 (BC Hydro, 2019). The Phase 1 RSEM R5A ponds B, C and D were managed to not discharge. Accidental passive discharges, if they occurred, and active discharge from RSEM R5A pond A were compared against approved WQGs for the protection of aquatic life (BC ENV, 2019a, 2019b) as per the letter from BC Hydro to PRHP describing the RSEM Area R5A sediment pond pumping plan (BC Hydro, 2019). Pond A and Pond B were screened against short-term BC WQG; Pond C and Pond D were screened against both the short-term and long-term BC WQG.

Analytical results from samples for discharges of non-construction contact surface water are compared against approved BC WQGs for the protection of aquatic life (BC ENV, 2019a, 2019b), in accordance with Section 5.2.1.7 of BC Hydro's ARD/ML Management Plan. 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).

3.2.2 Left Bank

Water quality monitoring was conducted throughout the Left Bank at EOP and upgradient station locations. The 2020 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 5.3.2. The monitoring stations are shown in Figure 3-1.

Construction of the diversion tunnels and channels was completed early August 2020. Flooding of the diversion channels was initiated August 18 and continued until September 11 when the DIC and DOC cofferdam slurry walls were breached. The Diversion Tunnel gates were opened September 30 and full diversion of Peace River was achieved on October 3 when the Upstream Cofferdam rockfill berm was extended to the Left Bank. Water quality samples were collected within the diversion channels and along the Peace River from approximately mid-August to early October prior to and after the cofferdam walls were breached.

An overview of water quality and management in each catchment area for the Left Bank in 2020 is presented in the sections below and additional detail regarding water management is in Section 5.3.2. 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 and LBEX-B1 sumps, and from the RSEM Area L5 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. Ponded water was also sampled in the Left Bank Debris Boom Anchor area located outside the western boundary of Main Civil Works RSEM Area L5, adjacent to Peace River (Figure 1-6 and Figure 1-7);
- Left Bank cofferdams and diversion tunnels – analytical samples and *in situ* field measurements were obtained from sumps and baker tanks that were used collect and manage water within the DIC, LBCD, and DOC areas. Sampling was also conducted in the DIC and DOC channels and associated Peace River locations once flooding of the DIC and DOC areas was initiated, and following flooding of the diversion tunnels;
- 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.

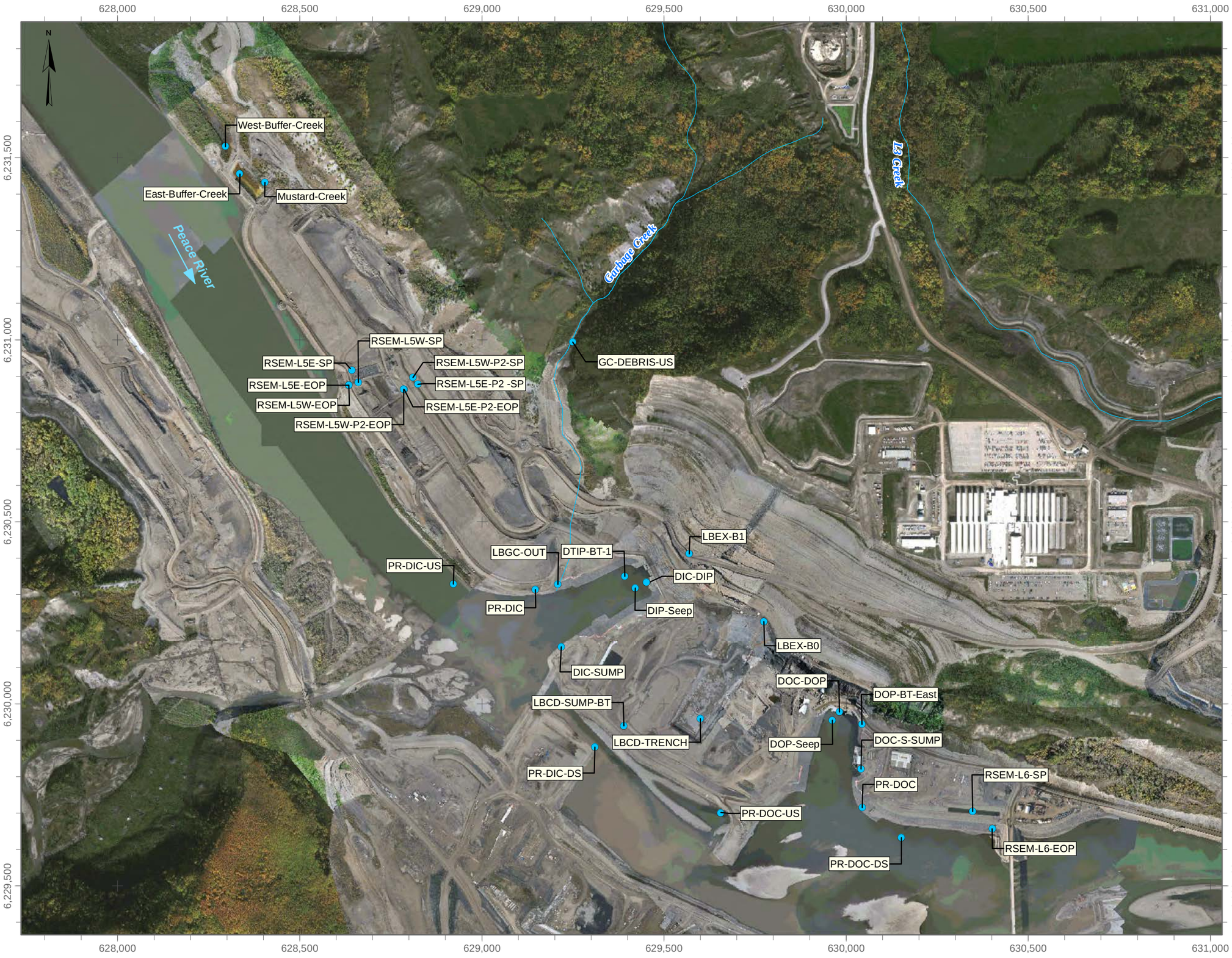
Table 3-3:
Water Quality Monitoring Stations in 2020 (Left Bank)

Station ID	Easting	Northing	Description
LEFT BANK EXCAVATION AND RSEM AREA L5			
RSEM AREA L5 SUBCATCHMENT - LBEX			
LBEX-B1	629569	6230412	LBEX Bench 1 Sump
LBEX-B0	629774	6230226	LBEX Bench 0 Sump
RSEM AREA L5 SUBCATCHMENT – RSEM AREA L5 DEPOSITION AREA			
RSEM-L5E-SP	628625	6230886	RSEM L5 East sediment control pond, in pond
RSEM-L5E-EOP	628635	6230875	RSEM L5 East sediment control pond, end of pipe
RSEM-L5W-SP	628661	6230883	RSEM L5 West sediment control pond, in pond
RSEM-L5W-EOP	628635	6230875	RSEM L5 West sediment control pond, end of pipe
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
LEFT BANK DEBRIS BOOM			
Mustard-Creek	628404	6231432	Seepage through historic disturbance outside the western boundary of Main Civil Works RSEM Area L5
East-Buffer-Creek	628350	6231430	Ponded water in isolated backchannel outside the western boundary of Main Civil Works RSEM Area L5, east and west of the access road bisecting the pond
West-Buffer-Creek	628321	6231486	
LEFT BANK COFFERDAMS AND DIVERSION CHANNELS			
DIVERSION INLET COFFERDAM AND DIVERSION INLET			
DIC-SUMP	629218	6230156	Sump in the southern part of the DIC that collects non-PAG contact water
DIP-Seep	629421	6230318	Seep just south to the entrance of the Diversion inlet portals
DTIP-BT-1	629392	6230350	Green tank at DTIP work area (drilling water)
DIC-DIP	629369	6230212	Diversion inlet adjacent to inlet portals
PR-DIC	629147	6230314	Peace River intake for diversion inlet channel flooding
PR-DIC-US	628922	6230329	Peace River upstream of the diversion inlet channel
PR-DIC-DS	629310	6229881	Peace River downstream of the diversion inlet channel
CENTRAL COFFERDAM			
LBCD-SUMP-BT	629390	6229940	Baker tank for Left Bank Cofferdam contact water
LBCD-TRENCH	629600	6229959	Left Bank Central Cofferdam dam core trench
DIVERSION OUTLET COFFERDAM AND DIVERSION OUTLET			
DOC-S-SUMP	630041	6229821	Original sump in southern part of area behind DOC
DOP-BT-East	630043	6229944	Baker tank used to hold outlet tunnel contact water
DOP-Seep	629962	6229955	Seep south of the diversion tunnel outlet portals
DOC-DOP	629982	6229978	Adjacent to diversion tunnel outlet portals
PR-DOC	630044	6229715	Peace River intake for diversion outlet channel flooding
PR-DOC-US	629645	6229663	Peace river upstream of the diversion outlet channel
PR-DOC-DS	630152	6229632	Peace River downstream of the diversion outlet channel
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) – 2020

Station ID[1]	*In situ* Sonde Continuous Measurements[2] (Y / N)	*In situ* Field Measurements		Analytical (Lab) Samples	
		Sample Count	Intended Frequency[3] (D / W / M / P)	Sample Count	Intended Frequency[3] (D / W / M / P)
LEFT BANK EXCAVATION AND RSEM AREA L5					
RSEM AREA L5 SUBCATCHMENT - LBEX					
LBEX-B1	N	35	W	6	M
LBEX-B0	N	0	P	1	P
RSEM AREA L5 SUBCATCHMENT – RSEM AREA L5 DEPOSITION AREA					
RSEM-L5E-SP	Y[4]	10	P	8	P
RSEM-L5E-EOP	N	79	D	78	D
RSEM-L5W-SP	Y[4]	2	P	1	P
RSEM-L5W-EOP	N	5	P	6	P
GARBAGE CREEK DIVERSION					
GC-DEBRIS-US	N	16	M	10	M
LBGC-OUT	N	72	D	25	W
RSEM AREA L5 DEBRIS BOOM					
Mustard-Creek	N	0	P	1	P
East-Buffer-Creek	N	0	P	1	P
West-Buffer-Creek	N	0	P	1	P
LEFT BANK COFFERDAMS AND DIVERSION CHANNELS					
DIVERSION INLET COFFERDAM AND DIVERSION INLET CHANNEL					
DIC-SUMP	N	2	P	2	P
DIP-Seep	N	0	P	1	P
DTIP-BT-1	N	1	P	0	P
DIC-DIP	N	29	P	8	P
PR-DIC	N	2	P	5	P
PR-DIC-US	N	3	P	3	P
PR-DIC-DS	N	3	P	3	P
CENTRAL COFFERDAM					
LBCD-SUMP-BT	N	180	D	29	W
LBCD-TRENCH	N	0	P	1	P
DIVERSION TUNNEL OUTLET COFFERDAM AND OUTLET DIVERSION CHANNEL					
DOC-S-SUMP	N	4	P	3	P
DOP-BT-East	N	1	P	1	P
DOP-Seep	N	0	P	1	P
DOC-DOP	N	25	P	8	P
PR-DOC	N	8	P	7	P
PR-DOC-US	N	3	P	3	P
PR-DOC-DS	N	3	P	3	P
RSEM AREA L6					
RSEM-L6-SP	Y[4]	10	P	4	P
RSEM-L6-EOP	N	8	P	8	P

[1] -SP = sediment control pond, in pond location;-EOP = sediment control pond, end of pipe location.
[2] Y = Yes; N = No.
[3] 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).
[4] Sonde was deployed when the pond was discharging.



LEGEND

- Monitoring Location

Note: Site C aerial imagery collected between September 2019 - September 2020

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:	Feb 24, 2021
DRAWN BY:	AL
REVIEWED:	NM
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2020 Annual Report

TITLE:

Left Bank Water
Quality Sampling Locations

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

P:\@Drafting\Site C\Drafting Figures\MXD\2020_Q4_Annual_Report\Fig 3_1_LB WQ.mxd

3.2.2.1 LBEX Sumps

The LBEX sumps are developed along the LBEX benches to collect surface runoff. The upper benches drain to LBEX-B1 sump through the Left Bank Drainage Channel, whereas the lower LBEX-B0 sump collects possible ARD influenced runoff that is directed to the MWTF for treatment. Monitoring records indicate that water periodically collected in the LBEX-B1 sump and was generally dewatered to Phase 1 RSEM L5 East sediment control pond during the first half of 2020, to Phase 2 RSEM L5 East sediment control pond for the balance of the year and, and on occasion, to RSEM R6 East sediment control ponds.

Over the course of 2020, one analytical sample was collected at LBEX-B0 (in May 2020) and six analytical samples were collected at LBEX-B1 (Table 3-5). Field measurements were collected at the latter on an approximate weekly basis.

The LBEX-B0 sump water quality was circum-neutral with a sulphate concentration of 1,120 mg/L (Table 3-5). The metal concentrations are low and attributed to TSS, except Cd which is entirely present as a dissolved component. The LBEX-B1 samples were typically circum-neutral with moderate sulphate that elevated to 910 mg/L, and variable TSS concentrations as high as 18,000 mg/L. The LBEX-B1 maximum sulphate and metal concentrations shown in Table 3-5 were observed in a sample collected June 8th. The higher concentrations of Cd, Co, Cu, and Zn observed in three of six samples collected at LBEX-B1 are attributed to elevated TSS, except in the June 8th sample when dissolved components of Cd, Co, Cu, and Zn were also present.

Table 3-5:
LBEX Lower Benches 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LBEX-B0 (n=1 lab)	Value	8.09	-	2,680	-	11.3	1,120	0.000152	0.00276	0.00078	0.0097
LBEX-B1 (n=6 lab, 35 field)	Max	8.22	8.7	1,840	2,130	18,000	910	0.0291	0.33	0.803	2.85
	Min	6.73	7.2	840	744	16.3	230	<0.00001	0.00043	0.0018	<0.005
	Median	7.98	8.1	1,231	1,451	2,984	359	0.00054	0.00516	0.023	0.068

Notes:
TSS = Total suspended solids.

3.2.2.2 RSEM Area L5 Sediment Control Ponds

The Phase 1 RSEM Area L5 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. The RSEM L5 Phase 2 East and West ponds have a similar design concept as the Phase 1 ponds but are located at a higher elevation within RSEM Area L5. The RSEM Area L5 Extension is included within the RSEM Area L5 water management catchment.

The Phase 1 RSEM L5 East and West sediment control ponds continued operation through 2020 until their decommissioning. Backfilling and decommissioning of the RSEM L5 West pond was completed July 23rd and the RSEM L5 East pond was decommissioned on September 20th and backfilled shortly thereafter. On September 12th, in advance of the planned Peace River diversion, water management in RSEM L5 area was transitioned to the Phase 2 RSEM L5 East sediment control pond while construction of the Phase 2 primary and emergency discharge channels and appurtenances was underway. Commissioning of the Phase 2 RSEM L5 ponds for discharge is expected to occur in Q1 2021 and until then discharges are prevented by dewatering to RSEM R6 sediment control ponds, if needed. As such, the Phase 2 RSEM L5 East and West ponds did not discharge in 2020 and no samples were collected.

During their operation in 2020, the Phase 1 RSEM L5 East and West sediment control ponds collected surface runoff from within the RSEM L5 Area catchment, as well as water transferred from the Central Cofferdam sump (LBCD-SUMP-BT), DIC sump, LBEX-B1 sump, and water captured within the partially constructed Phase 2 RSEM L5 East sediment control pond. Water management by site personnel included transfer of water between Phase 1 RSEM L5 East and West ponds to minimize the number of final discharge points from RSEM Area L5. The Phase 2 RSEM L5 East sediment control pond periodically received water from LBEX-B1 sump and temporarily stored PAG-contact water in mid-June which was subsequently treated prior to discharge through the Phase 1 pond. Discharge from RSEM L5 East pond was periodically treated with carbon dioxide to reduce pH.

The Phase 1 RSEM L5 East sediment control pond began discharging in early April 2020, as the site thawed. Discharge continued intermittently until September, when the pond was decommissioned. On April 10th, the RSEM L5 East pond was instrumented with an *in situ* continuous monitoring probe (sonde). Discharge from Phase 1 RSEM L5 West sediment control pond was limited to April 19th and a short period of time in July following heavy rains, and the pond was instrumented with a sonde when discharging. Backfilling of the Phase 1 RSEM L5 West pond was initiated in Q2 as part of the Phase 2 transition, which limited the capacity of this pond.

In July, *in situ* treatment was applied to ARD influenced water that was stored in the Phase 1 and Phase 2 RSEM L5 East sediment control ponds following heavy rains late June and early July. Due to the large volume of stored water, the treatment was operated in a modified and isolated section of the Phase 1 RSEM L5 East sediment control pond. The pond was divided into four cells; three were used for dissolved metal treatment and particle settling by applying the same process as used in the MWTF, and the final cell was operated as a RSEM sediment control pond. ARD influenced waters stored in the Phase 2 RSEM L5 East pond were transfer to the modified Phase 1 pond for treatment. Monitoring data indicate the treatment was effective and the treated effluent that was discharged later in July through the final cell of the RSEM L5 East pond met RSEM EOP limits.

Analytical water samples were collected from the Phase 1 RSEM L5 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 2020 analytical data and field pH measurements for Phase 1 RSEM L5 East and West sediment control ponds are summarized in Table 3-6, and plotted in Figure 3-2 through Figure 3-11. The monitoring data indicate pond waters were typically circum-neutral to slightly alkaline. Carbon dioxide sparging was periodically applied near the East pond discharge pipe intake to reduce pH at EOP. Sulphate occurred at moderate levels in the RSEM L5 East pond (up to 1280 mg/L) and up to 501 mg/L in the RSEM L5 West pond.

Concentrations of TSS and metals in analytical samples from Phase 1 RSEM L5 East and West sediment control ponds were generally low except during discrete periods in June and July following heavy rains. Water samples collected at RSEM-L5E-EOP exceeded RSEM EOP discharge limits for T-Cd and T-Zn from June 15th to June 19th in association with heavy rains mid-June (Table 3-6). During this period, high water volumes throughout the construction site limited the storage capacity of turbid site water and treatment capacity. Early July, following heavy precipitation, T-Cd elevated to 0.000657 mg/L in RSEM-L5E-EOP water, exceeding the RSEM EOP limit from July 5th to 7th. The Zn concentrations in the June event, and the Cd concentrations in both the June and July events, were driven in large part by the dissolved components of these metals. Field and analytical measurements of the RSEM L5 West pond discharges met the RSEM EOP limits, except April 19th when pH increased to 9.4 due to a temporary failure of the pH treatment system for alkaline shotcrete contact water from LBCD-Sump-BT.

Table 3-6:
RSEM L5 Phase 1 East and West Pond 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		**-**	**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**-**	**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.00029**	**0.55**	**0.011**	**0.033**
RSEM-L5E-SP (n=8 lab, 10 field)	Max	8.26	8.6	2,010	2,430	17.6	994	0.000047	0.00072	0.00282	0.0091
	Min	7.11	7.5	627	614	2	176	<0.00001	0.00022	0.00054	<0.005
	Median	7.86	8.4	876	879	4.6	307	0.000014	0.00034	0.00088	0.0050
RSEM-L5E-EOP (n=78 lab, 79 field)	Max	8.39	8.7	2,830	2,610	111	1,280	***0.00151***	0.0312	0.0106	***0.0711***
	Min	6.42	7.0	472	499	<1	138	<0.00001	<0.0002	<0.0005	<0.005
	Median	8.06	8.2	901	963	11.7	314	0.000061	0.00064	0.00217	0.0055
RSEM-L5W-SP (n=1 lab, 2 field)	Max	7.73	8.6	1,230	1,959	40	501	0.000063	0.00059	0.00245	0.0056
	Min		8.1		1,378						
	Median		8.4		1,669						
RSEM-L5W-EOP (n=6 lab, 5 field)	Max	8.55	***9.4***	1,130	1,302	25	481	0.000072	0.00071	0.00228	0.0096
	Min	7.69	8.0	1,030	954	3.2	340	0.000030	0.00021	0.00133	<0.005
	Median	8.05	8.6	1,095	1,238	16.3	461	0.000053	0.00049	0.00207	0.0050

Notes:
[1]RSEM EOP Limit only applies to RSEM sediment control pond discharge (-EOP samples).
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.
Gold italics indicate exceedance of an RSEM EOP limit.

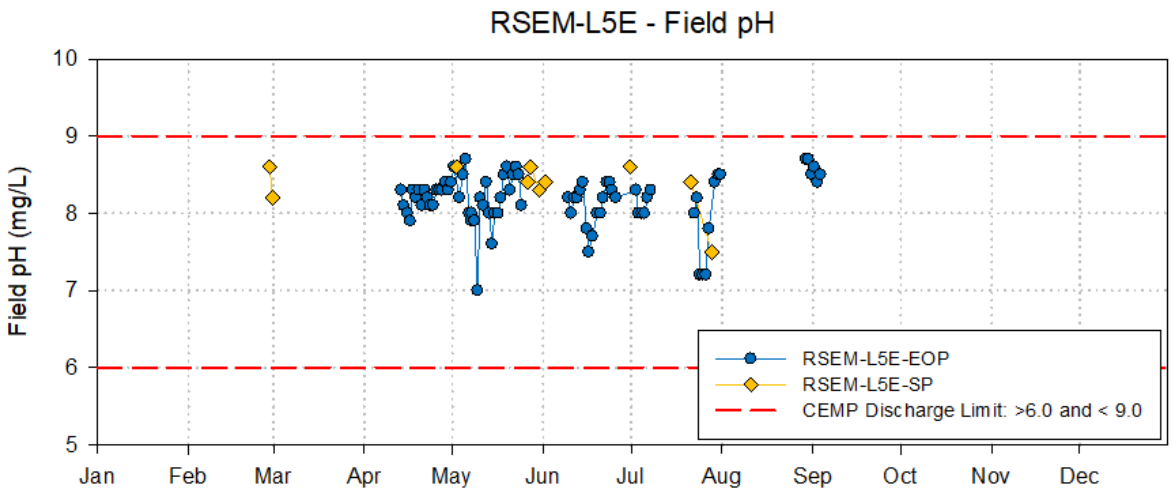


Figure 3-2: Time series profile for field pH in RSEM-L5 East compared to RSEM EOP Limits in 2020. EOP – End of Pipe; SP – Sediment Pond.

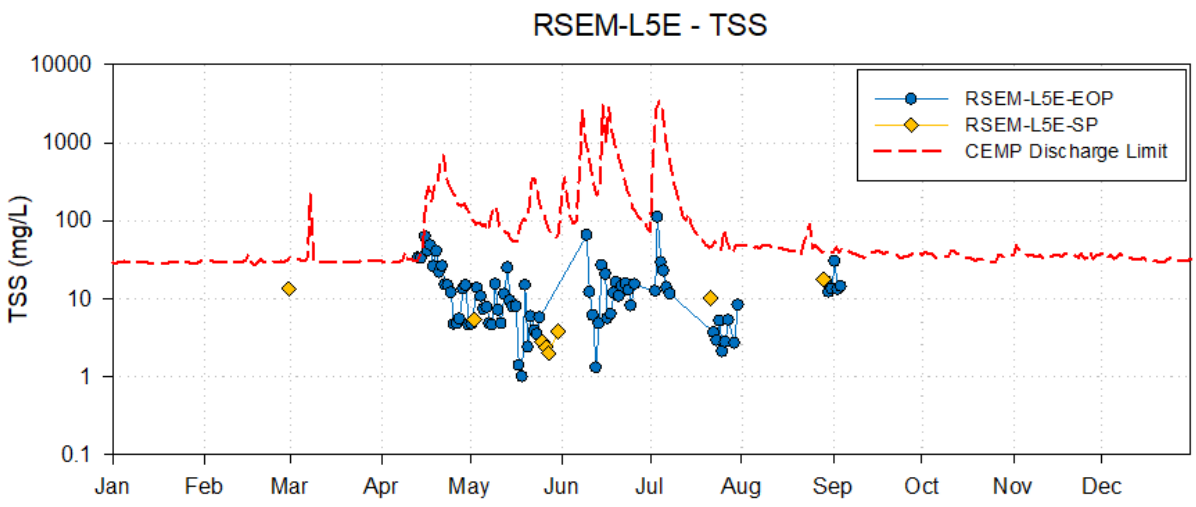


Figure 3-3: Time series profile for total suspended solids (TSS) in RSEM-L5 East compared to RSEM EOP Limits in 2020. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

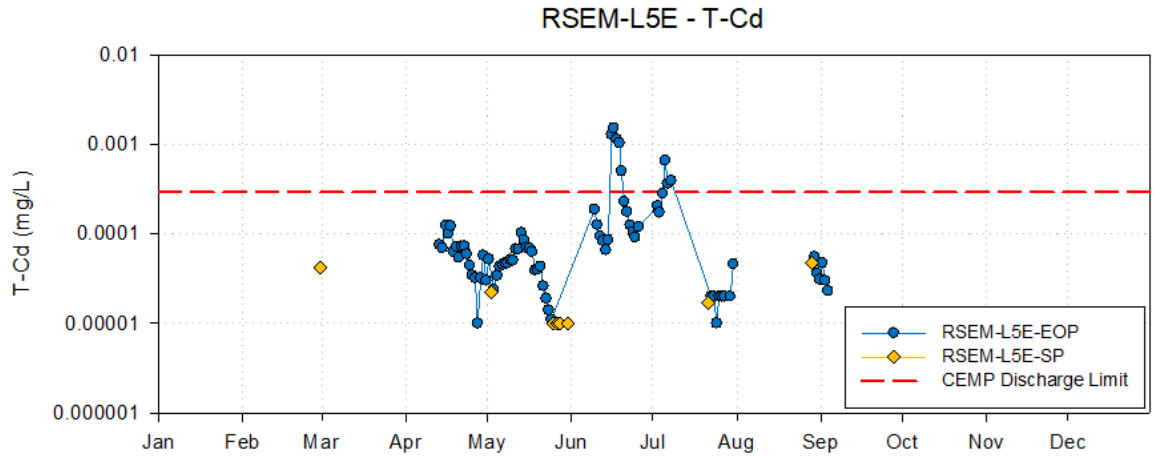


Figure 3-4: Concentrations of cadmium (Cd) for RSEM-L5 East compared to RSEM EOP Limits in 2020. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

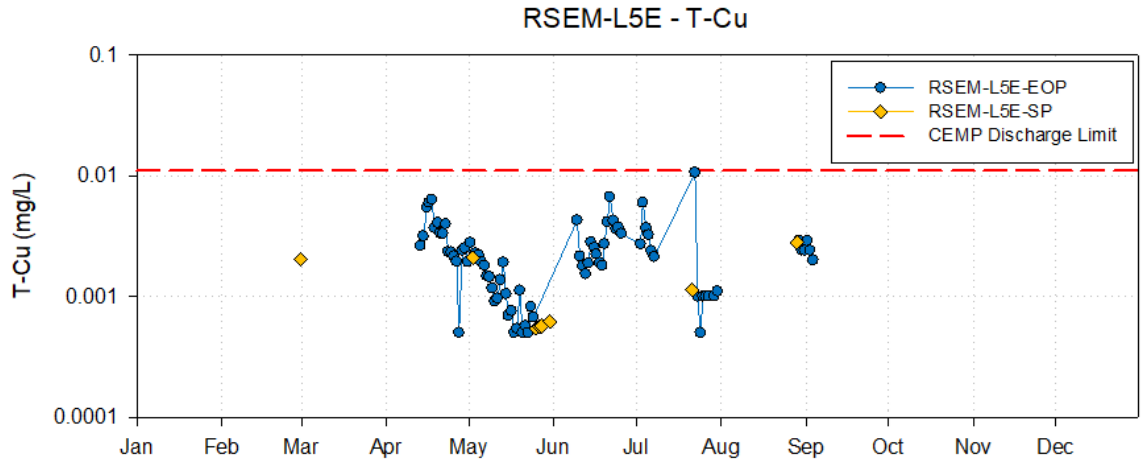


Figure 3-5: Concentrations of copper (Cu) for RSEM-L5 East compared to RSEM EOP Limits in 2020. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

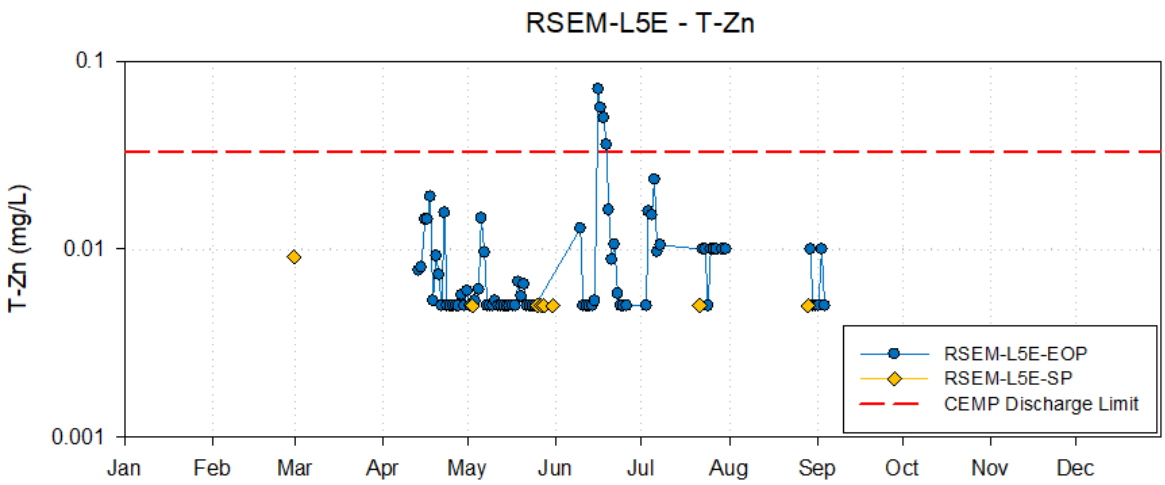


Figure 3-6: Concentrations of zinc (Zn) for RSEM-L5 East compared to RSEM EOP Limits in 2020. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

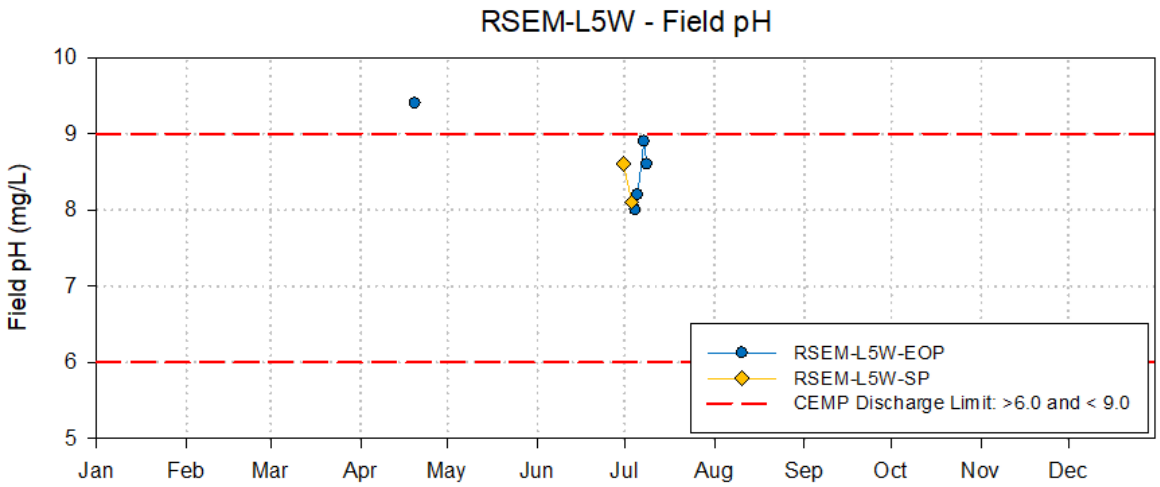


Figure 3-7: Time series profile for field pH in RSEM-L5 West compared to RSEM EOP Limits in 2020. EOP – End of Pipe; SP – Sediment Pond.

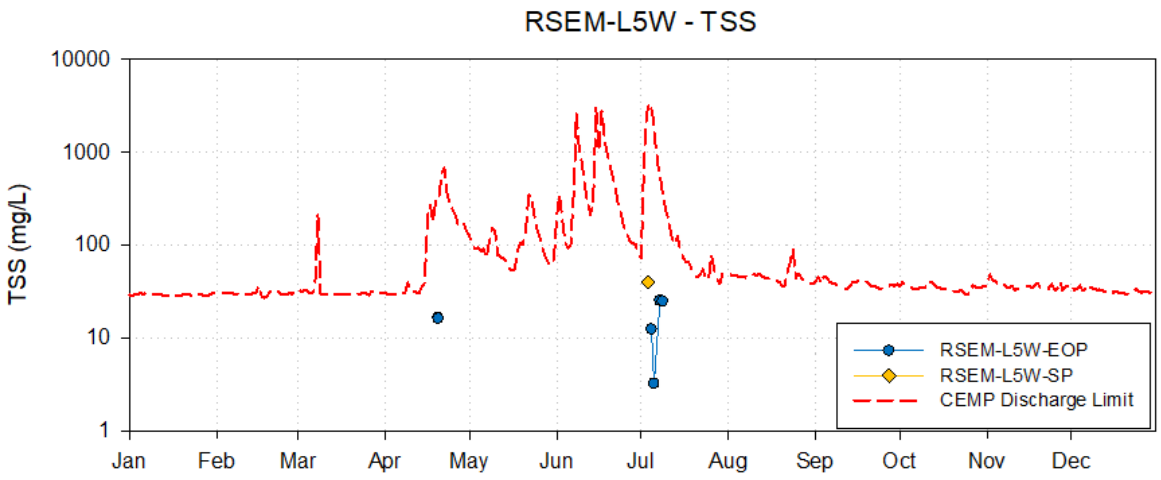


Figure 3-8: Time series profile for total suspended solids (TSS) in RSEM-L5 West compared to RSEM EOP Limits in 2020. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

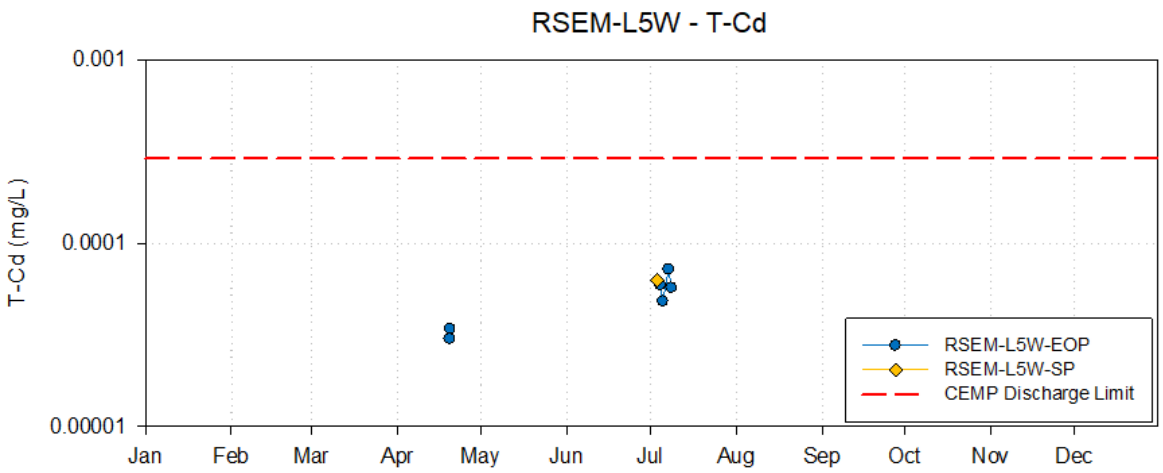


Figure 3-9: Concentrations of cadmium (Cd) for RSEM-L5 West compared to RSEM EOP Limits in 2020. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

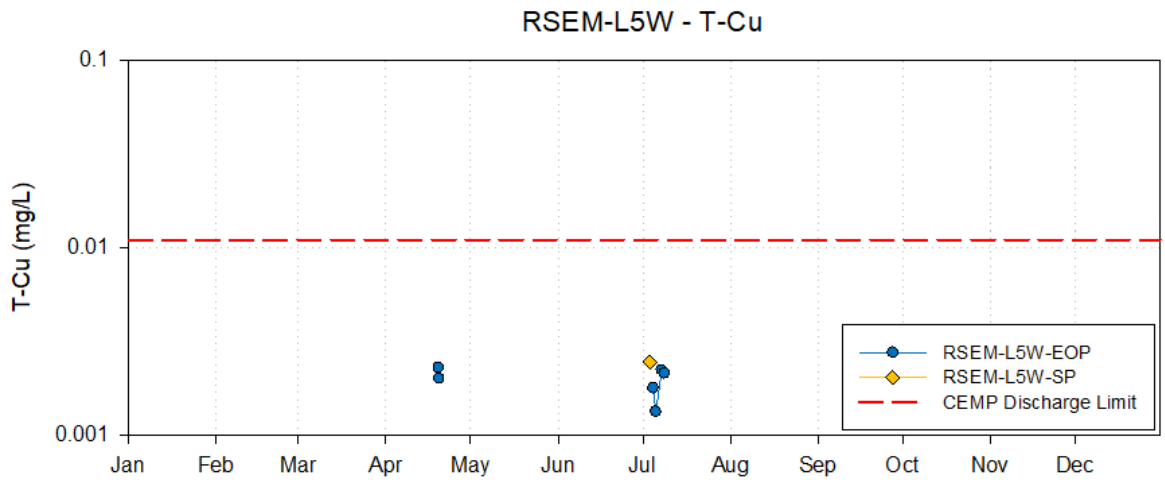


Figure 3-10: Concentrations of copper (Cu) for RSEM-L5 West compared to RSEM EOP Limits in 2020. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

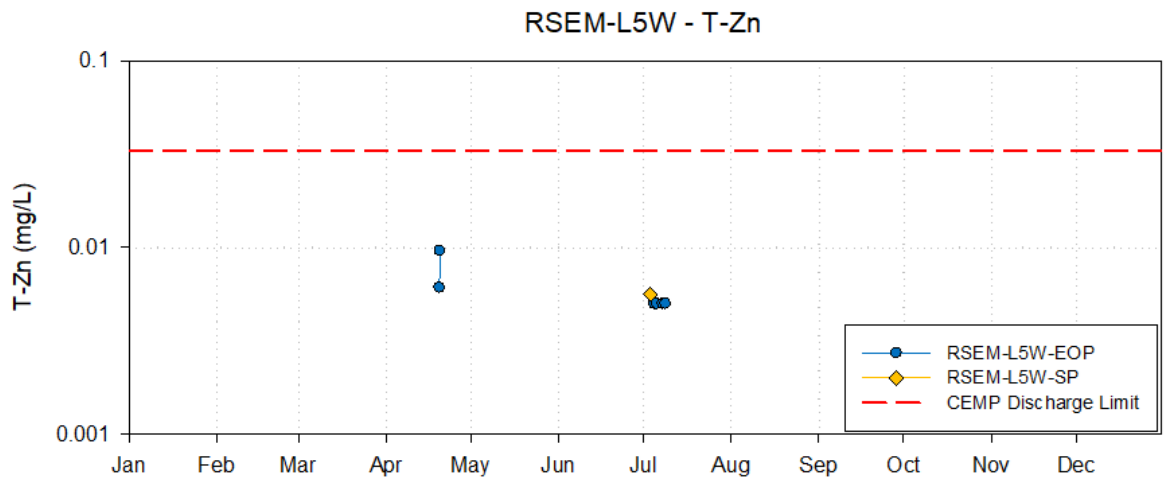


Figure 3-11: Concentrations of zinc (Zn) for RSEM-L5 West compared to RSEM EOP Limits in 2020. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

3.2.2.3 Garbage Creek Diversion

Garbage Creek originates outside the construction site and is diverted along ditches and culverts through RSEM Area L5 to minimize influence from construction activities on creek water quality. An ARD influence was noted in water from this catchment prior to construction activities and is attributed to exposed shale 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. From January through September 2020, there was intermittent construction at the diversion inlet and discharge channel during which creek flows were temporarily diverted around the construction areas. For the purpose of evaluating water quality, Garbage Creek is considered non-construction contact surface water.

Monitoring records indicate the creek was generally frozen during winter months in 2020, during which no samples were collected. During periods of flow (March through November), analytical samples for turbidity and TSS, and field measurements, were typically collected daily from the final culvert outlet (LBGC-OUT) during high flow periods, and monthly thereafter. Concurrent samples at GC-DEBRIS-US, upstream of the construction site, were collected less frequently on a daily to monthly basis, depending on flow conditions.

Garbage Creek was generally monitored during snowmelt and after rainfall and the water quality was overall circum-neutral with elevated turbidity and TSS at both stations in most of the months of the year (Table 3-7). The minimum pH was observed early March, during a brief late-winter thaw. 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 2020 Annual Water Quality Summary

Parameter		Field pH	Field Conductivity	Turbidity	TSS
Units		**-**	**µS/cm**	**NTU**	**mg/L**
LBGC-OUT (n= 72 field, 25 lab TSS/Turbidity)	Max	8.8	4,030	>4,000	24,100
	Min	5.2	269	0.25	2
	Median	8.3	1,199	>4,000	3,710
GC-Debris-US (n= 16 field, 10 lab TSS/Turbidity)	Max	8.5	4,050	>4,000	23,800
	Min	6.4	610	2.1	4.5
	Median	8.1	1,515	2,850	1,720

Notes:
TSS = Total suspended solids.

3.2.2.4 Left Bank Debris Boom Anchor

The Left Bank Debris Boom Anchor area straddles a side channel of the Peace River that is located outside of, and adjacent to, the northwestern boundary of Main Civil Works RSEM Area L5 Extension (Figure 1-6). The side channel is influenced by surface runoff

and groundwater seepage from a natural PAG slope above the northeastern edge of the channel and an access trail that leads to the northwest and bisects the slope. To facilitate the construction of debris boom anchors on the Left Back an access road that bisected the side channel was constructed in 2020 Q2.

Prior to construction of the channel crossing and the excavation of PAG from the area, two water quality samples were collected in April 2020, from the eastern and western end of the ponded water in the side channel (East-Buffer-Creek, West-Buffer-Creek). Seepage flowing into the channel was sampled August 2020 (Mustard-Creek). Field measurements were not reported.

Both the East and West Buffer Creek samples were acidic and had relatively high sulphate concentrations (Table 3-8). The measured concentrations of Cd, Cu, Co and Zn are attributed to the dissolved components of these metals. This water chemistry is believed to be predominately influenced by natural PAG exposures and weathered PAG from historic trail construction. Sulphate and corresponding metal concentrations in the circum-neutral Mustard Creek (seepage) sample collected in August were lower, possibly reflecting seasonal variation in the seepage water quality.

Table 3-8:
Left Bank Debris Boom Anchor 2020 Water Quality Summary

Parameter		Lab pH	Lab Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
East-Buffer-Creek (n=1 lab)	Value	4.18	2,030	19.1	1,100	0.000512	0.0394	0.0024	0.230
West-Buffer-Creek (n=1 lab)	Value	4.97	1,970	9.4	1,070	0.000356	0.0370	0.0020	0.205
Mustard-Creek (n=1 lab)	Value	7.45	900	5.4	334	0.00005	0.0048	<0.0005	0.0604

Notes:
TSS = Total suspended solids.

3.2.2.5 Diversion Inlet Cofferdam

The Diversion Inlet Cofferdam (DIC) isolated the Diversion Tunnel Inlet Portals (DTIP) from the Peace River during construction of the parallel diversion tunnels until the cofferdam was breached September 11th, 2020. This section describes the 2020 water quality monitoring results for DIC area samples collected prior to the area flooding mid-August. Water quality associated with the diversion channels during and after flooding is described in Section 3.2.2.8.

The DIC area received direct precipitation, tunnel construction water, runoff water from exposed and shotcrete-covered sections of the PAG bluff situated below the LBEX and above the inlet portal, and groundwater seepage. Site staff managed DIC waters using sumps and baker tanks that were generally directed to the MWTF for treatment prior to discharge through an RSEM Area sediment control pond. In mid-June PAG contact water was directed to Phase 2 RSEM L5 East sediment control pond for temporary storage prior to treatment, and early July DIC waters were temporarily transferred to Phase 1 RSEM L5 East pond. Non-PAG contact water in the southern area of the DIC, adjacent to Peace River, accumulated in a sump (DIC-SUMP) and was transferred to the Phase 1 RSEM L5 sediment control ponds. Water management facilities in the DIC area were dewatered and removed, and sumps were backfilled during diversion inlet construction late July through mid-August, 2020.

There were two samples collected from DIC-SUMP in May 2020; each had circum-neutral pH and low metal concentrations attributed primarily to TSS (Table 3-9). Sulphate concentrations were low compared to levels observed in contact-water samples from other Project areas. One field measurement at DTIP-BT-1 (a drill water storage tank in the DTIP) had neutral pH and high field conductivity (3,170 µS/cm). Circum-neutral groundwater seepage with low metals concentrations was sampled near the DTIP (station DIP-Seep) just prior to diversion inlet flooding.

Table 3-9:
Diversion Tunnel Inlet Cofferdam 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
DIC-SUMP (n=2 field, 2 lab)	Max	8.12	7.7	774	780	109	172	0.000099	0.00077	0.00406	0.0127
	Min	7.91	7.7	295	562	11	80.2	0.000038	0.00046	0.0015	0.0125
	Median	8.02	7.7	535	671	22	126	0.000069	0.00062	0.00276	0.0126
DIP-Seep (n=1 lab)	Value	8.22	-	-	-	36.4	-	0.000075	0.0099	0.0046	0.034
DTIP-BT-1 (n=1 field)	Value	-	7.0	-	3,170	-	-	-	-	-	-

Notes:
TSS = Total suspended solids.

3.2.2.6 Central Cofferdam

The central cofferdam (LBCD) isolates the Left Bank portion of the dam core footprint from the Peace River during excavation in advance of dam construction. The cofferdam catchment includes runoff from exposed and shotcrete-covered sections of the PAG bluff

between the diversion tunnel inlet and outlet portal, precipitation, and groundwater seepage.

Site staff generally managed water by segregating PAG-contact water from non-contact water until late Q2 with PAG-contact water generally directed to the MWTF throughout 2020. Shotcrete influenced and non-PAG contact runoff accumulated in the LBCD sump and was directed to the LBCD-SUMP-BT tank, treated with carbon dioxide to reduce pH, and to transferred to Phase 1 RSEM L5 or L6 sediment control ponds for discharge. In late Q2 and early Q3 water management was transitioned to direct all LBCD waters to the LBCD-SUMP-BT and subsequently to the MWTF for treatment.

As water availability allowed, monitoring was conducted at LBCD-SUMP-BT on a daily to weekly basis. The water quality of LBCD-SUMP-BT was variable (Table 3-10), reflecting the variable sources of PAG and shotcrete contact water accumulated in this baker tank. Field pH ranged from 6.4 to 10.8, but was commonly circum-neutral to slightly alkaline (median = 8.4). Sulphate concentrations ranged by more than an order of magnitude, from 150 mg/L up to 2,170 mg/L. Metal concentrations are attributed to TSS except at the end of June when PAG-contact water reduced the pH to 6.4 and elevated the dissolved components and concentrations of Cd, Cu , Co and Zn.

The LBCD-TRENCH station is located centrally within the LBCD. One sample was collected from this location in April 2020, showing elevated lab pH (9.28) and sulphate (1100 mg/L), but low TSS and metal concentrations.

Table 3-10:
Central Cofferdam 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LBCD-Trench (n=1 lab)	Value	9.28	-	3,220	-	27.7	1,100	<0.00001	0.00104	0.00141	0.0094
LBCD-Sump-BT (n=29 lab, 180 field)	Max	9.52	10.8	4,670	6,070	347	2,170	0.00388	0.103	0.0173	0.78
	Min	6.53	6.4	721	414	<1	150	<0.00001	0.00026	<0.0005	<0.005
	Median	8.10	8.4	991	1,076	3.4	269	0.00002	0.00062	0.00127	0.005

Notes:
TSS = Total suspended solids.

3.2.2.7 Diversion Outlet Cofferdam

The Diversion Outlet Cofferdam (DOC) isolated the Diversion Tunnel Outlet Portals (DTOP) from the Peace River during construction of the parallel diversion tunnels and prior to breeching the cofferdam on September 11th, 2020. The DOC water quality monitoring results prior to flooding the DOC mid-August are presented in this section and water quality monitoring during and after flooding is discussed in Section 3.2.2.8.

The DOC area received direct precipitation, tunnel construction water, and runoff water from exposed and shotcrete-covered sections of the PAG bluff situated below the LBEX and above the outlet portal. PAG contact water and groundwater from tunneling operations were accumulated in sumps and tanks, and were generally directed to the MWTF for treatment prior to discharge through an RSEM Area sediment control pond, except in July when DOC waters were briefly directed to the Phase 1 RSEM L5 East sediment control pond (early July) or to the RSEM L6 pond (July and August). The main water collection features in the DOC, prior to the cofferdam breech, included seepage (DOP-Seep), the DOP-BT-East water tank, and the DOC south sump (DOC-S-SUMP). The DOC water management facilities were dewatered and removed, and sumps were backfilled prior to and during the diversion outlet construction late July through mid-August 2020, in advance of flooding.

Analytical samples and corresponding field measurements for the DOC-S-SUMP were collected three times in 2020 (January, February, and June). In the January and February samples, water was circum-neutral with moderate sulphate and low TSS, Cd, Co, Cu and Zn concentrations (Table 3-11). The June sample was alkaline (12.3 field pH), likely due to shotcrete or cement contact, with elevated sulphate (912 mg/L), and metal concentrations which are attributed to elevated TSS (210 mg/L).

The DOP-BT-East sample collected in January (prior to station decommissioning) had a pH of 8, with an elevated sulphate concentration of 1680 mg/L and moderate Cd, Co, Cu and Zn concentrations attributed to the dissolved components of these metals and suggestive of ARD influence. Corresponding TSS levels were low (<100 mg/L).

Seepage sampled near the diversion tunnel outlet (DOP-Seep) mid-August, prior to flooding the diversion outlet, was slightly alkaline (pH 8.59) with elevated conductivity, TSS, sulphate and metal levels compared to other samples collected in the DOC area. The observed concentrations of Cd, Co, Cu and Zn are attributed to TSS.

Table 3-11:
Diversion Outlet Cofferdam 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
DOP-Seep (n=1 lab)	Value	8.59	-	7,640	-	211	3,660	0.000165	0.0101	0.0178	0.066
DOP-BT-East (n=1 lab, 1 field)	Value	8.05	8	4,040	4,050	68.4	1,680	0.000085	0.00623	0.0017	0.034
DOC-S-Sump (n=3 lab, 4 field)	Max	11.5	12.3	3,610	4,170	210	921	0.000071	0.00217	0.0158	0.025
	Min	7.86	7.2	1,010	1,004	2	223	0.000028	0.00042	<0.0005	0.0055
	Median	8.05	8.1	1,100	1,742	2.7	269	0.000042	0.00061	0.00050	0.0068

Notes:
TSS = Total suspended solids.

3.2.2.8 Diversion Inlet and Outlet Channels

In August, 2020, the construction of rip-rap lined diversion inlet and diversion outlet channels was completed within the DIC and DOC areas. The rip-rap lined channels were designed to convey the Peace River to and from the diversion tunnels. After the channels were completed, they were slowly flooded, from August 13th to September 7th, with Peace River water pumped from stations PR-DIC and PR-DOC. As the DIC and DOC were being flooded, monitoring within these areas was conducted within the channels (DIC-DIP and DOC-DOP). The water quality of the Peace River water pumped into the channels during flooding was monitored at Peace River pumping stations PR-DIC and PR-DOC.

Once the DIC and DOC cofferdams were breached on September 11th, monitoring continued at DIC-DIP and DOC-DOP from September 21st to October 9th, 2020. Over the same time period, water quality monitoring was conducted at stations in the Peace River upstream and downstream of the diversion inlet (PR-DIC-US and PR-DIC-DS) and the diversion outlet (PR-DOC-US and PR-DOC-DS).

To support the evaluation of diversion channel water quality prior to cofferdam breech, and the influence on Peace River following breech, samples collected during the flooding of the cofferdams (August 13th to September 11th) and after the breach of the cofferdams (September 21st to October 9th) are grouped separately. The average values for each group of samples are screened against the long-term WQGs, and individual sample results are compared to the short-term WQG, per BC ENV (2019a, 2019b). Parameters that exceeded a WQG during the flooding period of the cofferdams are included in Table 3-12, and parameters that exceeded a WQG following the breach of the cofferdams are included in Table 3-13.

During flooding, samples collected from the diversion inlet and outlet, and the Peace River stations met BC WQGs except for intermittent and minor exceedances of the short-term WQG for T-Fe at DIC-DIP, DOC-DOP and PR-DOC (Table 3-12). The long-term WQG for T-Zn was slightly exceeded at DOC-DOP. All samples were circum-neutral to slightly alkaline except September 3rd to September 9th when the diversion inlet channel water at DIC-DIP increased to pH 9.3. Carbon dioxide sparging was implemented and reduced the pH to 9.0 prior to the breach of the DIC cofferdam on September 11th.

After breaching the cofferdams on September 11th, similar water quality was observed at monitoring stations in the diversion channels (DIC-DIP and DOC-DOP) and Peace River (PR-DIC-US, PR-DIC-DS, PR-DOC-US and PR-DOC-DS). Total Fe showed intermittent, minor exceedances of the short-term BC WQG in the main stem of the Peace River upstream of the diversion inlet (PR-DIC-US), within the diversion outlet (DOC-DOP), and downstream of the diversion outlet in the Peace River (PR-DOC-US) (Table 3-13). Overall,

the influence of the diversion channels and tunnels on Peace River Water quality was not discernable in the downstream station (PR-DOC-DS) compared to the upstream station (PR-DIC-US).

Table 3-12:
Diversion Channel Water Quality Summary During Flooding of the Diversion Inlet and Outlet Cofferdams

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	T-Fe	T-Zn
Units		**-**	**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**
Short-term BC WQG[a]		**-**	**6.5-9.0**	**-**	**-**	**WQG[b]**	**1**	**0.0333**
Long-Term BC WQG[a]		**-**	**-**	**-**	**-**		**-**	**0.0078**
DIC-DIP (n=3 lab, 25 field)	Max	8.82	***9.3***	306	349	29.6	***1.38***	***0.0087***
	Min	7.81	8.1	216	222	6.0	0.176	<0.005
	Median	8.13	8.6	273	270	23.2	0.249	0.005
DOC-DOP (n=3 lab, 21 field)	Max	8.21	8.8	227	626	78.4	***3.23***	***0.018***
	Min	7.50	8.2	222	208	24.6	0.314	0.0061
	Median	8.08	8.5	223	251	46.1	0.653	0.0062
PR-DIC (n=5 lab, 2 field)	Max	8.17	8.4	192	176	23.5	0.460	<0.005
	Min	7.63	8.2	185	175	11.5	0.371	<0.005
	Median	7.87	8.3	187	175.5	18.8	0.391	0.005
PR-DOC (n=7 lab, 5 field)	Max	8.23	8.6	208	201	123	***1.38***	0.0074
	Min	7.38	8.4	178	174	9.3	0.150	<0.005
	Median	7.93	8.5	190	188	22.8	0.417	0.005

Notes: TSS = Total suspended solids
[a]British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture Summary Report, August 2019 (BC ENV, 2019a, 2019b) Aquatic Life guideline. 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 2020. Temperature of 5°C assumed.
[b]TSS guideline is dependent on background TSS readings in Peace River and is not evaluated for these samples.
Red italics indicate a value that exceeds short-term or long-term BC water quality guidelines for the protection of aquatic life.

Table 3-13:
Diversion Channel Water Quality Summary Following Breach of the Diversion Inlet and Outlet Cofferdams

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	T-Fe
Units		**-**	**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**
Short-term BC WQG[a]		**-**	**6.5-9.0**	**-**	**-**	**WQG[b]**	**1**
PR-DIC-US (n=3 lab, 3 field)	Max	7.60	8.4	222	251	101	***1.99***
	Min	6.94	7.8	198	226	8.5	0.249
	Median	7.51	8.3	199	242	8.8	0.283
PR-DIC-DS (n=3 lab, 3 field)	Max	7.70	8.3	219	254	26.9	0.486
	Min	6.81	8.2	197	219	9.3	0.274
	Median	7.50	8.2	199	226	13.3	0.382
DIC-DIP (n=5 lab, 4 field)	Max	7.59	8.6	218	251	17.2	0.422
	Min	6.80	8.1	190	226	5.4	0.198
	Median	7.52	8.4	200	247	9.9	0.270
DOC-DOP (n=5 lab, 4 field)	Max	7.67	8.6	219	248	88.7	***2.33***
	Min	6.83	8.3	196	221	.4	0.234
	Median	7.53	8.4	200	229	22	0.857
PR-DOC-US (n=3 lab, 3 field)	Max	7.58	8.4	220	249	57.1	***1.26***
	Min	6.74	8.4	196	225	14.6	0.414
	Median	7.55	8.3	199	230	18.9	0.569
PR-DOC-DS (n=3 lab, 3 field)	Max	7.68	8.5	219	246	25.1	0.857
	Min	6.63	8.4	198	230	19.0	0.357
	Median	7.58	8.5	200	246	23.7	0.692

Notes: TSS = Total suspended solids
[a]British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture Summary Report, August 2019 (BC ENV, 2019a, 2019b) Aquatic Life guideline. 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 2020. Temperature of 5°C assumed.
[b]TSS guideline is dependent on background TSS readings in Peace River and is not evaluated for these samples.
Red italics indicate a value that exceeds short-term BC water quality guideline for the protection of aquatic life.

3.2.2.9 RSEM Area L6 Sediment Control Pond

The RSEM L6 sediment control pond receives runoff water from the RSEM Area L6, and water transferred from other Left Bank locations on the Left Bank, 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 2020 except June 17th to 23rd and on June 27th, due to elevated water levels associated with significant precipitation in June and water transfers from DOC and LBCD sumps. Analytical water samples were

periodically collected from May to through October. A continuous monitoring sonde was deployed in-pond from June 20th to 28th and for several days in July.

All water quality samples collected from the RSEM L6 sediment control pond met the RSEM EOP limits, including periods during which the pond discharged (Table 3-14; Figure 3-12 to Figure 3-16). The pH in all analytical samples and field measurements was circumneutral to slightly alkaline, with low TSS and moderate sulphate levels. The observed low concentrations of Cd, Co, Cu and Zn are attributed to dissolved components of these metals.

Table 3-14:
RSEM L6 Pond 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		**-**	**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit		**-**	**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.00029**	**0.55**	**0.011**	**0.033**
RSEM-L6-SP (n=4 lab, 10 field)	Max	8.11	9.0	1,280	4,150	4.6	488	0.000057	0.00119	0.00144	<0.005
	Min	6.40	8.0	849	858	<1	267	0.000046	<0.0002	0.00115	<0.005
	Median	7.33	8.5	979	1,308	3.35	345	0.000053	0.00042	0.00128	0.0050
RSEM-L6-EOP (n=8 lab, 8 field)	Max	8.06	8.5	1,120	1,259	4.7	397	0.000070	0.00076	0.00146	0.0139
	Min	7.51	8.2	881	980	1.8	289	0.000049	0.00036	0.00111	<0.005
	Median	8.01	8.3	970	1,090	3.15	324	0.000059	0.00059	0.00129	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.
Gold italics indicate exceedance of an RSEM EOP limit.

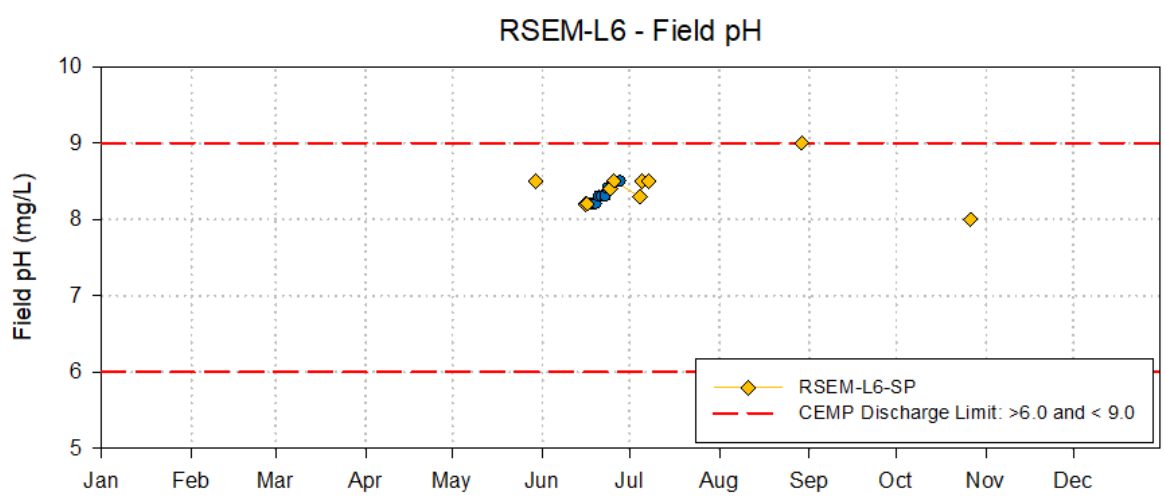


Figure 3-12: Time series profile for field pH in RSEM-L6 compared to RSEM EOP Limits in 2020. EOP – End of Pipe; SP – Sediment Pond.

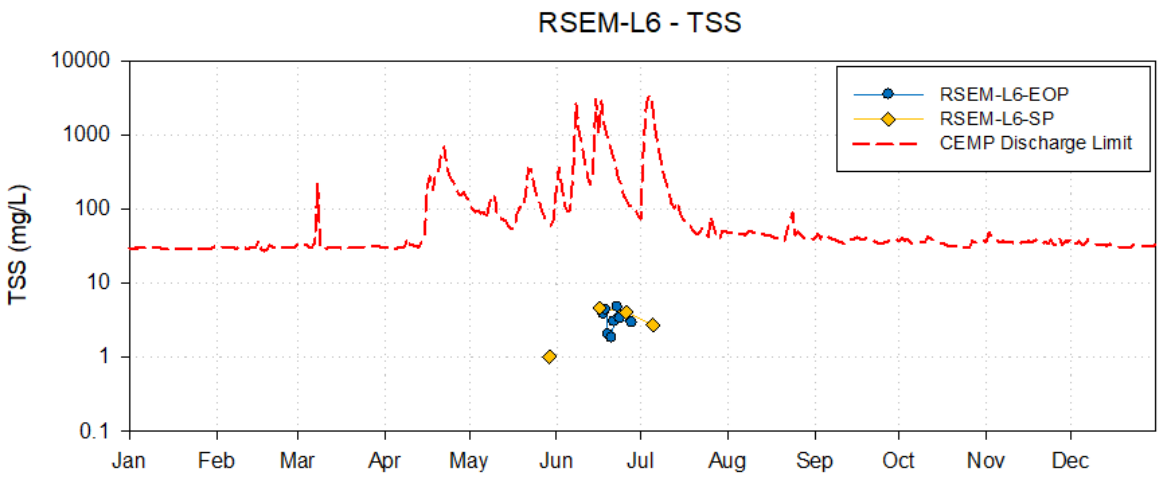


Figure 3-13: Time series profile for total suspended solids (TSS) in RSEM-L6 compared to RSEM EOP Limits in 2020. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

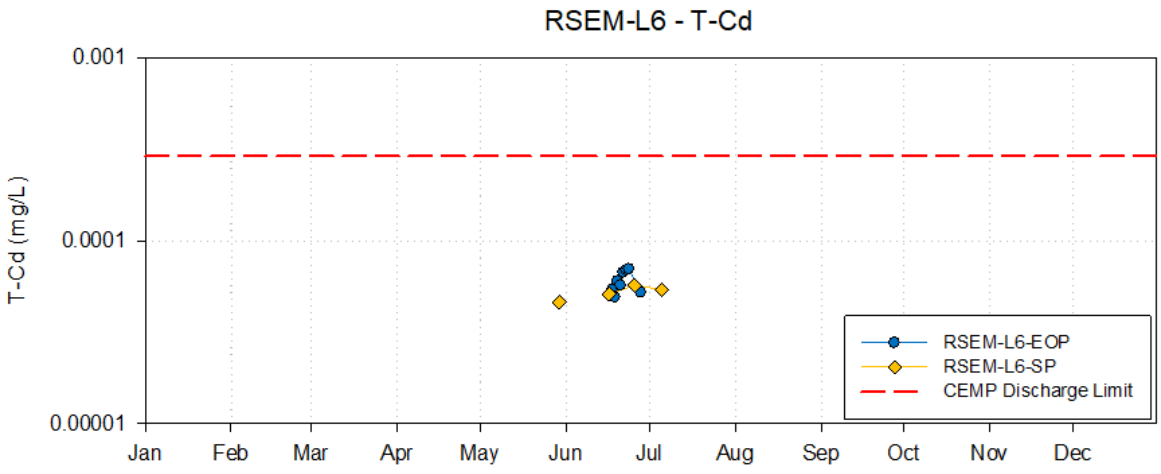


Figure 3-14: Concentrations of cadmium (Cd) for RSEM-L6 compared to RSEM EOP Limits in 2020. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

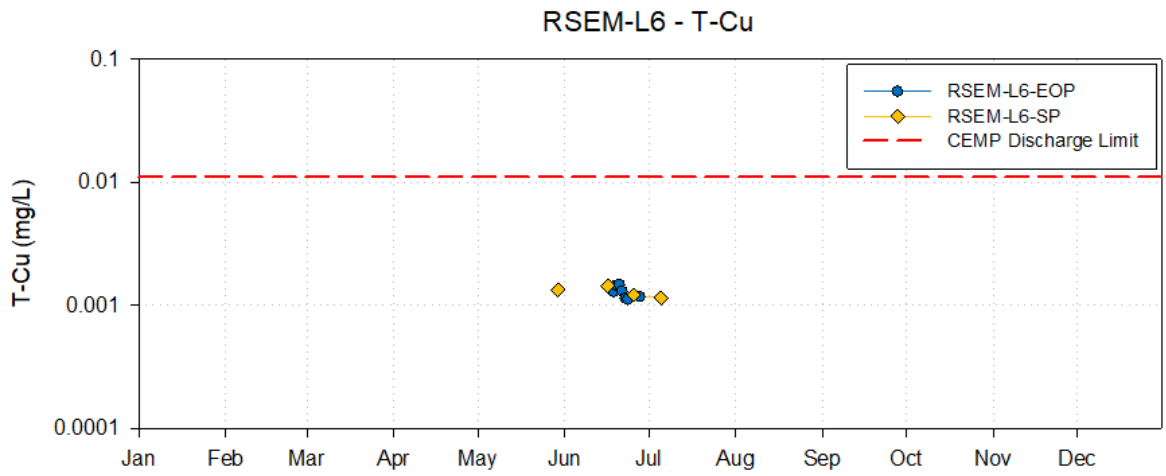


Figure 3-15: Concentrations of copper (Cu) for RSEM-L6 compared to RSEM EOP Limits in 2020. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

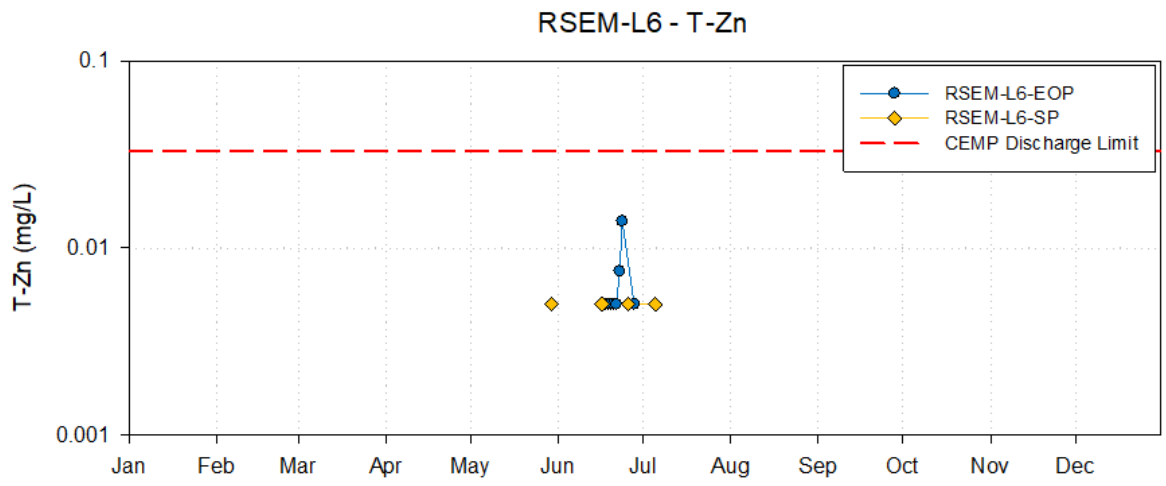


Figure 3-16: Concentrations of zinc (Zn) for RSEM-L6 compared to RSEM EOP Limits in 2020. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

3.2.3 Right Bank

The water quality monitoring network that was utilized on the Right Bank in 2020 included several stations in Area 30, Area A, Right Bank Cofferdam, Approach Channel, RSEM Area R6 and R5B catchments, and at the RSEM R6, R5B and R5A sediment ponds. The station locations and sampling frequencies are listed in Table 3-15 and Table 3-16, respectively. The monitoring locations are shown in Figure 3-17 (areas in the vicinity of and including RSEM Areas R6 and R5B) and Figure 3-18 (RSEM Area R5A).

During 2020, planned modifications to water management facilities were implemented during the transition to Phase 2 of construction. The MWTF was relocated in Q2 from the northwestern end of the Approach Channel area to RSEM Area R6. All water that was previously received by RSEM R5B sediment control pond was redirected to RSEM R6 sediment control ponds by mid-Q3. Phase 2 water management facilities were constructed in RSEM Area R5A in Q3 to replace the Phase 1 RSEM R5A sediment control ponds, and excavation of the Phase 2 RSEM Area R5B Sump was completed in Q4.

The treated discharge from the MWTF Sludge Pond was passively discharged to RSEM Area R5B sediment control pond until late April 2020 when the MWTF was temporarily decommissioned and relocated to RSEM Area R6. At the new location the former AK Pond was converted to the MWTF Pre-Treatment pond and a new MWTF Sludge Pond was constructed within the RSEM R6 West sediment control pond catchment. The new Pre-Treatment pond began receiving water on May 2nd and the new Sludge Pond began receiving treated effluent on May 9th. The clarified and pH adjusted treated effluent was pumped from the Sludge Pond to the RSEM R6 West sediment control pond for discharge until early November when pumping was replaced by passive discharge following the construction of a lined discharge channel from the MWTF sludge ponds to the RSEM R6 West sediment control pond.

An overview of water quality and management within in each catchment area for the Left Bank is presented in the sections below and in Section 5.3.2. Monitoring within the main catchment areas was conducted as follows:

- Area 30 – samples were collected adjacent to Septimus rail siding at Area 30 sediment control pond;
- Area A – samples were obtained from ponded water in Area A at the North Ditch and ponded water at the toe of NPAG gravel piles;
- RSEM Area R6 – samples were obtained from sumps and tanks in the RCC area and CVC areas. Inflow to RSEM R6 East sediment control pond was monitored at RSEM-R6-EP-US-SD. The RSEM R6 West pond inflows were monitored at the

Area 21 sump and discharge from the MWTF (MWTF-SLP-R6). Samples were routinely obtained from RSEM Area R6 East and West sediment control ponds at EOP when the ponds were discharging and occasionally from the in-pond stations;

- Approach Channel and RBCT – monitoring was conducted at various seeps and sumps in the Approach Channel and the floor of the RBCT;
- RSEM Area R5B – monitoring of inflows was conducted at the MWTF-SLP-R5B, RSEM-R5B-W and RB-R5B-ACDC stations. When discharging, daily samples were obtained EOP from RSEM R5B sediment control pond discharge, or occasional samples were collected in-pond when not discharging; and
- RSEM Area R5A –Occasional samples were obtained in-pond from each of the four RSEM sediment control ponds in RSEM Area R5A, and EOP from RSEM R5A Pond A when discharging.

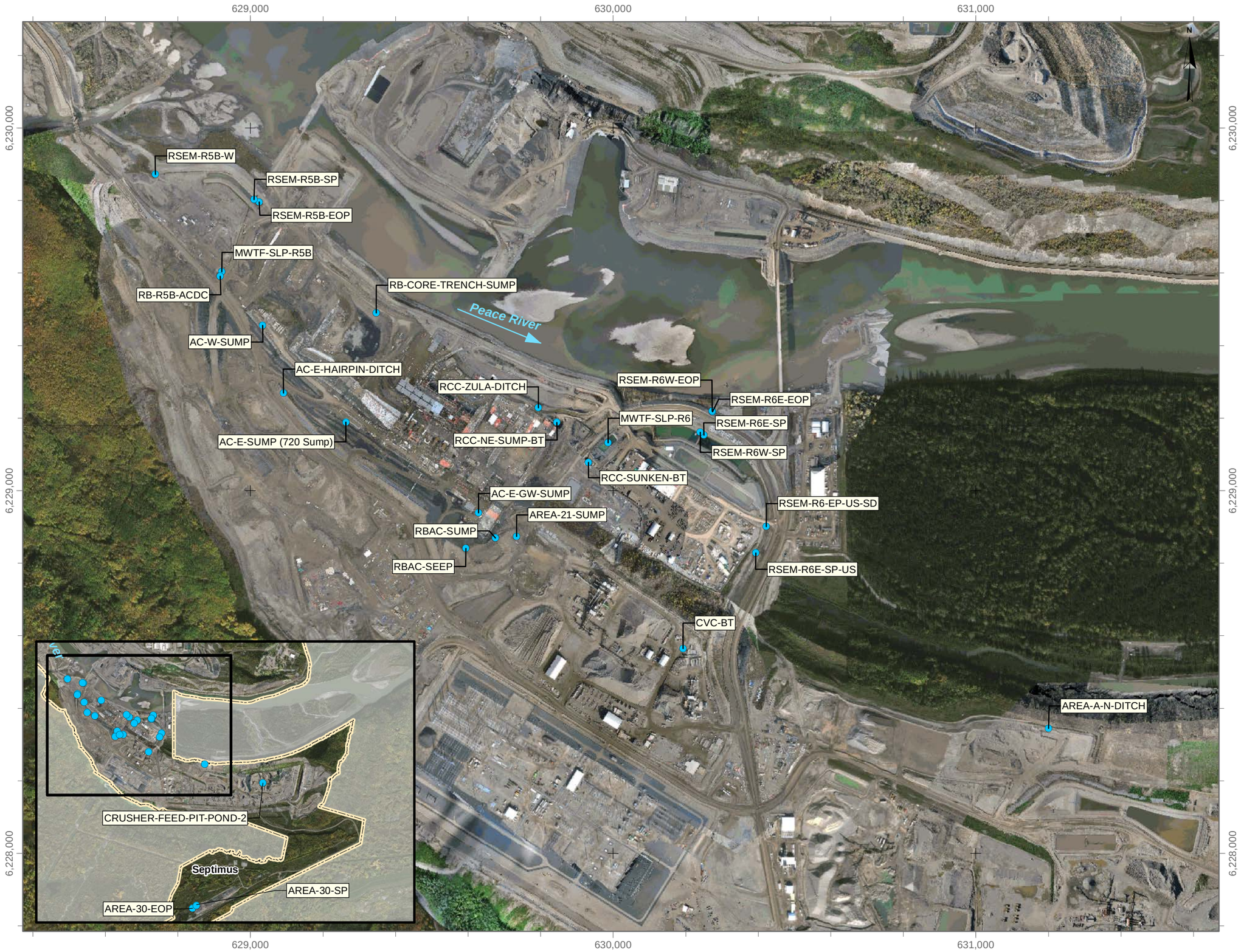
Table 3-15: Water Quality Monitoring Stations in 2020 (Right Bank)

Station ID	Easting	Northing	Description
AREA 30 / SEPTIMUS			
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
AREA A			
AREA-A-N-DITCH	631200	6228345	Ditch along the northern edge of Area A
CRUSHER-FEED-PIT-POND-2	632242	6228009	Ponded water in the excavated area at the base of gravel stockpiles, middle pond
RSEM AREA R6			
RSEM R6E SUBCATCHMENT – CVC BATCH PLANT			
CVC-BT	630193	6228565	Baker tank adjacent to CVC plant that collects CVC discharge water, carbon dioxide sparging is used to treat pH
RSEM R6W SUBCATCHMENT – RCC			
RCC-NE-SUMP-BT	629845	6229188	Final sump in RCC area, pH treatment is applied using carbon dioxide sparging
RCC-SUNKEN-BT	629932	6229078	Sunken Baker Tank for RCC concrete contact water
RCC-ZULA-DITCH	629794	6229229	Ditch along northern edge of RCC area
RSEM R6E SEDIMENT CONTROL POND			
RSEM-R6-EP-US-SD	630422	6228901	Ditch along SBIAR Road upstream of culvert
RSEM-R6E-SP-US	630393	6228828	Upstream of flocculant shack at R6 east sediment pond
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			
MWTF-SLP-R6	629986	6229132	RSEM Area R6 MWTF sludge pond final treated effluent
AREA-21-SUMP	629734	6228874	Intermediate transfer sump for moving AC-EAST-HAIRPIN-DITCH water to RSEM R6 West 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
APPROACH CHANNEL			
AC-E-SUMP	629228	6229210	Collection sump at the base of the AC excavation, east side
AC-E-GW-SUMP	629629	6228939	Collection sump at groundwater seep adjacent to East Conveyor
AC-W-SUMP	629034	6229456	Collection sump at the base of the AC benches, west side
RBAC-SEEP	629594	6228841	Groundwater seep at southeast end of Approach Channel
RBAC-SUMP	629675	6228870	Groundwater sump at southeast end of Approach Channel
AC-E-HAIRPIN-DITCH	629091	6229269	Sump on upper bench of Approach Channel excavation
RIGHT BANK CORE TRENCH			
RB-CORE-TRENCH-SUMP	629347	6229490	Sump in the Right Bank excavation of the Dam Core Trench
RSEM AREA R5B			
RB-R5B-ACDC	628917	6229591	Ditch from upper Approach Channel upstream of confluence with MWTF-SLP-R5B station
MWTF-SLP-R5B	628921	6229604	RSEM Area R5B MWTF sludge pond final treated effluent
RSEM-R5B-W	628738	6229872	RSEM R5B west ditch
RSEM-R5B-SP	629010	6229803	RESM R5B sediment control pond, in-pond
RSEM-R5B-EOP	629024	6229796	RSEM R5B sediment control pond, end of pipe
RSEM AREA R5A			
RSEM-R5A-A-SP	628158	6230787	RSEM R5A sediment control pond A, in-pond
RSEM-R5A-A-EOP	628190	6230802	RSEM R5A sediment control pond A, end of pipe
RSEM-R5A-B-SP	628146	6230801	RSEM R5A sediment control pond B, in-pond
RSEM-R5A-B-EOP	628188	6230803	RSEM R5A sediment control pond B, end of pipe
RSEM-R5A-C-SP	627544	6231637	RSEM R5A sediment control pond C, in-pond
RSEM-R5A-C-EOP	627576	6231660	RSEM R5A sediment control pond C, end of pipe
RSEM-R5A-D-SP	627535	6231664	RSEM R5A sediment control pond D, in-pond
RSEM-R5A-D-EOP	627572	6231665	RSEM R5A sediment control pond D, end of pipe
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-C-EOP	627481	6231594	Phase 2 RSEM R5A sediment control pond C, end of pipe
RSEM-R5A-P2-D-SP	627431	6231592	Phase 2 RSEM R5A sediment control pond D, in-pond
RSEM-R5A-P2-D-EOP	627481	6231594	Phase 2 RSEM R5A sediment control pond D, end of pipe

Table 3-16: Summary of Water Quality Monitoring in 2020 (Right Bank)

Station ID[1]	*In situ* Continuous Measurements[2] (Y / N)	*In situ* Field Measurements		Analytical (Lab) Samples	
		Count	Intended Frequency[3] (D / W / M / P)	Count	Intended Frequency[3] (D / W / M / P)
AREA 30 / SEPTIMUS HILL					
AREA-30-SP	N	0	P	1 *	P
AREA-30-EOP	N	3	P	0	P
AREA A					
AREA-A-N-DITCH	N	12	P	8	P
CRUSHER-FEED-PIT-POND-2	N	0	P	1	P
RSEM AREA R6					
RSEM R6 SUBCATCHMENTS – CVC BATCH PLANT					
CVC-BT	N	2	P	0	P
RSEM R6 SUBCATCHMENTS – RCC EXCAVATION AREA					
RCC-NE-SUMP-BT	N	216	D	32	W
RCC-SUNKEN-BT	N	1	P	0	P
RCC-ZULA-DITCH	N	21	W	6	M
RSEM R6 SUBCATCHMENT – RSEM R6 EAST SEDIMENT CONTROL POND					
RSEM-R6-EP-US-SD	N	177	D	3	P
RSEM-R6E-SP-US	N	1	P	0	P
RSEM-R6E-SP	Y	0	P	0	P
RSEM-R6E-EOP	N	323	D	319	D
RSEM R6 SUBCATCHMENT – RSEM R6 WEST SEDIMENT CONTROL POND					
AREA-21-SUMP	N	0	P	1	P
MWTF-SLP-R6	N	111	W	0	P
RSEM-R6W-SP	Y	2	P	2	P
RSEM-R6W-EOP	N	236	D	236	D
APPROACH CHANNEL					
AC-E-SUMP	N	27	W	1	P
AC-E-GW-SUMP	N	3	P	2	P
AC-W-SUMP	N	13	M	3	P
RBAC-SEEP	N	3	P	0	P
RBAC-SUMP	N	16	P	2	P
AC-E-HAIRPIN-DITCH	N	119	W	1	P
RIGHT BANK CORE TRENCH					
RB-CORE-TRENCH-SUMP	N	12	P	2	P
RSEM AREA R5B					
RB-R5B-ACDC	N	216	D	11	M
MWTF-SLP-R5B	N	109	W	0	P
RSEM-R5B-W	N	48	W	2	P
RSEM-R5B-SP	Y[4]	16	P	10	P
RSEM-R5B-EOP	N	215	D	214	D
RSEM AREA R5A					
RSEM-R5A-A-SP	N	5	P	3	P
RSEM-R5A-A-EOP	Y[4]	4	P	3	P
RSEM-R5A-B-SP	N	5	P	4	P
RSEM-R5A-C-SP	N	5	P	3	P
RSEM-R5A-D-SP	N	5	P	3	P

[1] -SP = sediment control pond, in pond location;-EOP = sediment control pond, end of pipe location.
[2] Y = Yes; N = No.
[3] 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).
[4] Sonde was installed during periods when the pond was discharging.



LEGEND

- Monitoring Location

Note: Site C aerial imagery collected between September 2019 - September 2020

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:	Feb 05, 2021
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REVIEWED:	NM
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2020 Annual Report

TITLE: RSEM Area R5B, RSEM Area R6, Area A and Area 30 Water Quality Sampling Locations

PROJECT #: A416-1 *FIGURE:* 3-17

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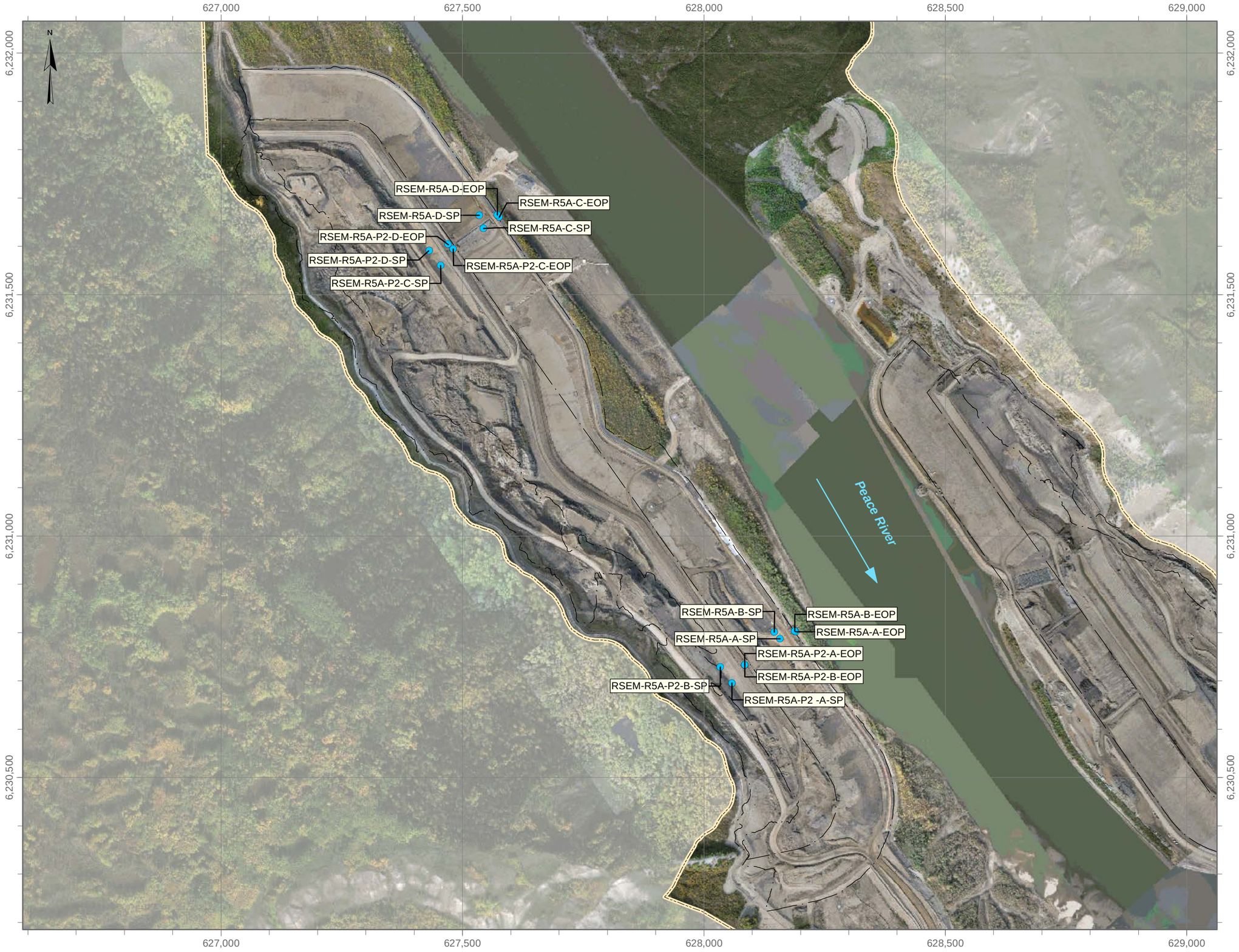

LEGEND

- Monitoring Location

Note: Site C aerial imagery collected between September 2019 - September 2020

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CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2020 Annual Report

TITLE:

RSEM Area R5A
Water Quality Sampling Locations

PROJECT #: A416-1 *FIGURE:* 3-18

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3.2.3.1 Area 30

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. Runoff from the stockpiled aggregates accumulate in the Area 30 sediment control pond, located along the northern edge of Area 30 which discharges to the adjacent wetlands through a rip-rap lined channel.

Field measurements were collected monthly at the Area 30 sediment control pond EOP from April to June of 2020. One water sample was collected from within the pond on August 22nd and analyzed for TSS and turbidity. The field measurements indicate the pond discharge from April to June was circum-neutral to slightly alkaline, with field conductivity up to 1,355 µS/cm (Table 3-17). The pond TSS concentration measured in August was low (2.8 mg/L).

Metal concentrations in pond discharge were not evaluated in 2020. As such, supplemental quarterly monitoring for the full suite of ARD parameters is recommended for this area in 2021 (Section 6), given the potential for contact runoff associated with stockpiled limestone in this area.

Table 3-17:
Area 30 2020 Annual Water Quality Summary

Parameter		Field pH	Field Conductivity	TSS
Units		**-**	**µS/cm**	**mg/L**
Area-30-SP (n=1 lab TSS/turbidity)	Value	-	-	2.8
Area-30-EOP (n=3 field)	Max	8.2	1,355	-
	Min	7.9	393	
	Median	8.1	981	

Notes:
TSS = Total suspended solids.

3.2.3.2 Area A

Area A is located south-east of the dam construction area, and east of the SBIAR. 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 a sludge pond in Area A to settle TSS, and clarified water is recycled within the crusher circuit. Surface runoff and groundwater accumulates in low-lying, excavated areas within the eastern side of Area A. Accumulated water was monitored March 2020 in one of the low-lying inundated areas (station CRUSHER-FEED-PIT-POND-2).

The North Ditch (monitored at station AREA-A-N-DITCH) is located along the northern edge of Area A, between the SBIAR and the Phase 2 Crusher facility. This ditch receives runoff from the slope northwest and downgradient of the Phase 2 Crusher facility. The North Ditch water was directed to the Phase 2 Crusher in 2020, as needed, and was also periodically directed to R6 East or RSEM Area R5B sediment control ponds to prevent discharge. Analytical samples were collected from AREA-A-N-DITCH on a monthly basis from January to July. Corresponding field measurements were collected with each analytical sample, and additional field measurements were collected in October and December.

All AREA-A-N-DITCH samples were circum-neutral with low sulphate levels (<150 mg/L). TSS levels were generally low (<25 mg/L), as were Cd, Co, Cu and Zn (Table 3-18). The CRUSHER-FEED-PIT-POND-2 sampled collected in March was circum-neutral with low concentrations of sulphate, TSS, Cd, Co, Cu and Zn (Table 3-18). The monitoring data for the Area A waters in 2020 suggest negligible PAG influence within this area.

Table 3-18:
Area A 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
AREA-A-N-DITCH (n=8 lab, 12 field)	Max	8.14	8.5	656	742	23.8	83.5	0.000051	0.00059	0.00210	0.0101
	Min	7.37	7.3	356	367	<1	21.9	<0.00001	<0.0002	0.00060	<0.005
	Median	8.02	7.9	594	582	2	36	0.000012	0.00027	0.00072	0.0050
CRUSHER-FEED-PIT-POND-2 (n=1 lab)	Value	8.02	-	995	-	12	140	0.000038	0.00073	0.00137	<0.005

Notes:
TSS = Total suspended solids.

3.2.3.3 CVC Batch Plant

The CVC Batch Plant produces concrete and is located on the northeastern side of Area 21. A baker tank is located adjacent to the plant to collect CVC discharge (station CVC-BT), which is treated to reduce pH prior to periodic discharge to RSEM R6 East pond via the SBIAR ditch. Two field measurements were collected from the CVC baker tank in March 2020. The measurements indicate the water was circum-neutral with elevated conductivity (1,613 to 1,727 µS/cm) (Table 3-19).

Table 3-19:
CVC Batch Plant 2020 Annual Water Quality Summary

Parameter		Field pH	Field Conductivity
Units		-	µS/cm
CVC-BT (n=2 field)	Max	8.2	1,727
	Min	7.2	1,613
	Median	7.7	1,670

Notes:
TSS = Total suspended solids.

3.2.3.4 RCC Area

The RCC area will house the future powerhouse, spillway and related facilities. Groundwater seepage, runoff and construction water in contact with the cement-based products used in the RCC area are generally slightly alkaline due to cement influence. The RCC waters were treated with carbon dioxide to reduce pH, as needed, prior to transfer and discharge through the RSEM R5B, R6 East, or R6 West sediment control ponds.

During 2020, the RCC area was dewatered to the Zula Ditch (monitored at station RCC-ZULA-DITCH) and to a baker tank (station RCC-NE-SUMP-BT). The RCC-NE-SUMP-BT baker tank was the final collection point for all RCC waters until mid-October when the baker tank was decommissioned for Winter, and the final collection point for water managed by PRHP was shifted to the Zula Ditch. The RCC-SUNKEN-BT, a baker tank previously used in 2019 to manage RCC water, contained residual RCC water which was dewatered to RSEM R6 West sediment control pond.

In 2020, RCC-NE-SUMP-BT field water quality was measured near-daily from March to October, and analytical samples were collected on an approximate weekly basis from January to August. Field measurements at RCC-ZULA-DITCH were taken on April 30, 2020, and near-daily in May 2020. Three analytical samples per month were also collected at RCC-ZULA-DITCH in April and May 2020. One field measurement was taken at RCC-SUNKEN-BT in May 2020.

Overall, as shown in Table 3-20, the RCC waters ranged from slightly acidic to alkaline (pH 6.1 to 10.1). Environmental staff indicate lower pH values were influenced by carbon dioxide treatment to lower pH because those measurements were collected after treatment was applied. Sulphate concentrations were generally low to moderate, elevating to 707 mg/L. TSS levels in all RCC samples were variable, ranging from 1.8 mg/L to 478 mg/L. The concentrations of Cd, Cu, Co and Zn were also variable and are attributed to TSS.

Table 3-20:
RCC Excavation 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RCC-ZULA-DITCH (n=6 lab, 21 field)	Max	8.61	9.9	1,550	1,581	104	308	0.000046	0.00257	0.00985	0.0314
	Min	8.28	6.9	1,220	1,087	8.4	195	<0.00001	0.00047	0.00218	0.0085
	Median	8.46	8.8	1,450	1,413	58	281	0.000020	0.00122	0.00325	0.0139
RCC-SUNKEN-BT (n=1 field)	Value	-	8.5	-	1,258	-	-	-	-	-	-
RCC-NE-SUMP-BT (n=22 lab, 146 field)	Max	8.47	10.1	2,310	5,200	478	707	0.000443	0.00770	0.02980	0.1540
	Min	6.63	6.1	380	314	1.8	42.2	<0.00001	<0.0002	<0.0005	<0.005
	Median	8.03	7.9	1,135	1,158	16	181	0.000028	0.00057	0.00247	0.0119

Notes:
TSS = Total suspended solids.

3.2.3.5 Approach Channel

Located on the PAG bench south of the Right Bank Cofferdam, the Approach Channel area extends from Area 21 northwest to RSEM Area R5B. Partial excavation of the Approach Channel PAG bedrock slope which faces the Right Bank Core Trench (RBCT) was conducted in previous years and ARD influenced runoff is directed to the MWTF for treatment. Additional PAG material was excavated in 2020, exposing fresh PAG surfaces in the central and eastern areas of the Approach Channel.

In 2020, 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). PAG-contact water accumulations on the lower Approach benches and at the RBAC Sump, and ARD influenced runoff from PAG exposures in the western Approach Channel area were directed to the MWTF throughout 2020. Groundwater seepage and runoff from the upper Approach Channel bench is generally directed to an RSEM PAG-contact sediment control pond, whereas PAG-contact waters are transferred to the MWTF for treatment.

The East Hairpin Ditch (station AC-E-HAIRPIN-DITCH) is located along the upper Approach Channel bench and intercepted and conveyed groundwater seepage and runoff to RSEM R5B sediment control pond via R5B ACDC Ditch (RB-R5B-ACDC) until September 2020. The East Hairpin Ditch waters were redirected in Q3 to the RSEM R6 West sediment control pond by pumping through the Area 21 Sump (AREA-21-SUMP). In Q4 the East Hairpin Ditch and Sump waters were trucked to RSEM R6 East sediment control pond. The East Hairpin Sump was used as a MWTF transfer point for PAG-contact

water during Q2 and Q3. A baker tank was sometimes used as a final collection point for combined East Hairpin Ditch and Sump waters. The East Hairpin Sump (or baker tank) was dewatered to the MWTF when it was used to manage PAG-contact water.

Water was managed similarly in the vicinity of the RBAC Sump (station RBAC-SUMP) located at the western end of the Approach Channel. Groundwater seepage (monitored at RBAC-SEEP) draining into the RBAC Sump was generally intercepted and transferred to RSEM R6 West sediment control pond, whereas PAG-contact water that accumulated in, or was transferred to, the RBAC Sump was directed to the MWTF throughout 2020. PAG contact water in the lower Approach Channel benches was directed to sumps (or baker tanks) and subsequently transferred to the MWTF. The main sumps used to manage PAG contact water in the lower bench include the 777 Sump, AC West Sump (station AC-W-SUMP), the 720 Sump (station AC-E-SUMP) and the East Groundwater Sump (station AC-E-GW-SUMP).

In 2020, *in situ* field measurements were collected near-daily from the AC-E-HAIRPIN-DITCH from January until June, and again in October, and from RB-R5B-ACDC from January until early September. The measurements reported for AC-E-HAIRPIN-DITCH were generally collected from within the East Hairpin Ditch and occasionally from the East Hairpin Sump. Measurements were taken intermittently over the year at other monitoring stations (AC-E-GW-SUMP, AC-E-SUMP, AC-W-SUMP, RBAC-SUMP, RBAC-SEEP), depending on water availability and water management considerations. Analytical water quality samples were periodically collected at certain stations (Table 3-21), typically in May, June and/or November. Monthly sampling occurred at RB-R5B-ACDC from January to June, followed by weekly sampling in July and one sample in September.

Despite the potential for strong PAG influence in the Approach Channel, water quality samples collected at the monitoring stations were typically circum-neutral to slightly alkaline. A low *in situ* field pH (pH 3.9) reading was measured at the AC-E-HAIRPIN-SUMP on April 9th, 2020. Field reports confirmed that this water was directed to the MWTF for treatment. *In situ* field pH at AC-E-HAIRPIN-SUMP returned to circum-neutral (pH 6.4 on April 12th) in the following days.

Within the Approach Channel area, sulphate concentrations at most stations were low, although one sample from RBAC-SUMP (May 11th, 2020) contained sulphate levels up to 1,140 mg/L. A field measurement at RBAC-SUMP indicates the sump water was circum-neutral with elevated conductivity when the analytical sample was collected. TSS levels were also typically low (<100 mg/L) in most samples, while concentrations of metals, notably Cd, Co, Cu and Zn, were variable. In particular, some metal concentrations were elevated in samples collected at AC-E-SUMP and AC-W-SUMP from the base of the

excavated PAG benches. At AC-E-SUMP elevated Cu, Cd, Co and Zn concentrations were driven by dissolved components of these metals, reflecting PAG influence. At AC-W-SUMP, Zn was elevated and is attributed to TSS.

The East Hairpin Ditch and Sump waters transferred to RSEM Areas R5B and R6 via R5B ACDC Ditch and Area 21 Sump, and monitored at the RB-R5B-ACDC and AREA-21-SUMP stations, were circum-neutral with sulphate below 200 mg/L, variable TSS and generally low metal concentrations except at RB-R5B-ACDC where high concentrations of Cu, Co, Cd and Zn are attributed to TSS, and were measured in samples collected on July 2nd and July 21st during heavy rainfall.

Table 3-21:
Approach Channel 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
AC-E-HAIRPIN-DITCH (n=1 lab, 119 field)	Max	8.09	8.7	966	3,140	26.7	202	0.000158	0.00223	0.00199	0.0185
	Min		3.9		586						
	Median		7.9		861						
AC-E-GW-SUMP (n=2 lab, 3 field)	Max	8.16	8.4	2,490	2,500	5.7	724	0.000052	0.00467	0.00181	0.023
	Min	8.16	8.2	2,000	1,819	3.7	560	0.000028	0.00109	0.00130	<0.01
	Median	8.16	8.3	2,245	2,230	5	642	0.000040	0.00288	0.00156	0.0165
AC-E-SUMP (n=2 lab, 27 field)	Max	8.00	8.1	2,360	2,930	204	929	0.00247	0.10100	0.02900	0.578
	Min	7.87	7.1	1,030	871	5.7	235	0.00159	0.02370	0.00509	0.3130
	Median	7.94	7.7	1,695	1,011	105	582	0.002030	0.06235	0.01705	0.4455
AC-W-SUMP (n=3 lab 13 field)	Max	8.42	8.6	1,200	1,420	9.9	316	0.000194	0.00517	0.00439	0.0381
	Min	7.98	8.0	1,090	1,186	7.1	239	0.000085	0.00177	0.00093	0.0192
	Median	8.15	8.2	1,190	1,283	8.1	283	0.000150	0.00420	0.00172	0.0363
AREA-21-SUMP (n=1 lab)	Value	8.04	-	939	-	7	63.3	0.000034	<0.0002	0.00056	<0.005
RBAC-SUMP (n=2 lab, 16 field)	Max	8.14	8.6	2,730	2,670	130	1,140	0.00186	0.08200	0.00902	0.4640
	Min	8.04	7.0	1,170	910	3.5	179	0.000023	0.00137	0.00080	0.0089
	Median	8.09	7.8	1,950	1,059	66.8	660	0.000942	0.04169	0.00491	0.2365
RBAC-SEEP (n=3 field)	Max	-	8.3	-	1,105	-	-	-	-	-	-
	Min		8.0		1,042						
	Median		8.2		1,052						
RB-R5B-ACDC (n=11 lab, 216 field)	Max	8.15	8.6	951	2,080	810	178	0.0014	0.0171	0.0424	0.214
	Min	7.89	7.5	748	278	<1	110	<0.00001	<0.0002	<0.0005	<0.005
	Median	8.03	8.2	823	947	4.0	129	0.000027	0.00020	0.00050	0.0050

Notes:
TSS = Total suspended solids.

3.2.3.6 Right Bank Core Trench

The core trench excavation is located in the Right Bank Cofferdam. Water from groundwater seepages and PAG and shotcrete contact water runoff that accumulate on the floor of the excavation are collected in the Core Trench sump, RB-CORE-TRENCH-SUMP. In 2020, this water was typically transferred to the MWTF for treatment. Water from the core trench was briefly directed to the RSEM Area L5 West sediment control pond in late April 2020, during the MWTF relocation, and to the RSEM Area R5B sediment control pond in mid-June following the mid-June precipitation event at the site.

Two analytical samples were collected in June 2020, and accompanied by twelve field measurements taken opportunistically over the course of June, August, and October to December. The water in RB-CORE-TRENCH-SUMP was typically alkaline, with moderate sulphate concentrations (Table 3-22). TSS levels were elevated, contributing to elevated concentrations of Cd, Co, Cu and Zn.

Table 3-22:
Right Bank Cofferdam Core Trench Excavation 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RB-Core-Trench-Sump (n=2 lab, 12 field)	Max	9.10	11.7	2,370	6,530	1,150	583	0.000505	0.0148	0.0479	0.187
	Min	9.06	8.0	1,840	1,384	377	501	0.000421	0.0113	0.0348	0.141
	Median	9.08	9.4	2,105	2,420	764	542	0.000463	0.0131	0.0414	0.164

Notes:
TSS = Total suspended solids.

3.2.3.7 Mobile Water Treatment Facility

From January to April 2020, the MWTF and associated infrastructure were located in the RSEM R5B area catchment, as described in Section 5.5.3. Treated effluent was directed to the RSEM R5B sediment control pond from the Sludge Pond outlet (station MWTF-SLP-R5B). In late April, the MWTF was relocated to RSEM Area R6, and from May through December, PAG-contact water that required treatment was redirected to the New Pre-Treatment Pond established in RSEM Area R6 (the former AK Pond). This water was treated in the relocated MWTF and discharged through a newly constructed Sludge Pond for solids settling and pH adjustment. The final treated effluent was pumped from the New Sludge Pond outlet (station MWTF-SLP-R6), to the RSEM R6W sediment control pond. Passive discharges commenced early November after the construction of a lined discharge

channel was completed. The configurations of the MWTF and related facilities in 2020 are described in Section 5.3.3. and shown in Figure 1-6. The Approach Channel PAG-contact waters were directed to the MWTF Pre-Treatment pond throughout 2020, as well as PAG and shotcrete contact water from other areas on both the Right and Left Bank, as needed (*e.g.*, DIC, LBCD, DOC, RBCT sumps).

Near-daily field measurements of treated effluent were collected at MWTF-SLP-R5B from January to April 2020, when treated water was directed to the RSEM R5B sediment control pond. From May 2020, onwards, field measurements were collected at MWTF-SLP-R6 on a daily to twice-weekly basis, as treated water was directed to the RSEM R6 West sediment control pond. Monitoring specific to the MWTF operation and treatment efficiency (*e.g.*, metal removal) is described under separate cover.

Overall, the field measurements of treated water from the MWTF sludge pond indicates the MWTF process was effective at buffering pH to within the project-specific discharge limits in treated water. Water quality was circum-neutral in 2020 (Table 3-23) except for two field pH measurements that occurred above 9.0 (January 16 and February 4, 2020), and were attributed to operational failure of the final pH adjustment system. Corresponding field turbidity values (Appendix 3-B), as an indicator of TSS levels, were low throughout 2020. Field conductivity ranged from 951 to 2,850 µS/cm (Table 3-23).

Table 3-23:
MWTF Sludge Pond 2020 Annual Water Quality Summary

Parameter		Field pH	Field Conductivity
Units		-	µS/cm
MWTF-SLP-R5B (n=109 field)	Max	10	2,250
	Min	6.9	951
	Median	7.9	1,602
MWTF-SLP-R6 (n=111 field)	Max	8.5	2,850
	Min	6.8	1,393
	Median	7.8	1,945

3.2.3.8 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.

In 2020, the RSEM R6 East sediment control pond received surface runoff and periodic discharges from the CVC Batch Plant (CVC-BT) via the SBIAR ditch (RSEM-R6-EP-US-SD), as well as site waters periodically transferred from Area A North Ditch and the RCC area. The RSEM R6 West sediment control pond received surface runoff and periodic water transfers from water storage facilities across the site depending on management needs, including the Area A North Ditch, Area 21 waters, groundwater seepage from the Approach Channel, and contact water from the RCC area (RCC-NE-SUMP-BT). In early May, the RSEM R6 West pond began receiving MWTF treated effluent and subsequently waters from the RSEM Area R5B catchment that were diverted during Q3.

Analytical water quality monitoring of RSEM R6 East and West sediment control ponds was conducted throughout 2020, including daily at EOP when discharging or occasional in-pond sampling as water levels allowed. The continuous measurement *in situ* sonde was deployed in-pond throughout 2020 at RSEM R6 East pond, excluding an approximate three-week period in May when the pond was not discharging due to low water levels. *In situ* sonde continuous measurements in RSEM R6 West Pond occurred from late April onwards, during periods when the pond was discharging. Field measurements were collected on a daily to weekly basis at RSEM-R6-EP-US-SD, upstream of the RSEM R6 East pond, when flowing, and three analytical samples were collected in April, June, and October. A single field measurement was also collected at RSEM-R6E-SP-US, upstream of the RSEM R6 East pond flocculation shack, on July 8, 2020.

The monitoring records for the RSEM R6 East sediment control pond indicate the pond discharged most days in 2020, except during discrete periods in February and March due to freezing conditions, and in May due to low water level. The RSEM R6 West sediment control pond had low water levels in Q1 and minor intermittent discharge began in mid-April. Flows increased following the relocation of the MWTF to RSEM Area R6 early May, with final treated effluent pumped to RSEM R6 West pond beginning May 9th. For approximately one week in early November, the RSEM R6 West sediment control pond was dewatered, and inputs were redirected to RSEM R6 East pond, in order to complete construction of the lined passive discharge channel from the MWTF to RSEM R6 West pond. Subsequently, pH adjusted treated effluent from the MWTF discharged passively to the RSEM R6 West pond. 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

Waters at RSEM-R6-EP-US-SD, located at the inlet to the RSEM R6 East sediment control pond conveyance ditch, were circum-neutral to alkaline, reflecting the influence of the CVC batch plant water. Sulphate levels were relatively low, and TSS concentrations were variable. Elevated Cd, Cu, Co and Zn metal at RSEM-R6-EP-US-SD are attributed primarily to elevated TSS. Water at RSEM-R6E-SP-US had a field pH of 8.4 at the time of measurement, and conductivity of 850 µS/cm.

The 2020 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 371 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, except for a single T-Zn exceedance on November 3rd. The source of elevated Zn in the November 3, 2020, sample could not be ascertained, but the corresponding sample field duplicate had a T-Zn concentration well below the RSEM EOP limit. Analytical water quality data and field pH measurements for RSEM R6 East pond stations are summarized in Table 3-24 and trends in water quality are illustrated in Figure 3-19 through Figure 3-23.

Table 3-24:
RSEM R6 East Pond 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		**-**	**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**-**	**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.00029**	**0.55**	**0.011**	**0.033**
RSEM-R6-EP-US-SD (n=3 lab, 177 field)	Max	8.14	9.5	1,510	3,034	7,850	472	0.0123	0.158	0.320	2.03
	Min	6.72	7.2	475	465	39.8	76.3	0.000291	0.00678	0.0069	0.0709
	Median	7.69	8.4	890	867	331	151	0.000430	0.00809	0.0157	0.0731
RSEM-R6E-SP-US (n=1 field)	Value	-	8.4	-	850	-	-	-	-	-	-
RSEM-R6E-EOP (n=319 lab, 323 field)	Max	8.40	8.8	1,670	1,941	26	371	0.000278	0.0137	0.00647	***0.0439***
	Min	6.77	7.2	489	494	<1	55.8	<0.00001	<0.0002	0.00054	<0.005
	Median	8.05	8.2	846	960	2	124	0.000018	0.00061	0.00113	0.0050

Notes:
[1]RSEM EOP Limit applies only to RSEM sediment control pond discharges. Upstream stations are not screened.
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.
Gold italics indicate exceedance of an RSEM EOP limit at an RSEM sediment control pond. Upstream stations are not screened.

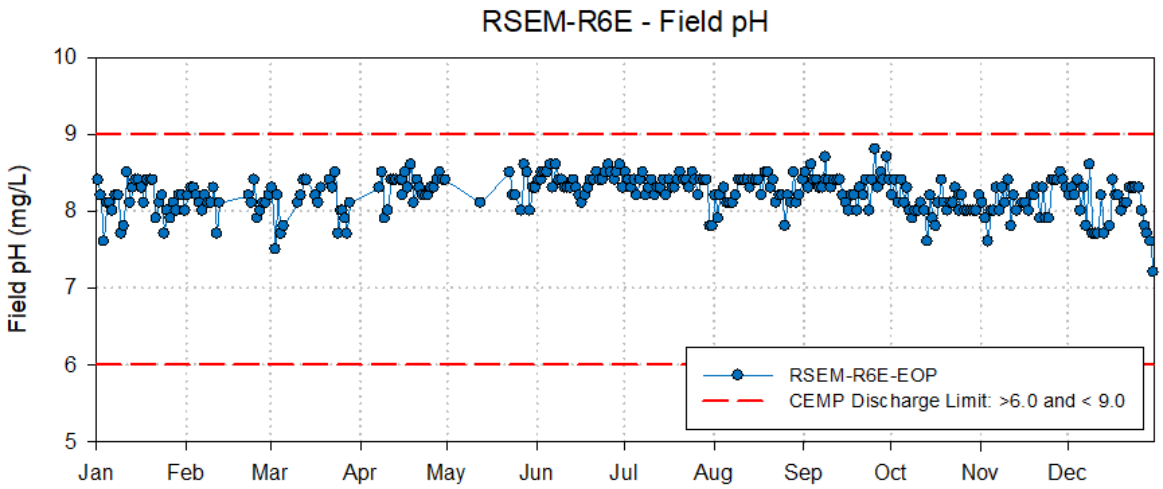

Figure 3-19: Time series profile for field pH in RSEM-R6 East compared to RSEM EOP Limits. EOP – End of Pipe; SP – Sediment Pond.

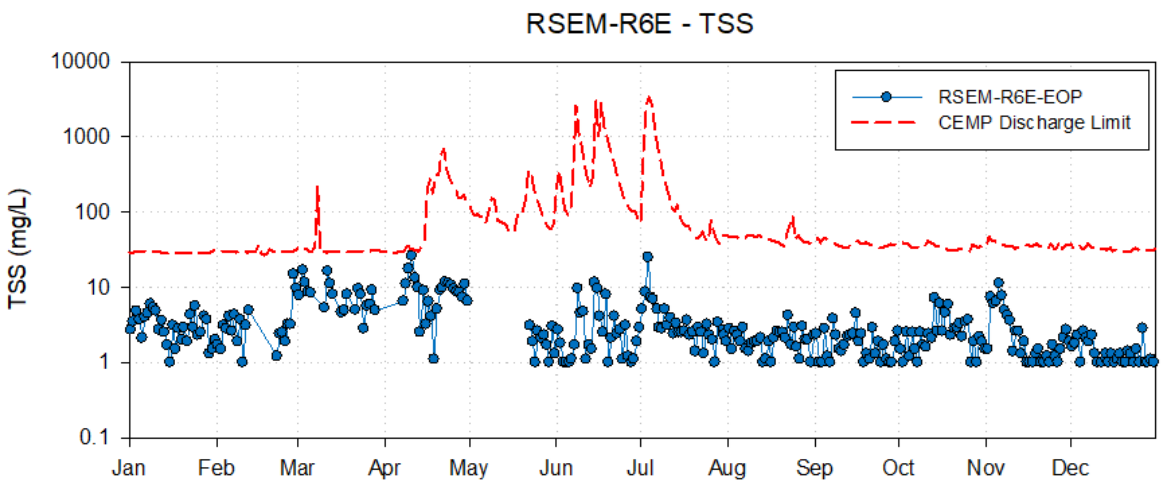

Figure 3-20: Time series profile for total suspended solids (TSS) in RSEM-R6 East compared to RSEM EOP Limits. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond.

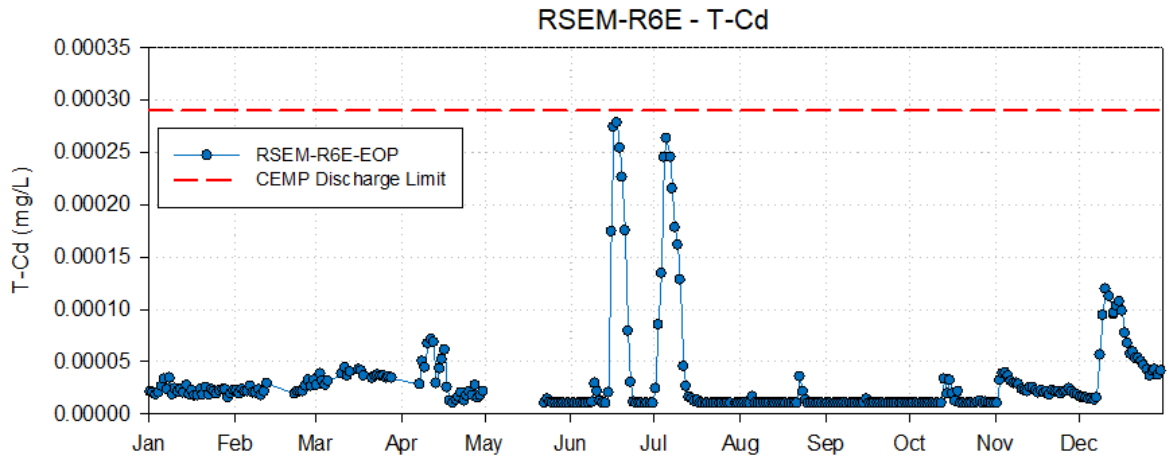

Figure 3-21: Concentrations of cadmium (Cd) for RSEM-R6 East compared to RSEM EOP Limits. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

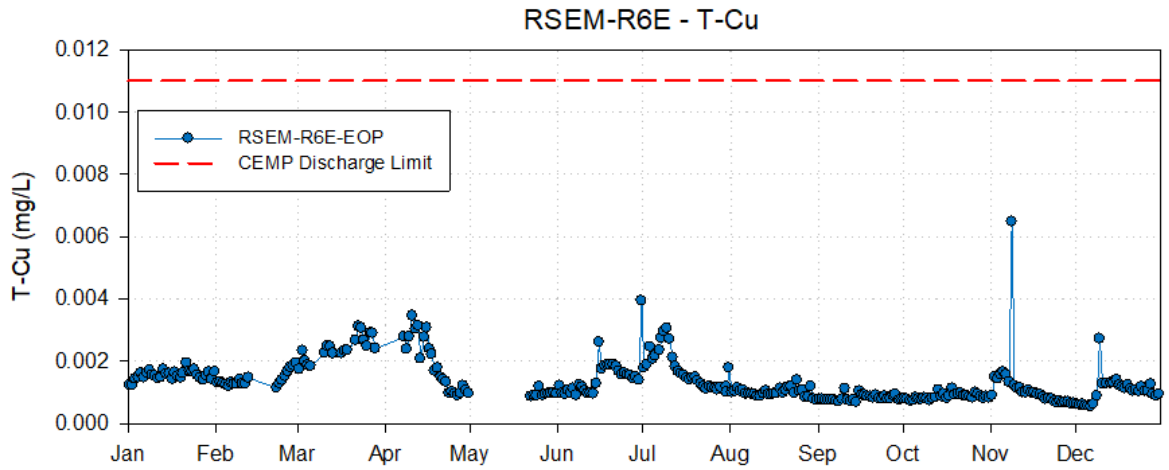

Figure 3-22: Concentrations of copper (Cu) for RSEM-R6 East compared to RSEM EOP Limits. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

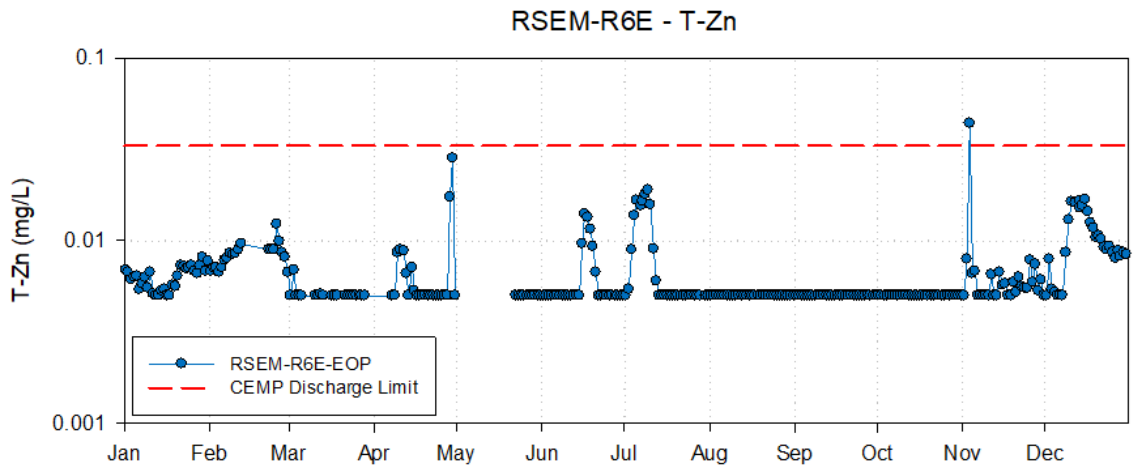

Figure 3-23: Concentrations of zinc (Zn) for RSEM-R6 East compared to RSEM EOP Limits. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

RSEM Area R6 West Catchment

Results for RSEM R6 West sediment control pond stations are summarized in Table 3-25 and water quality trends are illustrated in Figure 3-24 through Figure 3-28. The 2020 monitoring data indicate the RSEM R6 West sediment control pond water and EOP discharges were circum-neutral to slightly alkaline, with sulphate concentrations up to 995 mg/L. All analytical samples and *in situ* field measurements met RSEM EOP limits except for Zn on June 16, 2020, at Cd and Zn in early July. The exceedances occurred in association with significant precipitation events at the site that affected treatment and storage capacity of PAG-contact waters.

Table 3-25:
RSEM R6 West Pond 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		-	-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RSEM EOP Limit[1]		**-**	**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.00029**	**0.55**	**0.011**	**0.033**
RSEM-R6W-SP (n=2 lab, 2 field)	Max	8.31	8.4	711	718	18	130	0.000020	0.00063	0.00360	0.0058
	Min	8.15	8.3	588	587	10	97	0.000015	0.00055	0.00276	<0.005
	Median	8.23	8.4	650	653	14	114	0.000018	0.00059	0.00318	0.0054
RSEM-R6W-EOP (n=236 lab, 236 field)	Max	8.46	8.8	2,170	2,600	48.5	995	***0.00067***	0.00864	0.0058	***0.0842***
	Min	6.68	7.2	618	788	<1	117	<0.00001	<0.0002	0.00076	<0.005
	Median	8.10	8.3	1,575	1,817	3	522	0.000012	0.00030	0.00116	0.0050

Notes:
[1]RSEM EOP Limit only applies to RSEM sediment control pond discharges.
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.
Gold italics indicate exceedance of an RSEM EOP limit at an RSEM sediment control pond. Upstream stations are not screened.

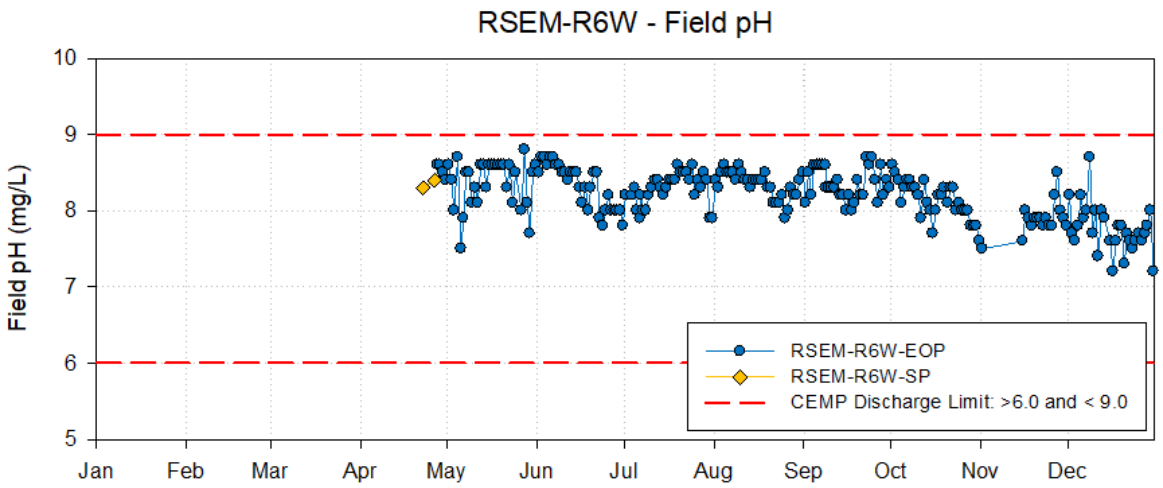

Figure 3-24: Time series profile for field pH in RSEM-R6 West compared to RSEM EOP Limits. EOP – End of Pipe; SP – Sediment Pond.

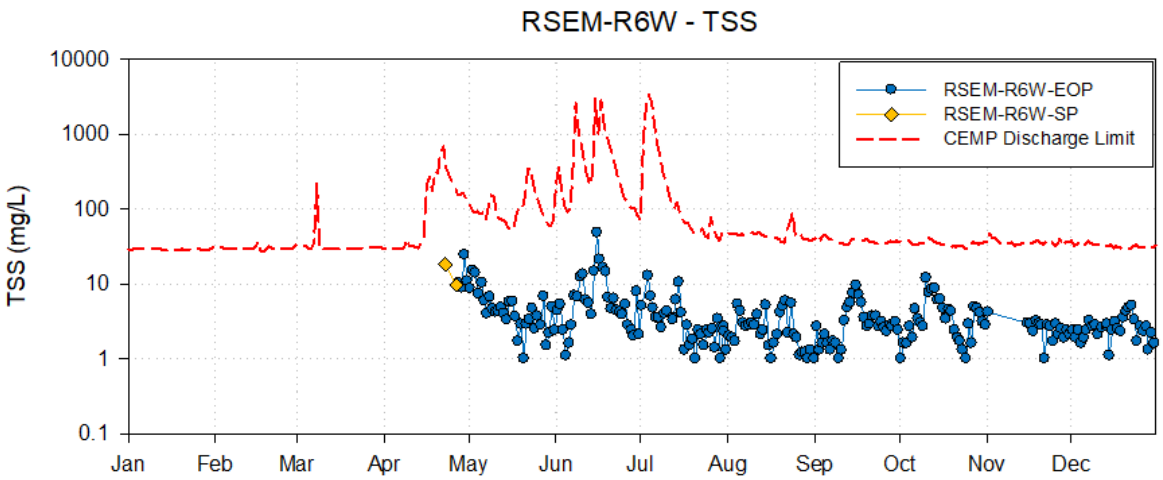

Figure 3-25: Time series profile for total suspended solids (TSS) in RSEM-R6 West compared to RSEM EOP Limits. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP- Sediment Pond.

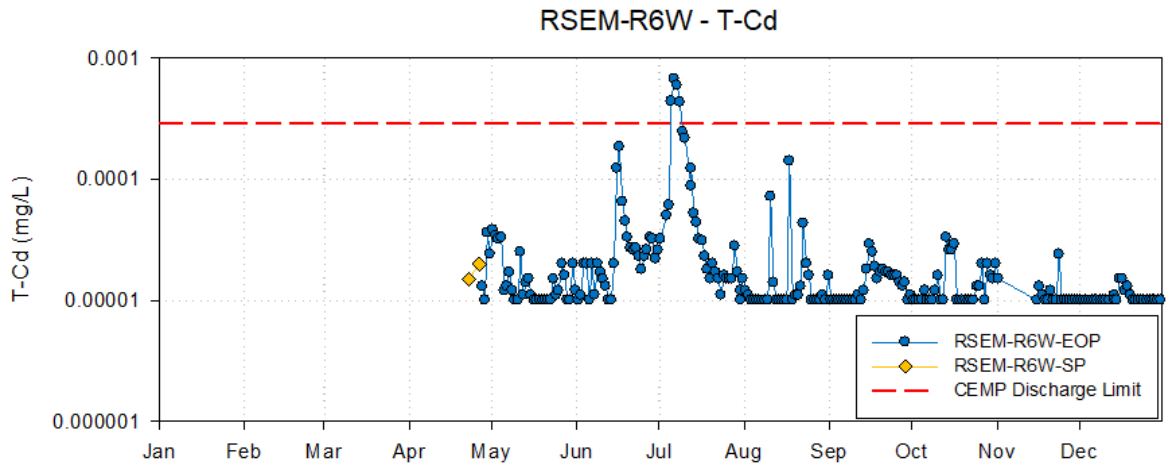

Figure 3-26: Concentrations of cadmium (Cd) for RSEM-R6 West compared to RSEM EOP Limits. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

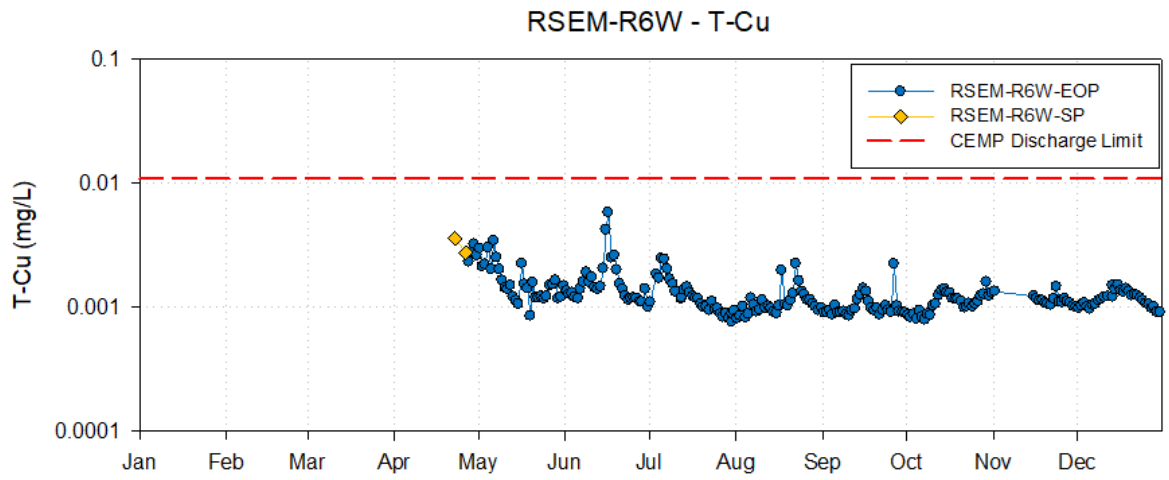

Figure 3-27: Concentrations of copper (Cu) for RSEM-R6 West compared to RSEM EOP Limits. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

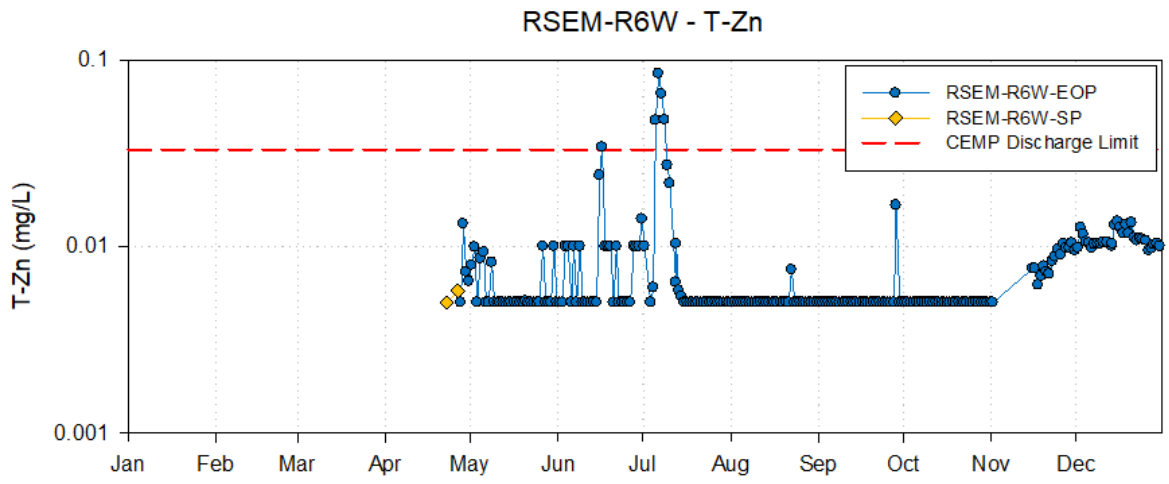

Figure 3-28: Concentrations of zinc (Zn) for RSEM-R6 West compared to RSEM EOP Limits. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

3.2.3.9 RSEM Area R5B Sediment Control Pond

The RSEM R5B sediment control pond is located northeast of the Right Bank Cofferdam (RBCD) and the Approach Channel area. The RSEM R5B sediment control pond passively discharged in 2020 through a pipe to a rip rap protected outfall, which descended the bank to the Peace River, until the pond was deactivated early September 2020. Water quality was monitored periodically at the in-pond (SP) station and daily, when discharging, at the EOP station.

Since deactivation of the RSEM R5B sediment control pond early September 2020, all previous inflows have been redirected to the RSEM R6 sediment control ponds. Since July, PAG influenced runoff from PAG exposures in the western extent of the Approach Channel have been intercepted at R5B West Ditch by a sump and were periodically transferred to the MWTF. Water management within RSEM Area R5B catchment will transition to the Phase 2 R5B Sump located upslope from the RSEM R5B sediment control pond. Construction of the Phase 2 R5B Sump and conveyance ditches commenced in Q4 2020. Commissioning of the Phase 2 R5B Sump is anticipated to occur in 2021, at which point the RSEM R5B sediment control pond will be decommissioned and backfilled.

The RSEM R5B sediment control pond received water from several sources in 2020. With respect to contact waters, the pond received treated discharge from the MWTF, runoff and groundwater from the Approach Channel (notably, water from the East Hairpin Ditch via the ACDC ditch), and transfers from Area A North Ditch and the RCC area. Shotcrete contact water from the RBCT was briefly directed to the RSEM Area R5B sediment control

pond following the June 14th to 15th precipitation event. The RSEM R5B sediment pond also intermittently received surface runoff intercepted by the RSEM-R5B-W ditch. It is noted the present section describes water quality for the RSEM R5B sediment control pond and the RSEM-R5B-W ditch. The water quality of Approach Channel waters directed to the RSEM R5B sediment control pond and monitored along the R5B ACDC conveyance ditch (at station RB-R5B-ACDC) is described in Section 3.2.3.5.

Monitoring records indicate discharge occurred from the RSEM R5B sediment control pond almost every day from January to April 2020, followed by intermittent periods of discharge in May and early June. Near-daily discharge from the pond continued from mid-June until early September, at which point the pond was deactivated in tandem with the Upstream Cofferdam construction. All previous inflows to the RSEM R5B sediment control pond were subsequently redirected to the RSEM R6 West pond for the remainder of 2020.

When discharging, daily monitoring of RSEM R5B sediment control pond water was conducted using analytical samples and *in situ* field measurements. Continuous water quality measurements were also collected from the sonde deployed at the in-pond station (RSEM-R5B-SP), when the pond was discharging. Two analytical samples were collected at RSEM-R5B-W in April and July, 2020. *In situ* field measurements were collected on a daily to weekly basis depending on water availability from late March to August.

Water quality results are summarized in Table 3-26, and Figure 3-29 through Figure 3-33. The RSEM R5B sediment pond water in 2020 was circumneutral to alkaline, with moderate sulphate concentrations (up to 662 mg/L) and TSS levels below 68 mg/L. Metals concentrations were generally low, and discharges met the RSEM EOP limits except during discrete periods in June and July following heavy rains. Specifically, RSEM EOP discharge limits for Cd and Zn were exceeded from June 16th to 24th, and from July 5th to 9th, following heavy rainfall. The elevated Cd and Zn were primarily present in dissolve form, indicating ARD influence that likely originated from the rinsing of PAG exposures in the western extent of the Approach Channel and conveyed by the R5B West Ditch, prior to completion of an interception sump.

With respect to surface runoff quality measured at RSEM-R5B-W, water in both the April and July samples was circumneutral to alkaline with low sulphate concentrations (< 250 mg/L). Both samples had elevated TSS, T-Cd, T-Cu, and T-Zn at concentrations above the RSEM end of pipe limits due to heavy rains and surface runoff at the time of sampling.

Table 3-26: RSEM R5B Pond 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cd	T-Co	T-Cu	T-Zn
Units		**-**	**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**-**	**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.00029**	**0.55**	**0.011**	**0.033**
RSEM-R5B-W (n=2 lab, 47 field)	Max	8.20	8.8	838	1,707	2060	245	0.00171	0.0258	0.0695	0.249
	Min	7.78	7.7	375	374	1030	102	0.00104	0.0150	0.0404	0.154
	Median	7.99	8.5	607	1019	1545	174	0.00138	0.0204	0.0550	0.202
RSEM-R5B-SP (n=10 lab, 16 field)	Max	8.41	9.0	1,720	1953	24.4	579	0.000069	0.0010	0.00382	0.0149
	Min	7.05	7.5	589	619	<1	126	<0.00001	<0.0002	0.00127	<0.005
	Median	8.12	8.5	1,525	1551	3	470	0.000022	0.00032	0.00194	0.0050
RSEM-R5B-EOP (n=214 lab, 215 field)	Max	8.43	8.7	1,710	1984	67.2	662	***0.00079***	0.0195	0.00448	***0.103***
	Min	6.78	6.8	478	563	<0.98	114	<0.00001	<0.0002	0.00065	<0.005
	Median	8.12	8.3	1,140	1215	3	295	0.000019	0.00044	0.00132	0.0050

Notes:
[1]RSEM EOP Limit only applies to RSEM sediment control pond discharges. Upstream stations are not screened.
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.
Gold italics indicate exceedance of an RSEM EOP limit. Upstream stations are not screened.

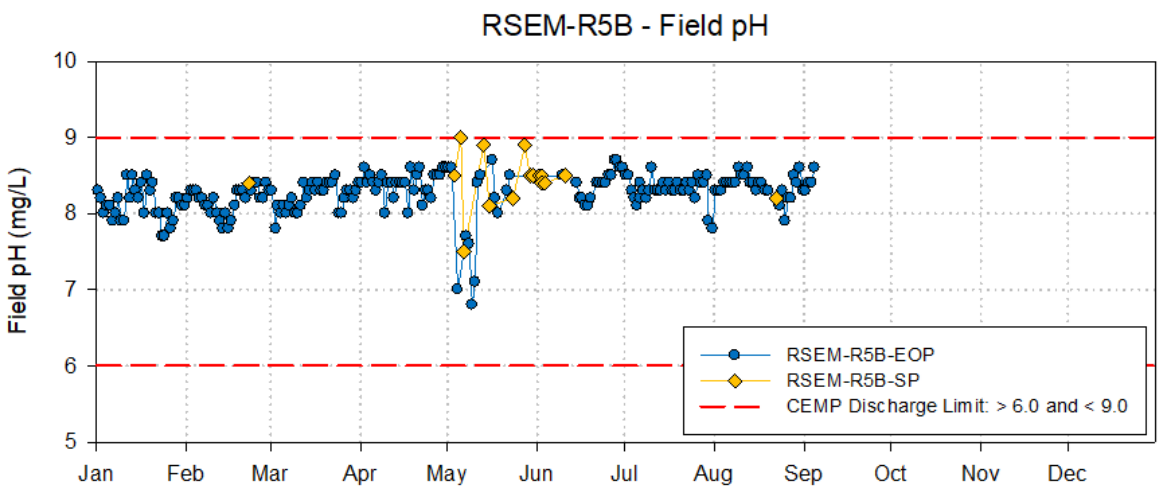

Figure 3-29: Time series profile for field pH in RSEM-R5B compared to RSEM EOP Limits. EOP – End of Pipe; SP – Sediment Pond.

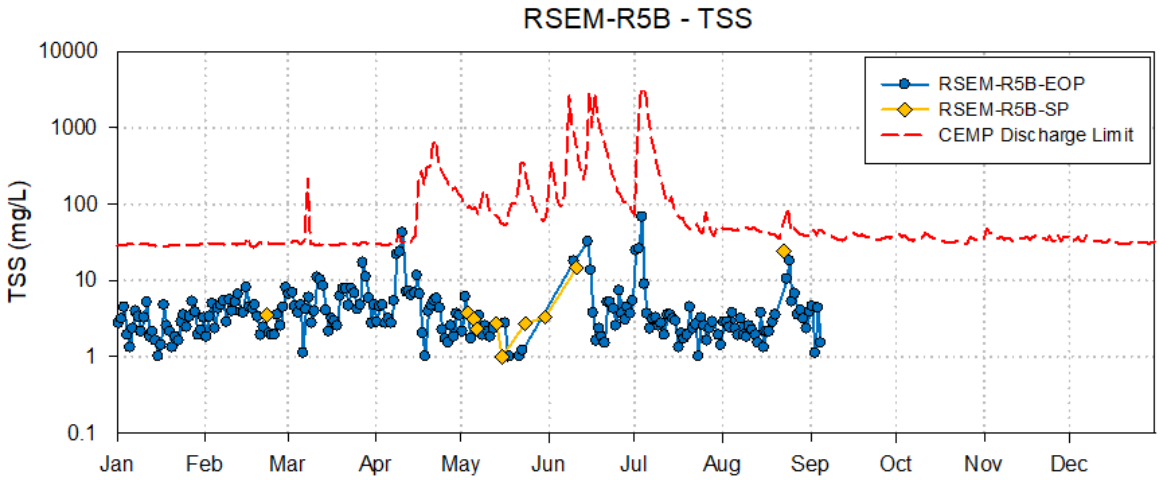

Figure 3-30: Time series profile for total suspended solids (TSS) in RSEM-R5B compared to RSEM EOP Limits. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond.

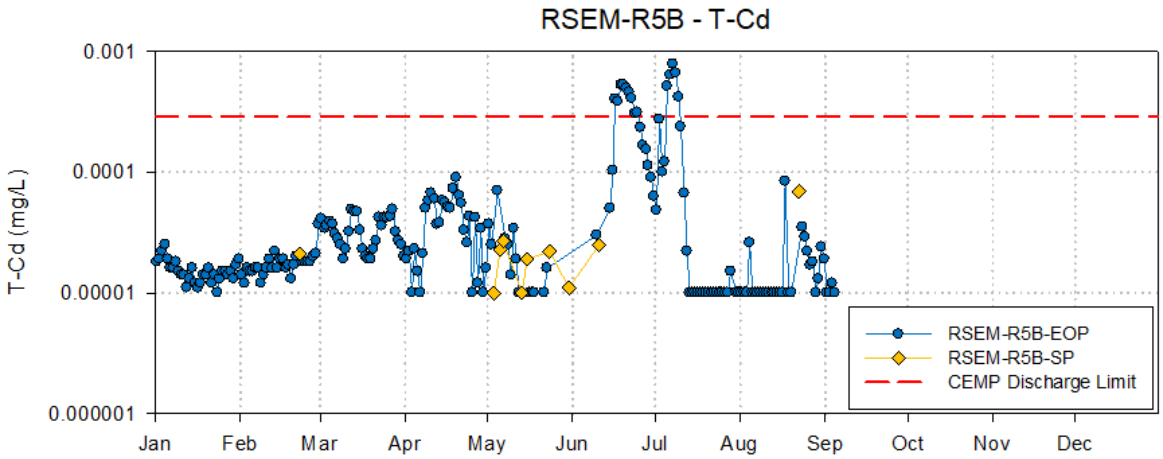

Figure 3-31: Concentrations of cadmium (Cd) for RSEM-R5B compared to RSEM EOP Limits. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

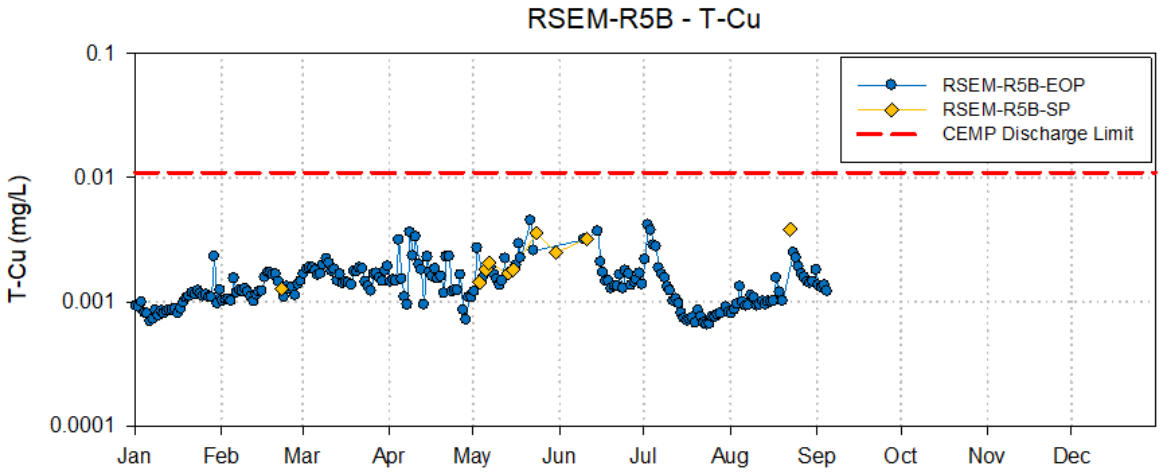

Figure 3-32: Concentration of copper (Cu) for RSEM-R5B compared to RSEM EOP Limits. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

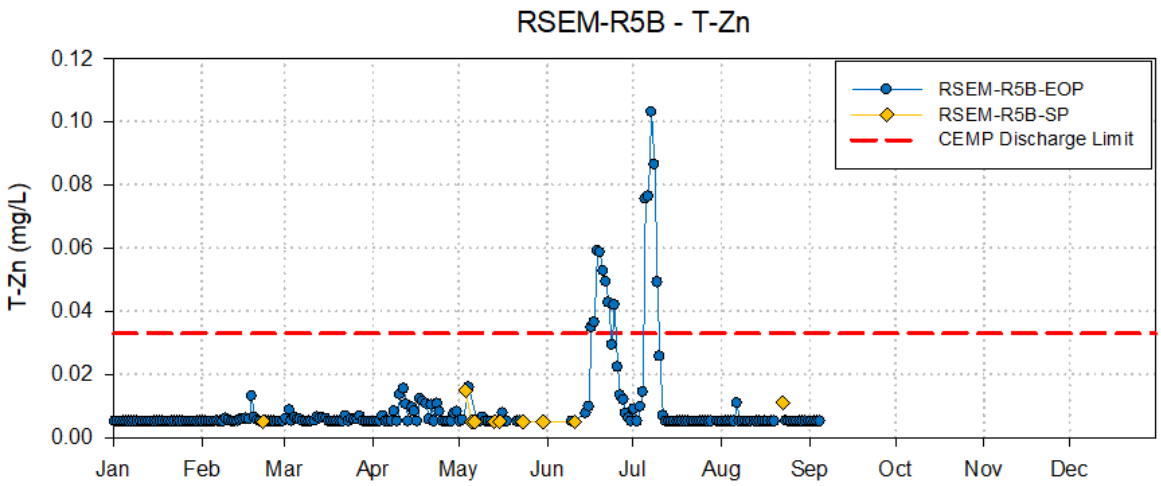

Figure 3-33: Concentration of zinc (Zn) for RSEM-R5B compared to RSEM EOP Limits. EOP – End of Pipe; SP - Sediment Pond; T – Total Concentrations.

3.2.3.10 RSEM Area R5A Sediment Control Ponds

The Phase 1 RSEM Area R5A sediment control ponds were used to manage runoff in the RSEM Area R5A catchment from January through September 2020. Two ponds (A and B) received runoff from the southeastern RSEM area, whereas surface flows from the northwestern extent were directed to ponds C and D. The paired ponds are separated by a

berm. Outfalls were constructed to convey potential discharge from the southeast ponds into a riparian area adjacent to the river (ponds A / B) and from the northwest ponds to a side channel of the Peace River (ponds C / D). For each RSEM R5A pond, water quality monitoring stations were located in-pond (the SP station) or at EOP. Construction of the similarly configured Phase 2 RSEM R5A sediment control ponds commenced in Q3 2020 upslope of the Phase 1 ponds.

The Phase 1 RSEM R5A sediment control ponds were decommissioned and backfilled in September 2020, and runoff in RSEM Area R5A was redirected to the partially constructed Phase 2 RSEM R5A ponds from September 19th onwards. Water levels in the Phase 2 ponds were low for the balance of 2020, and there were no discharges. The Phase 2 ponds are expected to be commissioned for passive discharge in 2021.

Active discharge by pumping to the Peace River main stem was approved in 2019 for the Phase 1 RSEM R5A Pond A sediment control pond (BC Hydro, 2019). The ponds were generally managed to prevent discharge by pumping water between ponds or to a sump along the upper bench above the ponds (in summer) for storage as needed. When water storage capacity was exceeded the excess water was directed to RSEM R5A Pond A and from there was pumped to the Peace River by active pumping.

In the event of discharge from the RSEM R5A sediment control ponds, water quality is screened against BC WQG for the protection of aquatic life, as noted in the approved pumping plan (BC Hydro, 2019). For this analysis, both working and approved WQG are used to screen data. Pond A and Pond B are screened against short-term WQG; Pond C and Pond D are screened against long-term WQG, as well as short-term WQG for parameters for which a long-term WQG does not exist. Water that is pumped from the Pond A to the main stem of the Peace River is also screened against the RSEM EOP limits.

The RSEM R5A sediment control ponds did not discharge in 2020 with the exception of discrete events in June and July due to water accumulations associated with heavy rainfall events. On June 30th, and July 4th to 6th, water was pumped directly from RSEM R5A Pond A to the Peace River in accordance with the RSEM Area R5A sediment control pond pumping plan (BC Hydro, 2019). Site reports estimate that small volumes of passive discharge occurred on July 3rd from RSEM R5A Pond B (9 m^3) and July 4th from Pond C (1.2 m^3).

Analytical samples were collected from each of the RSEM R5A sediment control ponds in March, April and June, 2020. Discharges were sampled at RSEM-R5A-A-EOP on June 30th, July 4th, and July 5th. *In situ* field measurements were collected for each pond at the time of sampling and continuous monitoring sondes were deployed to RSEM R5A sediment control ponds A and B while discharging.

End of pipe samples were collected from Pond A during periods of active discharge to the peace river (June 30, July 4, and July 5). The water quality in these samples met RSEM EOP limits (Table 3-27). In-pond samples collected from Ponds A and B were circum-neutral to alkaline (up to pH 9.0 in Pond A), with low to moderate sulphate concentrations and TSS that elevated to 367 mg/L in the April 12th Pond B sample. Elevated concentrations of Cd, Cu and Zn are attributed to TSS and are not indicative of ARD influence. The water quality of analytical samples from RSEM R5A Pond A and Pond B met short-term WQG, except T-Fe and T-Zn (Ponds A and B), and T-Ag and T-As (Pond B). An estimated 9.3 m^3 was discharged from Pond B on July 3rd.

In-pond samples from Ponds C and D were slightly alkaline with low to moderate sulphate concentrations (up to 1,070 mg/L in Pond C) (Table 3-28). Analytical samples variously exceeded short- or long-term guidelines for sulphate, nitrate, nitrite, T-Ag, D-Al, T-As, T-Be, T-Co, T-Cr, D-Cu, T-Fe, T-Pb, T-Se and T-Zn(Table 3-28). Elevated concentrations of Cd, Cu and Zn are attributed to TSS and are not indicative of ARD influence. No discharge was reported in 2020 Pond D, and a minor volume of water (estimated volume of 1.2 m^3) from Pond C was discharged on July 4th.

Table 3-27:
RSEM R5A A and B Ponds 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Ag	T-As	T-Cd	T-Co	T-Cu	T-Fe	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**
RSEM EOP Limit[a]		**-**	**6.0-9.0**	**-**	**-**	**WQG**	**-**	**-**	**-**	**0.00029**	**0.55**	**0.011**	**-**	**0.033**
Short-term BC WQG[b]		**-**	**6.5-9.0**	**-**	**-**	**WQG[C]**	**-**	**0.0001**	**0.005**	**-**	**0.11**	**-**	**1**	**0.033**
RSEM-R5A-A-SP (n=3 lab, 5 field)	Max	7.98	9.0	606	895	*62.5*	192	0.000057	0.00298	0.000138	0.00232	0.00684	***5.33***	***0.0455***
	Min	6.77	7.4	243	253	10.5	37.1	0.000034	0.00163	0.000065	0.00116	0.00440	***2.91***	0.0130
	Median	7.95	8.1	257	679	*59.1*	44.8	0.000040	0.00229	0.00011	0.00200	0.00683	***4.19***	0.0215
RSEM-R5A-A-EOP (n=3 lab4 field)	Max	8.18	8.4	1,510	1,674	62.8	544	0.000033	0.00206	0.000090	0.00164	0.00471	***3.34***	0.0132
	Min	7.78	7.8	1,040	1,162	6.1	367	<0.00002	0.00104	0.000029	0.00049	0.00275	0.82	<0.005
	Median	8.03	8.3	1,110	1,235	10.6	387	0.000021	0.00143	0.000070	0.00153	0.00344	***1.94***	0.0113
RSEM-R5A-B-SP (n=4 lab, 5 field)	Max	7.98	8.6	596	2,270	367	198	***0.000177***	***0.00995***	0.000415	0.01010	0.0296	***20.4***	***0.118***
	Min	6.58	7.8	246	253	6.9	50.4	<0.00002	0.00118	0.000044	0.00083	0.00312	***1.71***	0.0071
	Median	7.85	8.5	428	647	69.3	126	0.000040	0.00271	0.00012	0.00213	0.00739	***4.46***	0.0203

Notes:
[a]RSEM EOP Limit only applies to discharge from the RSEM R5A Pond A sediment control pond.
[b]Approved BC short-term water quality guideline for protection of aquatic life. 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 2020 (except TSS). Temperature of 15°C assumed.
[c]TSS guideline is dependent on background TSS readings in Peace River at the time of discharge, therefore TSS is only evaluated for discharges.
Red italics **indicate a value that exceeds BC short-term Water Quality Guidelines for the protection of aquatic life. Because calculated guidelines shown are based on corresponding minimum hardness statistic, discrepancies may exist between exceeding values shown in table and reported exceedances**

Table 3-28:
RSEM R5A C and D Ponds 2020 Annual Water Quality Summary

Parameter		Lab pH	Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	Nitrite (as N)	Nitrate (as N)	T-Ag	D-Al	T-As	T-Be	T-Co	T-Cr	D-Cu	T-Fe	T-Pb	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**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
Short-term BC WQG[a]		**-**	**6.5-9.0**	**-**	**-**	**WQG[b]**	**-**	**0.12**	**32.8**	**0.0001**	**0.1**	**0.005**	**-**	**0.11**	**-**	**0.0051[c]**	**1**	**0.056**	**-**	**0.033**
Long-Term BC WQG[a]		**-**		**-**	**-**	**WQG[b]**	**218**	**0.04**	**3**	**0.00005**	**0.05**	**-**	**0.00013**	**0.004**	**0.001 (Cr VI) 0.0089 (Cr III)**	**0.0009[c]**	**-**	**0.0055**	**0.002**	**0.0075**
RSEM-R5A-C-SP (n=3 lab, 5 field)	Max	8.11	8.4	2,870	9,200	113	***1,070***	***0.129***	***4.65***	***0.000109***	***0.0784***	***0.00784***	***0.00051***	***0.00760***	***0.0136***	***<0.0025***	***14.3***	***0.00891***	***0.00684***	***0.0806***
	Min	7.77	8.1	362	356	6.7	91.4	0.033	0.615	<0.00002	0.0069	0.000740	<0.0001	0.00061	***0.0011***	0.00086	0.954	0.00059	***0.00276***	0.0060
	Median	7.87	8.2	431	2,640	39.6	136	***0.072***	0.934	***0.0001***	0.0150	0.00162	***0.00050***	***0.00410***	***0.0051***	***0.00114***	***2.66***	0.00140	***0.00536***	***0.0250***
RSEM-R5A-D-SP (n=3 lab, 5 field)	Max	8.00	8.6	2,080	3,950	72.2	***780***	***0.072***	***3.90***	***0.000161***	***0.572***	***0.00776***	***0.00058***	***0.00751***	***0.0146***	***<0.0025***	***15.2***	***0.00910***	***0.00678***	***0.0815***
	Min	7.62	8.0	281	291	6.4	71.3	0.034	0.618	0.000023	<0.015	0.00080	<0.0001	0.00123	***0.0024***	***0.00109***	0.865	<0.001	0.00190	***0.0126***
	Median	7.88	8.3	368	2,000	8.1	94.9	***0.047***	0.663	***0.0001***	0.0421	0.00150	***0.00050***	0.00140	***0.0050***	***0.00131***	***2.30***	0.00143	***0.00630***	***0.0250***

Notes:
[a]Approved and working BC short-term and long-term Water Quality Guideline for protection of aquatic life (BC ENV, 2019a). 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 2020 (except TSS). Temperature of 5°C assumed.
[b]TSS guideline is dependent on background TSS readings in Peace River at the time of discharge, therefore TSS is only evaluated for discharges.
[c]D-Cu guideline presented is the lowest of the sample specific guidelines taken from the Cu Look-up Table provided as a supplement to the Cu WQG, and based on 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 lowest derived guideline is shown and is based on pH = 8.11, hardness = 75 mg/L and DOC = 1.5 mg/L.
Red italics indicate a value that exceeds BC short-term or long-term water quality guidelines for the protection of aquatic life. Because calculated guidelines shown are based on corresponding minimum hardness statistic, discrepancies may exist between exceeding values shown in table and reported exceedances.

3.2.4 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 BV Laboratories, and 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 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 2020, a total of 469 QC samples were obtained (229 blanks and 240 duplicates) and 1142 monitoring samples were collected as part of the ARD water quality monitoring program. QC samples therefore represented approximately 41% of the monitoring samples collected, indicating the 2020 field QC program was more robustly implemented than the general industry practice.

Once samples are submitted to BV, 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). 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 need to be met by the analytical laboratory before a final report is issued.

The analytical samples are submitted to the BV depot in Fort St. John and are tested at the BV laboratories in Burnaby and Calgary. Both 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.

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.

As an additional quality control evaluation for field parameters, the *in situ* field measurements 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 results for hold time exceedances, field blanks, field duplicates, total versus dissolved metals, *in situ* field measurements and *in situ* continuous in-pond measurements.

3.2.4.1 Sample Receipt Temperature Monitoring

Sample temperature is one of the factors that influences the stability of the parameters to be tested, in particular for parameters for which chemical preservation is not possible. Therefore, environmental staff collect and store samples in coolers with icepacks, and generally submit samples to the BV service depot in Fort St. John on the same day they are collected. The BV service depot is open during regular business hours (Monday to Friday) and offers a 24 hour secure drop off service. The depot is an extension of BV laboratories and assumes laboratory custody of the samples upon receipt. After hour sample submissions are processed (*i.e.,* received) on the next business day. Sample temperature is measured by the lab upon receipt and the BV service depot ensures received samples are

stored in accordance with the temperature requirements set out by BC ENV (2013, 2020). For the parameters included in the ARD water quality monitoring program, the sample temperature during shipping and upon receipt should be between 0 to 10 °C, except total and dissolved metals for which no temperature requirement is specified (BC ENV; 2013, 2020).

Review of the sample submission records indicates samples were appropriately packaged for submission to the laboratory and that icepacks were used for cooling, with few exceptions. Throughout 2020, 417 sample submissions were made to the BV service depot. Of the submissions, 312 (77%) met the sample temperature requirements, and 95 (23%) were received with sample temperatures >10°C. Most of the submissions with temperatures > 10°C (89 of 95, or 94%) were collected during May to early October when ambient water temperatures were also generally > 10°C.

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 May through October 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.

3.2.4.2 Hold Time Exceedances

PRHP makes every effort to have samples delivered to BV within recommended hold times, and in 2020 all samples met this criterion. Once delivered to the BV service depot, 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). The parameters most commonly analyzed by the laboratory outside the recommended hold times for 2020 were turbidity (36 samples), nitrate and nitrite (155 samples) and orthophosphate (147 samples). Analysis outside of the recommended hold time does not mean that the sample is compromised but may increase the uncertainty of the 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.

3.2.4.3 Field Blanks

A total of 229 field blanks were collected as part of the 2020 surface water quality monitoring program (Appendix 3-C). These data indicate good overall contamination control, with the majority of parameter values (~98%, not including pH, which is always detectable) in blank samples falling below the laboratory reported detection limit (RDL) as shown in Table 3-29. In total, 48 parameter values out of the 20,656 measured (*i.e.,* <0.3%) 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 0.4% per quarter. Overall, the 2020 results for field blanks indicate contamination is generally well controlled.

Parameters that account for the greatest occurrence of DQO failures include NH_3-N and T-Ca (Table 3-29). These anomalies may be from contributions associated with the sampling supplies (*e.g.,* DI water, laboratory bottles, preservation reagents, gloves), the sampling procedure or from sources at the laboratory.

There were two instances of T-Zn concentrations approaching or above the RSEM EOP limit (0.033 mg/L) in field blank samples collected in 2020, specifically on February 4th (0.030 mg/L) and December 8th (0.041 mg/L). However, source investigations did not identify root cause. There are many possible sources of Zn including galvanized steel products used at the Project (*e.g.,* fencing, culverts, posts, etc.). Past investigations of elevated and suspected spurious monitoring results for T-Zn (and T-Cd) have occasionally identified laboratory contamination as the root cause. Field blanks should continue to be frequently collected to monitor the frequency and magnitude of contaminants in the monitoring program. Additional studies and further enhancements to field QC (*e.g.*, trip blanks, additional field duplicates) may be warranted if there is an increase in the frequency and magnitude of field blank DQO exceedances or suspect monitoring results.

Table 3-29:
Comparison of number and type of detected parameters in field blanks in 2020

Quarter	Number of Field Blanks Collected	Number of Parameters Analyzed in Field Blanks	Number of Detected Parameters > RDL	Number of Detected Parameters > 2x RDL	Top Parameters with Detected Values > 2x RDL (Number of Times)
1	89	8,086	181	11	NH_3-N (3), T-Ca (2), PO_4, T-Al, T-Ba, T-Zn and D-Ca
2	72	6,387	231	27	NH_3-N (3), T-Ca (18), Cl, total hardness, T-Al, T-Fe, T-Ni and T-Zr
3	34	3,092	50	3	Conductivity, PO_4 and T-Al
4	34	3,091	36	7	T-Zn (2), NH_3-N, TDS, TOC, HCO_3, D-Na

Notes: RDL- Reported Detection Limit.

3.2.4.4 Field Duplicates

A total of 240 field duplicates were collected as part of the 2020 surface water quality sampling program. In general, water quality results were similar between field duplicates. Table 3-30 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 0.10% to 0.69%. Parameters that show overall greatest variability between samples (inferred from multiple instances of RPD values greater than 50%) include TSS, turbidity, NH_3-N and T-Cu. These parameters are influenced by suspended particulates which may be heterogeneously distributed in the source waters at the time of sampling.

Of the parameters for which RSEM EOP discharge limits are approved (Cd, Co, Cu, TSS, Zn, and pH), eight duplicate pairs for TSS, six for T-Cu and three for T-Zn had RPD values greater than 50% in 2020 (Table 3-31). TSS concentrations did not exceed the discharge limit in any duplicate samples. On the contrary, concentrations for T-Cu in the RSEM-L5E-EOP sample collected on July 22nd, and for T-Zn in samples collected from DOC-DOP on September 11th and from RSEM-R6E-EOP on November 3rd approach or exceed the discharge limits (0.011 mg/L for T-Cu and 0.033 mg/L for T-Zn) in one of the duplicate samples. These results likely indicate sample variability over the course of the monitoring program and may also be influenced by contamination (as previously noted in field blanks) and imprecision in laboratory measurements; however, such variability is infrequent and is not expected to alter the overall interpretation of the data.

Table 3-30:
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%	Number of Parameters with RPD > 50%
1	88	8,173	133	24
2	72	6,548	148	45
3	45	4,095	11	4
4	35	3,184	22	2

Notes: RPD- Relative Percent Difference

Table 3-31:
Comparison of 2020 Duplicate RPDs Greater than 50% for Parameters with RSEM EOP Limits

Station Code	Collection Date	Lab ID (Sample)	Lab ID (Duplicate)	Parameter	Units	Concentration			RPD %
						RDL	Sample	Duplicate	
RSEM-R5B-EOP	11-Jan-20	XF5746	XF5747	TSS	mg/L	1	5.1	1	134
RSEM-R5B-EOP	4-Mar-20	XM8004	XM8005	TSS	mg/L	1	3.7	6.3	52
RSEM-R5B-EOP	6-Mar-20	XN0417	XN0416	TSS	mg/L	1	1.1	6.2	140
RSEM-R5B-EOP	26-Mar-20	XP2433	XP2434	T-Cu	mg/L	0.0005	0.00166	0.00339	69
RSEM-R5B-EOP	26-Mar-20	XP2433	XP2434	TSS	mg/L	1	4.7	23.7	134
RSEM-R6E-EOP	11-Mar-20	XN7891	XN7892	T-Cu	mg/L	0.0005	0.00248	0.009	114
RSEM-R6E-EOP	13-Mar-20	XN9529	XN9530	TSS	mg/L	1	8	4.8	50
RSEM-R5B-EOP	1-Apr-20	XP6344	XP6345	TSS	mg/L	1	2.8	5.4	63
RSEM-R5B-EOP	4-Apr-20	XQ0607	XQ0608	T-Cu	mg/L	0.0005	0.00313	0.00147	72
RSEM-R5B-EOP	8-Apr-20	XQ4587	XQ4588	T-Cu	mg/L	0.0005	0.00361	0.00204	56
RSEM-R5B-EOP	12-Apr-20	XQ6093	XQ6094	TSS	mg/L	1	11.4	6.1	61
RSEM-R6E-EOP	29-Apr-20	XS3516	XS3517	T-Zn	mg/L	0.005	0.0283	0.0131	73
RSEM-R6E-EOP	30-Jun-20	YA2738	YA2739	T-Cu	mg/L	0.0005	0.00393	0.00151	89
RSEM-R6W-EOP	14-Jul-20	YC1072	YC1073	TSS	mg/L	1	10.5	5.9	56
RSEM-L5E-EOP	22-Jul-20	YD2615	YD2616	T-Cu	mg/L	0.001	0.0106	0.001	166
DOC-DOP	11-Sep-20	YK8184	YK8185	T-Zn	mg/L	0.005	0.018	0.0301	50
RSEM-R6E-EOP	3-Nov-20	YU4781	YU4782	T-Zn	mg/L	0.005	0.0439	0.0072	144

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

3.2.4.5 Total versus Dissolved Metals

Total metals are field-acidified and undergo acid digestion at the lab, whereas dissolved metals are lab-filtered prior to acidification of the filtrate. Dissolved and total metal pairs are evaluated for possible contamination during the filtration process. The dissolved and total metal subsamples are analogous to field duplicate samples. By definition, total metals analysis accounts 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 as higher than total metal concentrations; therefore, the field duplicate DQOs of 120% and 150% are applied to flag outlier and suspect data points, respectively.

Out of 54,783 total and dissolved parameter pairs compared in the 2020 dataset, 124 dissolved metal values were flagged as being higher than their corresponding total metal value (0.23%) (Table 3-32). Overall, this proportion was higher in the second quarter (0.50%) and similar in Q1, Q3 and Q4 (0.09% to 0.15%). Dissolved parameters that most frequently exceeded their total values were As, Li and Se.

For the purpose of the present data evaluation, a second data quality objective of 150% was also used to identify parameters with the greatest magnitude of exceedances (Table 3-32). The proportion of dissolved parameters that exceed the secondary DQO is low (maximum of 0.05%) with no DQO failures occurring in Q3 and Q4. There is no direct explanation for this variability across quarters; however, high TSS events have in some cases coincided with the occurrence of dissolved parameters exceeding total values. Overall, these results reflect a reasonable confidence in the data.

Table 3-32:
Number of Sample Metal Pairs in 2020 for Which the Dissolved Concentration Exceeded the Total by 120% and 150%

Quarter	Total Number of Samples Collected	Number of Parameters with D>120% T	Number of Parameters with D>150% T
1	407	20	7
2	508	83	2
3	432	12	-
4	263	9	-

3.2.4.6 In Situ Field Measurements

In situ field measurements are measurements that are typically collected with hand-held probes at the same location and at the same time during which an analytical sample is collected. 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. This change to the monitoring practice was implemented because it is not possible 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.

Generally, *in situ* field data are consistent with corresponding analytical measurements. In Table 3-33 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 positive bias of field measurements relative to analytical results is evident for pH, conductivity and turbidity values measured in water quality samples from all RSEM locations (Figure 3-34).

In 2020, *in situ* field pH at the sediment ponds are elevated by 0.16 to 0.36 units above analytical pH measurements (Table 3-33). This is consistent with 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 to 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 are up to 13% and 85% higher than their respective analytical conductivity and turbidity measurements in the RSEM ponds. For analytical results, a difference of values within 20% is typically assumed to be within the range of analytical error; thus, the difference between *in situ* field and analytical conductivity measurements cannot be differentiated from analytical error. 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. While the data indicate that field turbidity measurements are generally suitable for informing TSS management decisions PRHP staff should factor potential uncertainty in field turbidity measurements into management decision triggers.

Table 3-33:
Comparison of 2020 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-L5-EP-SP/EOP	1	61	21	-	83	0.25	3.1
RSEM-L5-WP-SP/EOP	-	1	5	-	6	0.36	4.4
RSEM-R5B-SP/EOP	91	69	63	-	223	0.16	2.4
RSEM-R6E-SP/EOP	71	63	90	88	312	0.17	2.9
RSEM-R6W-SP/EOP	-	66	90	76	232	0.25	3.5
Conductivity						**µS/cm**	**%**
RSEM-L5-EP-SP/EOP	1	61	21	-	83	55	8.4
RSEM-L5-WP-SP/EOP	-	1	5	-	6	128	10
RSEM-R5B-SP/EOP	91	69	63	-	223	83	7.1
RSEM-R6E-EOP	71	63	90	88	312	106	13
RSEM-R6W-SP/EOP	-	66	90	76	232	220	13
Turbidity						**NTU**	**%**
RSEM-L5-EP-SP/EOP	1	61	21	-	83	3.5	48
RSEM-L5-WP-SP/EOP	-	1	5	-	6	7.0	62
RSEM-R5B-SP/EOP	91	69	63	-	223	2.2	57
RSEM-R6E-SP/EOP	71	63	90	88	312	2.1	76
RSEM-R6W-SP/EOP	-	66	90	76	232	2.7	85

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.

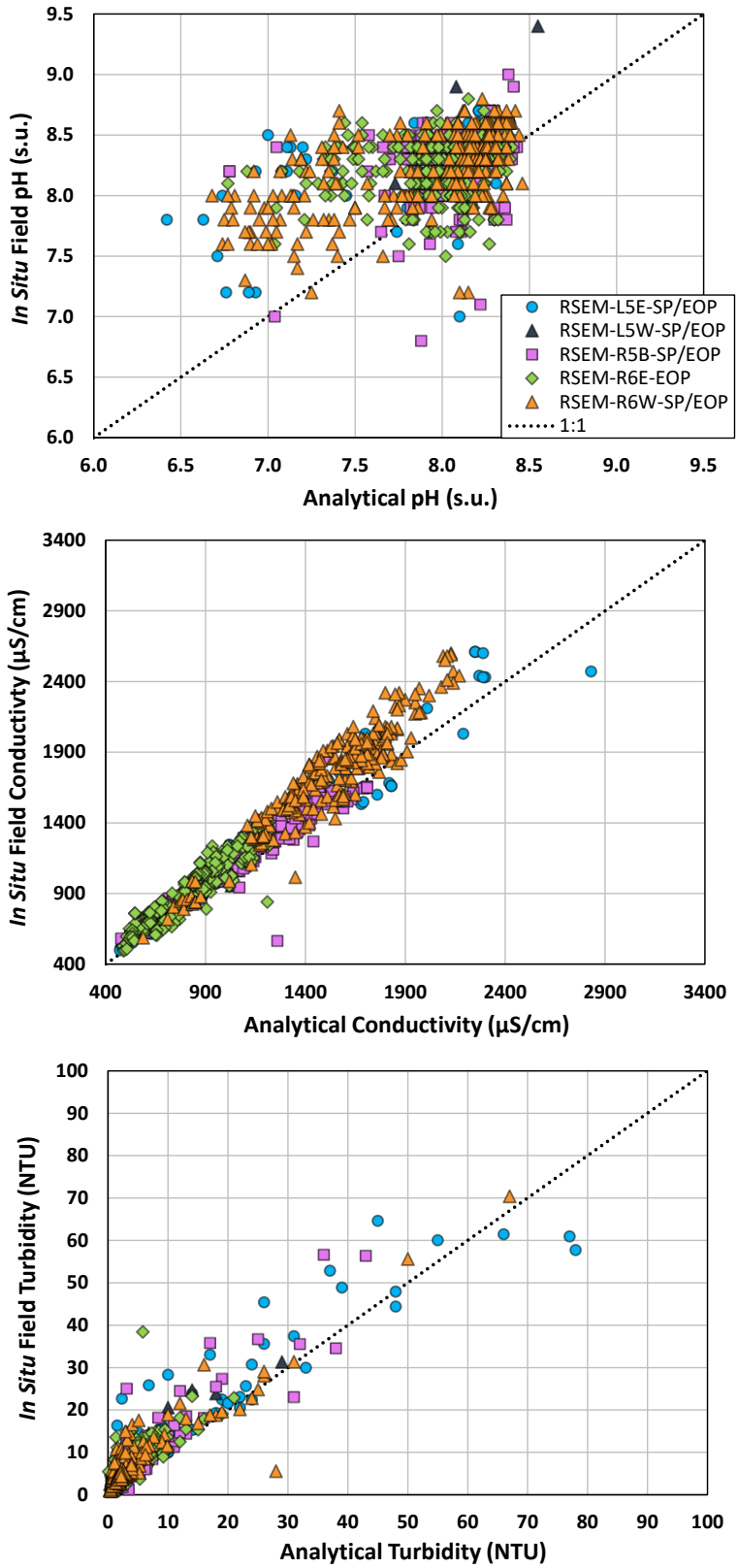

Figure 3-34: ***In situ*** **Field versus Analytical Measurements for pH, Electrical Conductivity and Turbidity for 2020.**

3.2.4.7 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. In comparison to *in situ* field measurements which are typically collected at the same location and at the same 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 water quality EOP 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 data from the RSEM Area R5B sediment control pond have been excluded for January 8 to 23 and for March 13 to 18. During the January event it is suspected that ice build-up within the insulated compartment that houses the deployed sonde influenced *in situ* continuous readings. Maintenance was conducted on January 23 to return the sonde to normal operations. Adjustment of the probe on March 18 restored the accuracy of *in situ* continuous conductivity and turbidity measurements following the March malfunction of the sonde.

Overall, sonde pH measurements show a negative bias relative to field pH measured in water quality samples (Table 3-28 and Figure 3-35). Across all sediment ponds, median sonde pH are 0.04 to 0.28 units below their field measurement counterparts. This suggests that sonde readings may underestimate elevated pH values at EOP. Sonde and analytical conductivity results generally align to a 1:1 relationship in all sediment ponds. In Figure 3-30, it is evident that some sonde conductivity readings for R5B, R6E and R6W fall below the 1:1 relationship, with up to 4.3% median relative percent difference observed in the R6W pond.

In Figure 3-35 seventeen *in situ* sonde and analytical turbidity data pairs from L5E (3 samples), R5B (2 samples) and R6W (12 samples) are not presented for which RPD values are greater than 100%; however these results are included in the calculation of

annual median difference and relative percent difference in Table 3-34. These instances where sonde turbidity readings are well above (>100 NTU) their analytical counterparts predominantly occur in Q2 (14 samples) and to a lesser degree in Q1 (2 samples) and Q3 (1 sample).

Sonde turbidity measurements in 2020 show higher variability with a median relative percent difference ranging between 72% to 113% (Table 3-34). There is a consistent positive bias of *in situ* sonde measurements relative to analytical turbidity readings. This is most notable at the L5E and L5W ponds which show a median difference of up to 23 and 35 NTU, likely due to the low number of measurements. 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 less TSS 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. At turbidity values > 40 NTU, there is a notable shift to greater variability of the positive bias of sonde readings compared to analytical measurements. These findings suggest that sonde turbidity measurements are not a reliable indicator of turbidity in the pond discharge.

3.2.4.8 Conclusions

Overall, the QA/QC results for the 2020 sampling program provide a reasonable level of confidence in the water quality data for field (hand-held and continuous) and analytical measurements. Minor issues associated with sample representativeness are noted but are not expected to measurably alter the interpretation of sampling data. Trends noted in the sections above will continue to be monitored and appropriate action will be taken to minimize potential sample contamination and data variability.

Table 3-34: Comparison of 2020 *In Situ* Sonde 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-L5-EP-SP/EOP	-	28	8	-	36	-0.28	4.3
RSEM-L5-WP-SP/EOP	-	-	2	-	2	-0.04	0.49
RSEM-R5B-SP/EOP	65	58	54	-	177	-0.18	2.3
RSEM-R6E-SP/EOP	71	42	83	90	286	-0.05	2.6
RSEM-R6W-SP/EOP	-	60	83	71	214	-0.08	2.2
Conductivity						**µS/cm**	**%**
RSEM-L5-EP-SP/EOP	-	29	9	-	38	-7.1	1.6
RSEM-L5-WP-SP/EOP	-	-	2	-	2	-24	2.3
RSEM-R5B-SP/EOP	66	59	58	-	183	-20	3.6
RSEM-R6E-EOP	71	43	89	92	295	-14	3.1
RSEM-R6W-SP/EOP	-	61	88	72	221	43	4.3
Turbidity						**NTU**	**%**
RSEM-L5-EP-SP/EOP	-	29	9	-	38	23	106
RSEM-L5-WP-SP/EOP	-	-	2	-	2	35	113
RSEM-R5B-SP/EOP	66	59	58	-	183	1.0	75
RSEM-R6E-SP/EOP	71	43	20	92	226	1.1	72
RSEM-R6W-SP/EOP	-	61	88	72	221	3.3	95

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.
In situ continuous measurements from RSEM-R5B-SP/EOP for January 8 to 23 and March 13 to 18 were excluded from comparison to *in situ* field (pH) or analytical (conductivity and turbidity) measurements.

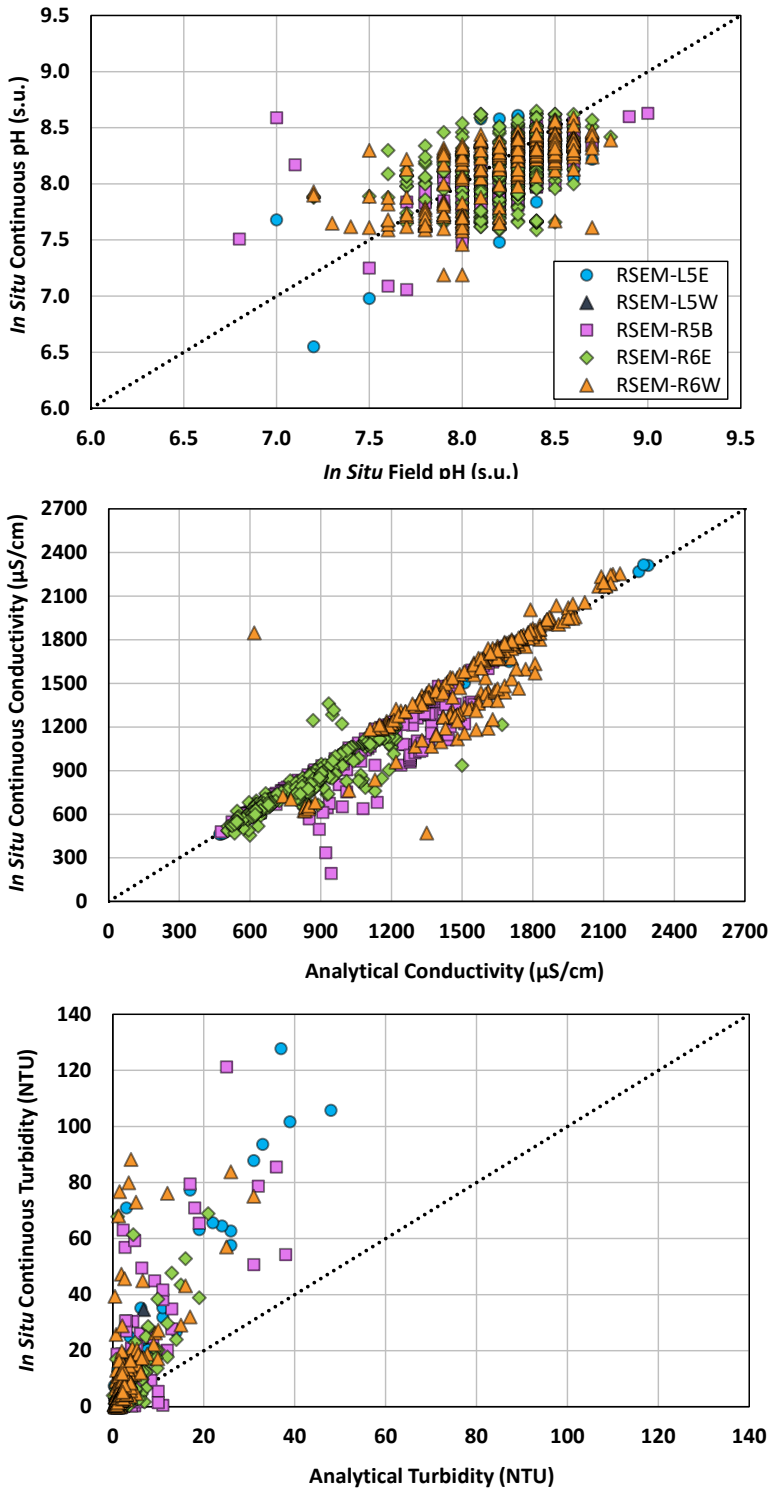

Figure 3-35: ***In situ*** **sonde versus field measurements for pH, and sonde versus analytical measurements for electrical conductivity and turbidity for 2020. Seventeen** ***in situ*** **sonde and analytical turbidity data pairs from L5E (3 samples), R5B (2 samples) and R6W (12 samples) are not presented for which RPD values are greater than 100%.**

4. Groundwater Quality Monitoring

PEACE RIVER
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4. Groundwater Quality Monitoring

This section provides an overview of the groundwater monitoring program at RSEM Area R5A and R5B that was initiated in 2016 and completed in 2020 to fulfill the requirements of Section 7.2.5 and Section 7.3.3 of the Acid Rock Drainage and Metal Leachate (ARD/ML) Management Plan for the Site C Clean Energy Project. The ARD/ML Management Plan is included as Appendix E of the Construction Environmental Management Plan – Revision 4 (CEMP) (BC Hydro, 2016). This section provides an overview of program activities undertaken during the program from well installation through well decommissioning, the groundwater level and groundwater quality monitoring results and development of compliance requirements.

4.1 Program Overview

The objectives, rationale and methodology for the groundwater monitoring program are outlined in the *Site C Clean Energy Project, Implementation Design, Technical Memorandum, Peace River and RSEM Discharge Groundwater Monitoring Program* (KCB and SNC-Lavalin, 2016). The Groundwater Monitoring Program, as outlined in KCB and SNC-Lavalin (2016), is part of the Site C Clean Energy Project Water Quality Management Program for the construction of the RSEM storage areas and is required under Conditional Water Licenses 132990 and 132991 issued to BC Hydro & Power Authority (BC Hydro) in June 2016 (KCB and SNC-Lavalin, 2016).

Monitoring wells were installed in late 2016 to assess potential effects to groundwater resulting from the storage of potentially acid generating (PAG) material at RSEM areas R5a and R5b. At each RSEM area, one upgradient well was installed to assess background conditions and three downgradient wells were installed to intersect potential seepage paths and groundwater quality from the RSEM areas. All monitoring wells were screened in the sediments above the bedrock contact and were decommissioned September 23 – 25, 2020 and sealed with bentonite.

4.1.1 Well Installation

RSEM Area R5A monitoring wells GW-1, GW-2 and GW-3 were located at the toe of the RSEM dyke on the north end, centre, and south end of the RSEM area, respectively. Up gradient well GW-4, on the valley wall above RSEM Area R5A, remained dry since installation through May 2018, when a blockage was discovered in the well at approximately 3.0 meters below top of well casing (mbtoc). A replacement up gradient well GW-4A was situated approximately 75 m upstream and north of RSEM Area R5A.

Monitoring wells GW-1 to GW-3 and GW-4A are all located on the Peace River floodplain as shown in Figure 4-1.

RSEM Area R5B downgradient monitoring wells GW-6, GW-7 and GW-8 were located at the toe of the RSEM dyke on the west end, centre, and east end of the RSEM area, respectively. Up gradient monitoring well GW-10 was installed upslope from RSEM Area R5B at the toe of the valley wall between the upper and lower terraces. However, GW-10 was damaged as a result of slope failure in 2016. The first attempt to install a replacement well resulted in a dry borehole at GW-10A. The replacement up gradient well, GW-10B, was situated further upslope on the upper terrace. Monitoring well locations at RSEM Area R5B are shown in Figure 4-2.

Installation details and well logs are presented in a series of technical memos as outlined below.

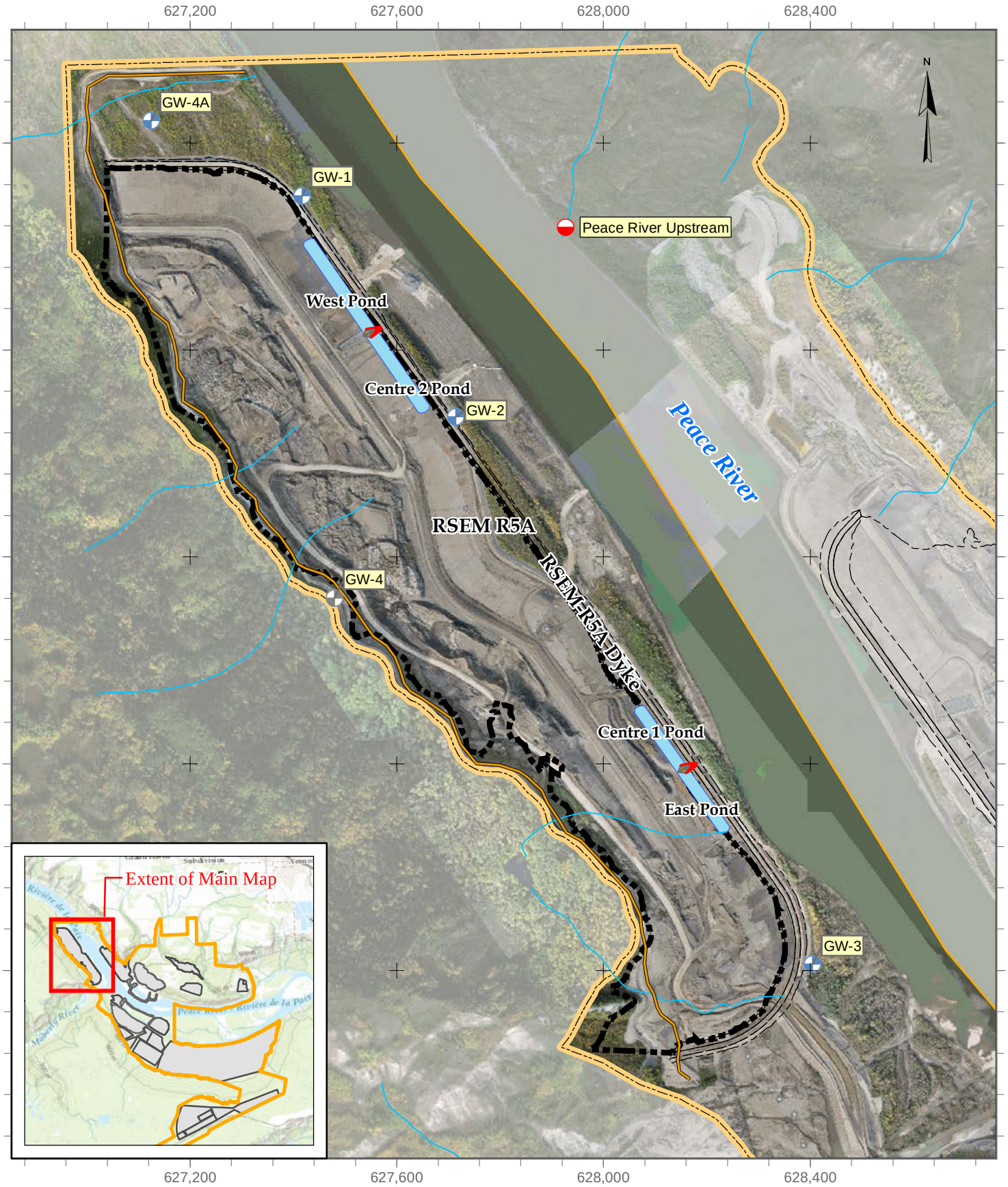
- RSEM Area R5B wells (Lorax, 2016a; Lorax, 2016c)
- RSEM Area R5A wells (Lorax, 2016b)

4.1.2 Monitoring

Groundwater monitoring consisted of groundwater level measurement and groundwater quality sampling. A baseline groundwater monitoring program comprised of three sampling events at each well was conducted from November through December 2016 in RSEM Area R5A and from October through December 2016 in RSEM Area R5b. The details of the RSEM Area R5A and RSEM Area R5b baseline programs are outlined in Lorax (2017a) and Lorax (2017b), respectively.

Following the baseline program, quarterly water quality monitoring was conducted at all RSEM Area R5a and R5b wells. More frequent monthly sampling events were initiated in 2018 at RSEM Area R5b wells GW-7 and GW-8 in response to the exceedance of the compliance targets at these two locations.

Water level monitoring included both manual measurement of groundwater levels with a water level meter at the time that water quality samples were collected, as well as semi-continuous (*i.e.*, hourly) water level measurements with a pressure transducer datalogger at each monitoring well except GW-10B, which was not instrumented.



LEGEND

- Gauging Station
- GW Monitoring Well (2016)
- GW Monitoring Well (2016, Dry)
- Site C Boundary
- RSEM-R5A Boundary
- Diversion Channel
- Sediment Ponds

Note: Site C aerial imagery collected between September 2019 - September 2020

DATE SAVED:	Jan 26, 2021
DRAWN BY:	AL
REVIEWED:	JH
VERSION:	1

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

1:10,000

0 50 100 150 Meters

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2020 Annual Report

TITLE: Site Map of RSEM Area R5a and Monitoring Well Locations

PROJECT #: A416-1

FIGURE: 4-1

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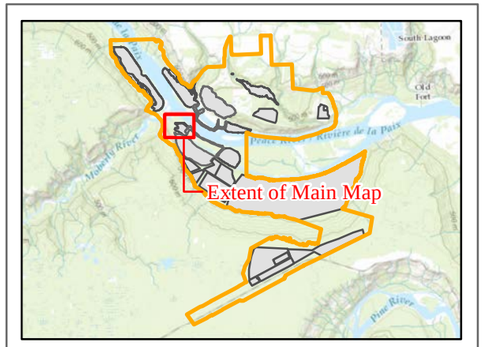

Legend

- Monitoring Well (2016)
- Monitoring Well (2016, Damaged)
- Borehole (2016)
- Site C Boundary
- RSEM-R5B Boundary
- Culvert
- Diversion Channel

Note: Imagery collected between September - October 2020

0 50 100 150 Meters

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DATE SAVED: Jan 26, 2021 **REVIEWED:** JH

DRAWN BY: AL **VERSION:** 1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2020 Annual Report

TITLE:

Site Map of RSEM Area R5b and Monitoring Well Locations

PROJECT #: A416-1 *FIGURE:* 4-2

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

Path: *P:\@Drafting\SiteC\Drafting Figures\MXD\2020_Q4_Annual_Report\Fig_4_2_R5B_Wells.mxd*

4.1.3 Compliance Requirements

Groundwater compliance followed requirements presented in the CEMP and the Trigger Action Response plan developed as part of the Groundwater Water Quality Mitigation Plan (Lorax, 2017c). An outline of the Trigger rationale, actions and reference documents that discuss the development of the Compliance Targets is listed in Table 4-1.

Table 4-1:
Compliance Target Rationale and Reference Documents

Compliance Targets	Trigger Rationale	Action	Reference
Trigger 1	Downgradient water quality exceeds upgradient	Prepare Groundwater Quality Mitigation Plan	CEMP Appendix E (S7.2.5)
Trigger 2	Temporary One-Year Compliance Target based on Q4 2016 baseline monitoring	Refine Compliance Target following one year of monitoring to account for seasonal variation, analytical detection limits, and well installation artefacts.	Groundwater Water Quality Mitigation Plan (Lorax, 2017c)
Trigger 3	Identify a sustained change of downgradient groundwater quality relative to background	Assess cause, increase monitoring frequency and develop conceptual groundwater model and groundwater loading model	Groundwater Water Quality Mitigation Plan (Lorax, 2017c) Review of Groundwater Water Quality Data (Lorax, 2018)
Trigger 4 Alert	Identify groundwater concentrations that result in chemical loading that may impact water quality in the Peace River	Assess cause, update monitoring plan, evaluate remedial measures	Groundwater Water Quality Mitigation Plan (Lorax, 2017c) Groundwater Loading Assessment for RSEM Area R5b (Lorax, 2019b)

Initial compliance for the groundwater monitoring program was established by guidance presented in the CEMP based on the concentration of water quality in downgradient wells relative to upgradient well (Trigger 1 Compliance). The CEMP Appendix E (S 7.2.5) states the following:

> *The Contractor shall monitor groundwater at R5A and R5B RSEM sites as defined in the Groundwater Monitoring program (S. 7.3.3). If the down gradient well samples at these sites exceed the up gradient control well samples, BC Hydro must prepare a Groundwater Water Quality Mitigation Plan and submit to the satisfaction of the Water Sustainability Act Engineer….*

The development of a Groundwater Water Quality Mitigation Plan (Lorax, 2017c) was triggered by the CEMP requirements when a review of the 2017 Q1 groundwater monitoring results demonstrated that downgradient well sample concentrations exceeded the upgradient control well. The Plan identified a set of Acidic PAG Indicator Parameters (pH-field, SC-field, TDS, D-SO_4, D-Na, D-Cl, D-Cd, D-Cr, D-Co, D-Cu, and D-Zn), established Trigger 2 compliance targets at each down gradient well for the parameters, and developed action responses that would be implemented in the event that the compliance targets were exceeded. The Plan also required that Trigger 3 compliance targets be established following a review of an entire year of monitoring data. These were developed and presented in Lorax (2018). The Trigger 2 and Trigger 3 Compliance Targets were developed to flag any notable and sustained change of down gradient groundwater quality relative to the baseline.

The exceedance of Trigger 3 Compliance Targets at downgradient RSEM Area R5b monitoring wells GW-7 and GW-8 triggered the development of Trigger 4 alert concentrations for the assessment of downgradient groundwater quality at RSEM Area R5b. Trigger 4 alert concentrations were developed to identify the water quality concentrations that would result in chemical loading from R5b that may impact water quality in the Peace River. The conceptual groundwater model for seepage from RSEM Area R5B, the groundwater loading model and assumptions used to develop the Trigger 4 alert concentrations are discussed in Lorax (2019b).

4.1.4 Well Decommissioning

All monitoring wells in RSEM Area R5A and RSEM Area R5B were decommissioned in advance of the October 2020 river diversion and flooding. The Peace River flood plain in both areas where the wells are located will be completely flooded during the establishment of the reservoir. The monitoring wells were decommissioned September 23 – 25, 2020 and sealed with a bentonite plug by Geotech Drilling Services Limited.

4.2 RSEM R5A (GW-4A, GW-1, GW-2, GW-3)

4.2.1 Gradients

The monitored groundwater levels were strongly influenced by the fluctuation of water levels in the Peace River (top panel - Figure 4-3). Water level changes in the RSEM Area R5a monitoring wells were a subdued reflection of the Peace River water levels. River level fluctuations on the order of 0 to 2.1 m were accompanied by 0 to 1.2 m responses in the R5a wells. The monitoring well that showed the most subdued responses was GW-4A which was located furthest upstream and the greatest distance from the Peace River.

A comparison of the RSEM Area R5a monitoring well water levels relative to the calculated river water level adjacent to each well is illustrated in the lower panel of Figure 4-3. Groundwater levels at GW-1, GW-2 and GW-4A were typically slightly lower (-) than the Peace River level, while groundwater levels at GW-3, the well located closest to the Moberly River, were generally higher (+) than the Peace River level. Groundwater levels at GW1, GW-2 and GW-4A showed similar trends with groundwater flow direction interpreted to be from the Peace River towards the RSEM area for most of the monitoring period. The interpreted groundwater flow directions at GW-1, GW-2 and GW-4A were likely due to the location of RSEM Area R5a on the outside of a bend in the Peace River where river water moves into the stream banks (and floodplain). Only during periods of rapid water level drop in the Peace River was groundwater flow interpreted to be towards the river at GW-1, GW-2 and GW-4A.

In contrast, groundwater flow at GW-3 was interpreted to be towards the Peace River, except during rare periods of short-duration rapid water level rise in the Peace River when the flow was interpreted to be from the river into the bank at this location. The higher groundwater levels typically measured at GW-3, in addition to proximity to the Moberly River suggest that groundwater levels at GW-3 were also influenced by the Moberly River.

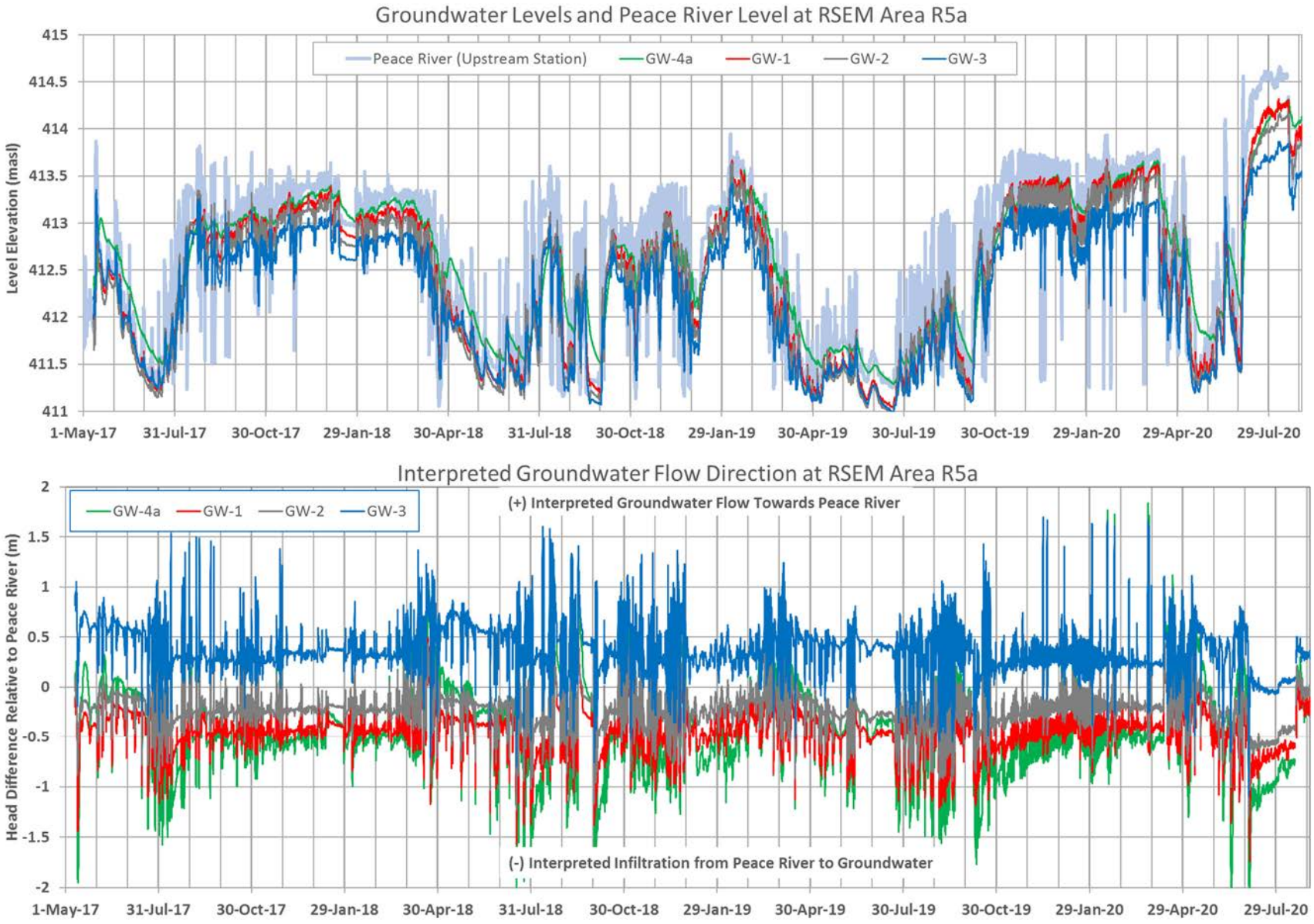

Figure 4-3: (Top) Automated groundwater level measurements at RSEM Area R5A and Peace River (Upstream station). (Bottom) Head difference between groundwater and Peace River at RSEM Area R5A

4.2.2 Water Chemistry

Groundwater major ion composition ranged from calcium-bicarbonate-type (Ca-HCO_3) at GW-3 and GW-4A to calcium-sulphate-type (Ca-SO_4) at GW-1, and mixed cation-sulphate-type (mixed cation-SO_4) at GW-2 in 2020 Q3 Figure 4-4). Groundwater compositions shifted toward higher sulphate and lower bi-carbonate proportions over the course of the monitoring period. Cation proportions remained consistent at all wells except GW-2 where there was a shift towards a higher Na proportion.

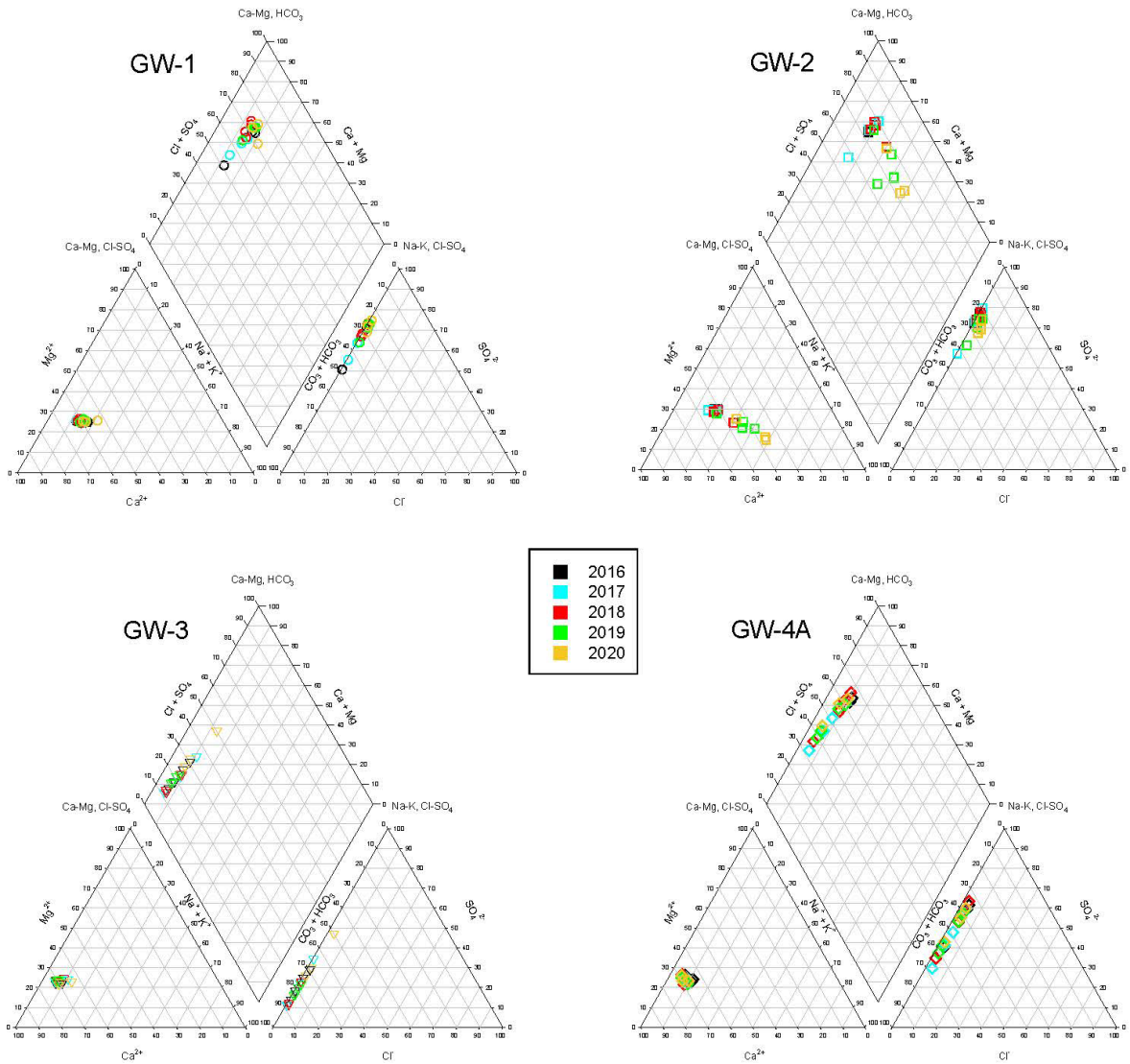

Figure 4-4: Major Ion Composition at RSEM Area R5A (2016 – 2020 Q3).

Groundwater concentrations of the PAG indicator parameters (pH-field, SC-field, TDS, D-SO_4, D-Na, D-Cl, D-Cd, D-Cr, D-Co, D-Cu, and D-Zn) at the RSEM Area R5A monitoring wells GW-1, GW-2, GW-3, and up gradient well GW-4A were generally stable during the 2016 September through 2020 July monitoring period with a few exceptions. The temporal concentration trends for Field-pH and Field-SC measurements at the R5A wells are plotted in Figure 4-5. Summary statistics for PAG indicator parameters are presented in Table 4-1. Plots for other parameters are included in Appendix 4-A (Figures 1 to Figure 3). All monitoring data are tabulated in Appendix 4-B. The overall trends are summarized below:

- Field pH ranged from approximately 6.2 to 7.5 throughout the 2016 September through 2020 July monitoring period. The lowest pH values (pH < 6.7) at GW-1 and GW-2 in some of the more recent 2019 and 2020 samples were also observed in the background well GW-4A.
- Specific conductance peaked early in 2020 at the three downgradient wells but values returned to within the range previously measured in the final sample.
- PAG indicator parameters (D-Cl, D-Na and D-SO_4) remained stable from 2016 through 2020 July except at GW-2 where increases in D-Cl, D-Na were observed.
- Increasing trends relative to baseline measurements are also noted for the following metal(oid)s:
    - D-Cd at GW-1,
    - D-Se at GW-2, and
    - D-Co, at GW-3.

Although exceedances of Trigger 3 Compliance Targets were periodically observed at GW-1, GW-2, and GW-3 from 2017 through 2020 and the observed trends may be influenced by construction activities in RSEM Area R5A, the magnitude of the increases and the different parameters displaying increases at the monitoring wells, suggest that PAG-contact seepage did not contribute to widespread degradation of groundwater quality adjacent to RSEM Area R5A during the monitoring period. As a result, Trigger 4 Compliance Targets were not deemed necessary for the RSEM Area R5A monitoring wells.

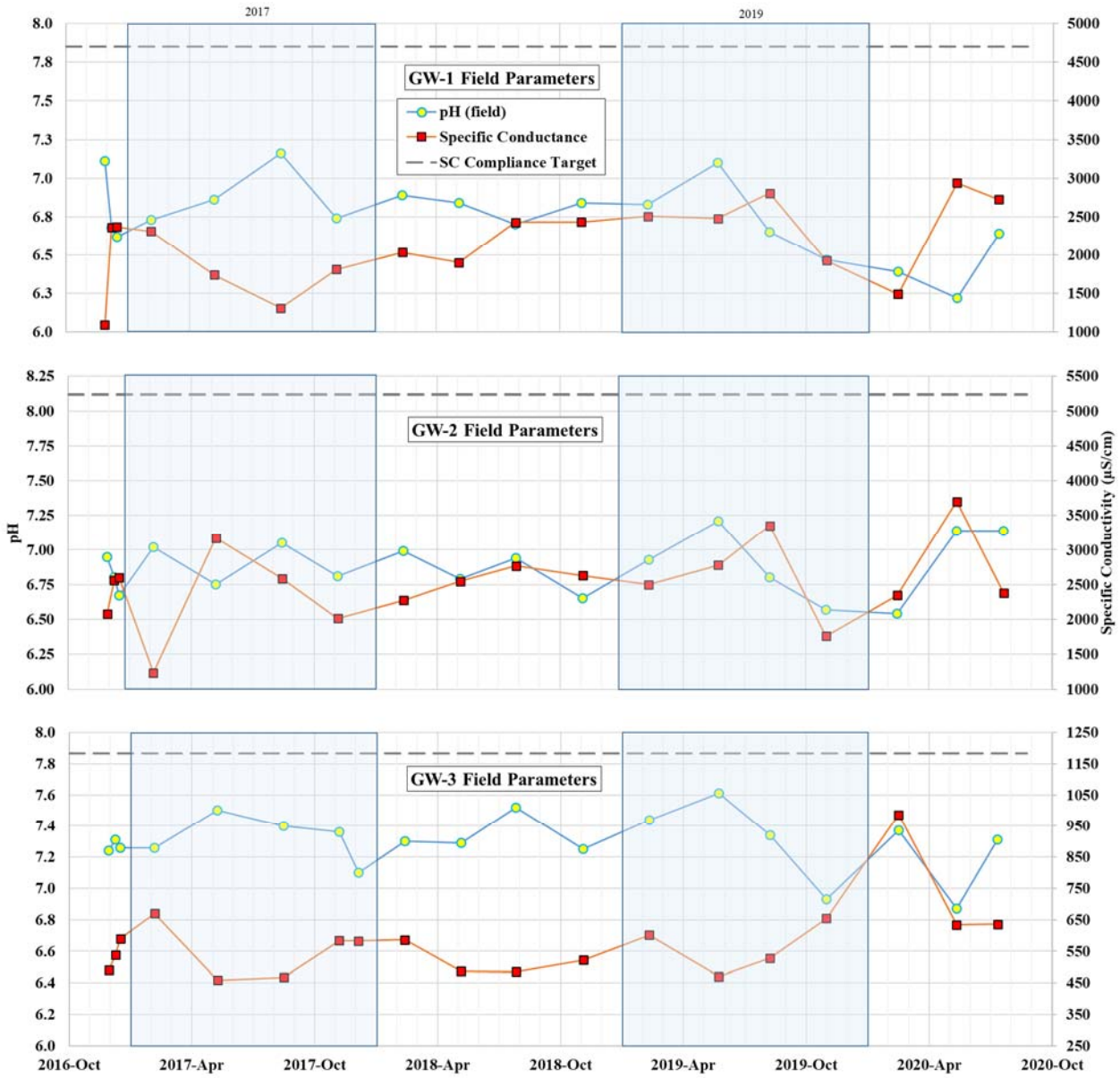

Figure 4-5: Field measured pH and Specific Conductance in RSEM Area R5A groundwater wells

Table 4-1:
Water Quality Summary Statistics for RSEM Area R5A Groundwater Wells

	pH-field	SC-field	TDS	D-SO4	D-Na	D-Cl	D-Cd	D-Cr	D-Co	D-Cu	D-Zn
	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GW-1 Trigger 3	-	4700	3940	2180	216	22	0.000214	0.0005	0.0032	0.0004	0.0138
Maximum	7.16	2940	2600	1320	165	**26.4**	**0.0003**	**0.00090**	0.00178	**0.0006**	0.0069
P90	7.103	2749	2339	1230	136	17.6	**0.000307**	**0.00050**	0.001425	**0.000442**	0.00394
Median	6.74	2336	1935	1065	99	8.80	0.00014	<0.0005	0.00058	0.00020	0.00245
Minimum	6.22	1089	732	302	32	3.70	0.00004	<0.0001	0.000041	<0.0002	0.00092
GW-2 Trigger 3	-	5240	4540	2480	278	8.6	0.000178	0.0005	0.00238	0.00052	0.00346
Maximum	7.21	3701	2900	1550	**532**	**73**	0.000156	**<0.001**	**0.00460**	0.000487	0.00295
P90	7.14	3227	2725	1423	**317**	**45**	0.000129	**0.00050**	0.000973	0.000365	0.002500
Median	6.87	2553	2140	1240	145	**10**	0.000087	0.000175	0.000295	0.000215	0.001235
Minimum	6.54	1230	898	417	56	2	0.000054	<0.0001	0.000083	<0.0001	<0.0001
GW-3 Trigger 3	-	1184	736	166	21.4	3	0.000025	0.0005	0.00154	0.00025	0.00122
Maximum	7.61	986	676	**259**	**32**	**11.6**	<0.00001	<0.001	**0.00397**	<0.0005	**<0.005**
P90	7.504	657	467	106	14	**3.8**	0.000005	0.00050	**0.00287**	0.00010	**0.00250**
Median	7.31	583	346	67	10	1.8	<0.000005	<0.0001	0.00131	<0.00005	0.00046
Minimum	6.87	459	238	27	5	0.9	<0.000005	<0.0001	0.00037	<0.00005	0.00012

*Values in **Bold Text** exceed well-specific Trigger 3 compliance level

4.3 RSEM R5B (GW-10b, GW-6, GW-7, GW-8)

4.3.1 Gradients

The monitored groundwater levels are strongly influenced by the fluctuation of water levels in the Peace River (top panel - Figure 4-6). Water level changes in the RSEM Area R5b monitoring wells are a subdued reflection of the Peace River water levels. River level fluctuations on the order of 0 to 2.7 m are accompanied by 0 to 1.5 m responses in the R5b wells. The monitoring well that shows the most subdued response is GW-6 which is located closest to the Moberly River and the greatest distance from the Peace River.

A comparison of the RSEM Area R5b monitoring well water levels relative to the calculated Peace River water level adjacent to each well is illustrated in the lower panel of Figure 4-6. Groundwater levels at GW-7 and GW-8 were generally similar to or higher than the Peace River level. Groundwater levels at GW-6 were higher relative to the Peace River level and groundwater flow was generally interpreted to be toward the river. In contrast, groundwater levels at GW7 and GW-8 were typically closer to the Peace River level and reversals in the interpreted groundwater flow direction may have occurred at both wells following sudden increases in the river level. For example, the groundwater flow is interpreted to have reversed towards Peace River at GW-7 and GW-8 in July 2020 until the continuous logging instrumentation was removed from the wells and a final manual level measurement was collected.

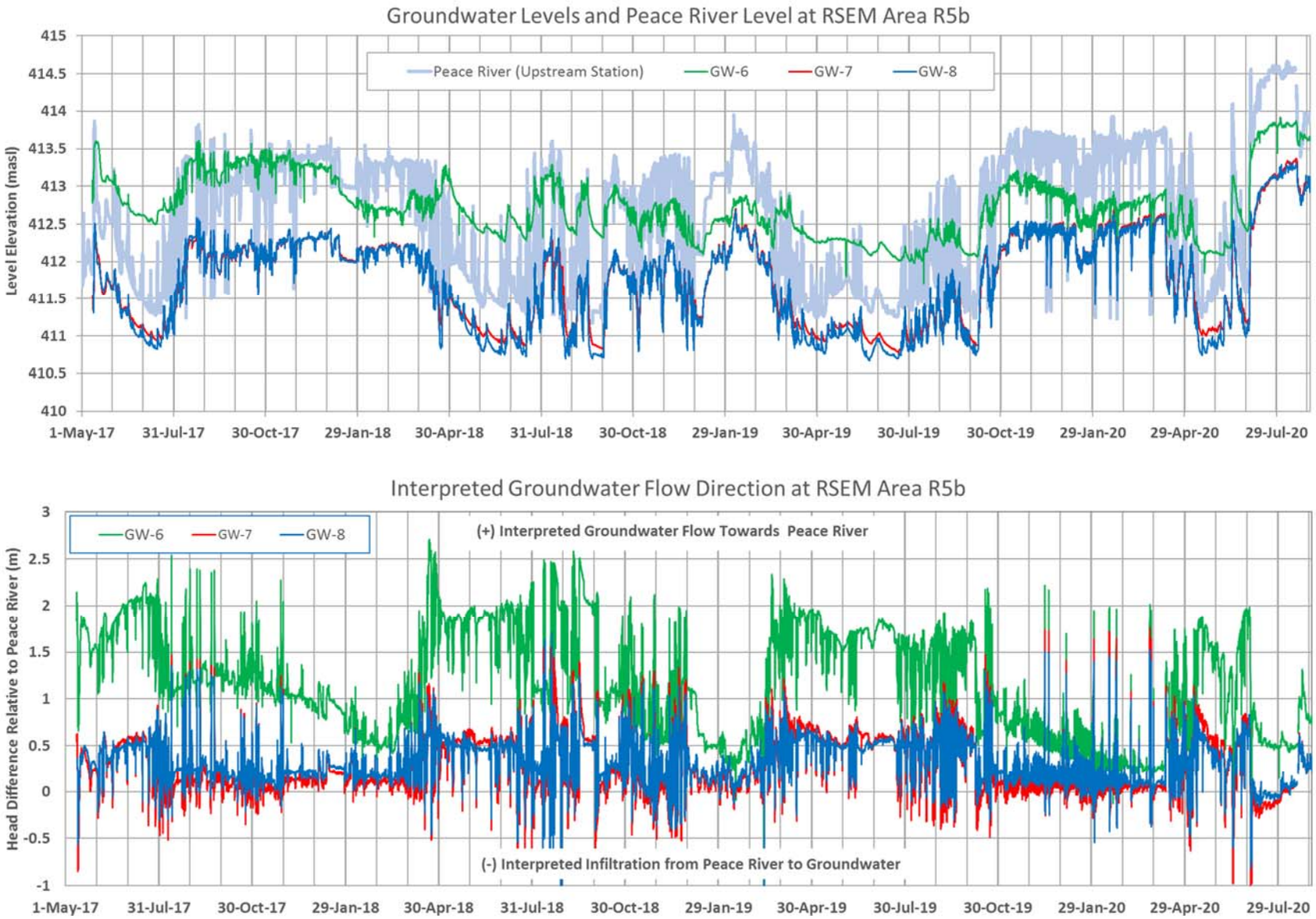

Figure 4-6: (Top) Automated groundwater level measurements at RSEM Area R5B and Peace River (Upstream station). (Bottom) Head difference between groundwater and Peace River at RSEM Area R5B

4.3.2 Water Chemistry

Groundwater major ion compositions at RSEM Area R5b ranged from Ca-HCO_3-type at GW-10B to mixed cation-SO_4-type at GW-6, Ca-SO_4-type at GW-7 and sodium-sulphate-type (Na-SO_4) at GW-8 in 2020 Q3. Groundwater composition at GW-10B has been consistent between 2016 and 2020 Q3, with samples clustering on the Piper plot (Figure 4-7). The major ion compositions at GW-6, GW-7, and GW-8 are relatively consistent with samples collected in 2019. However, when the full dataset is examined, all wells show an increasing trend in the Na proportion. This trend is relatively minor for GW-7 and more pronounced for GW-6 and GW-8. Wells GW-7 and GW-8 also show an increasing trend in the SO_4 proportion and a corresponding decreasing trend in the HCO_3^- proportion.

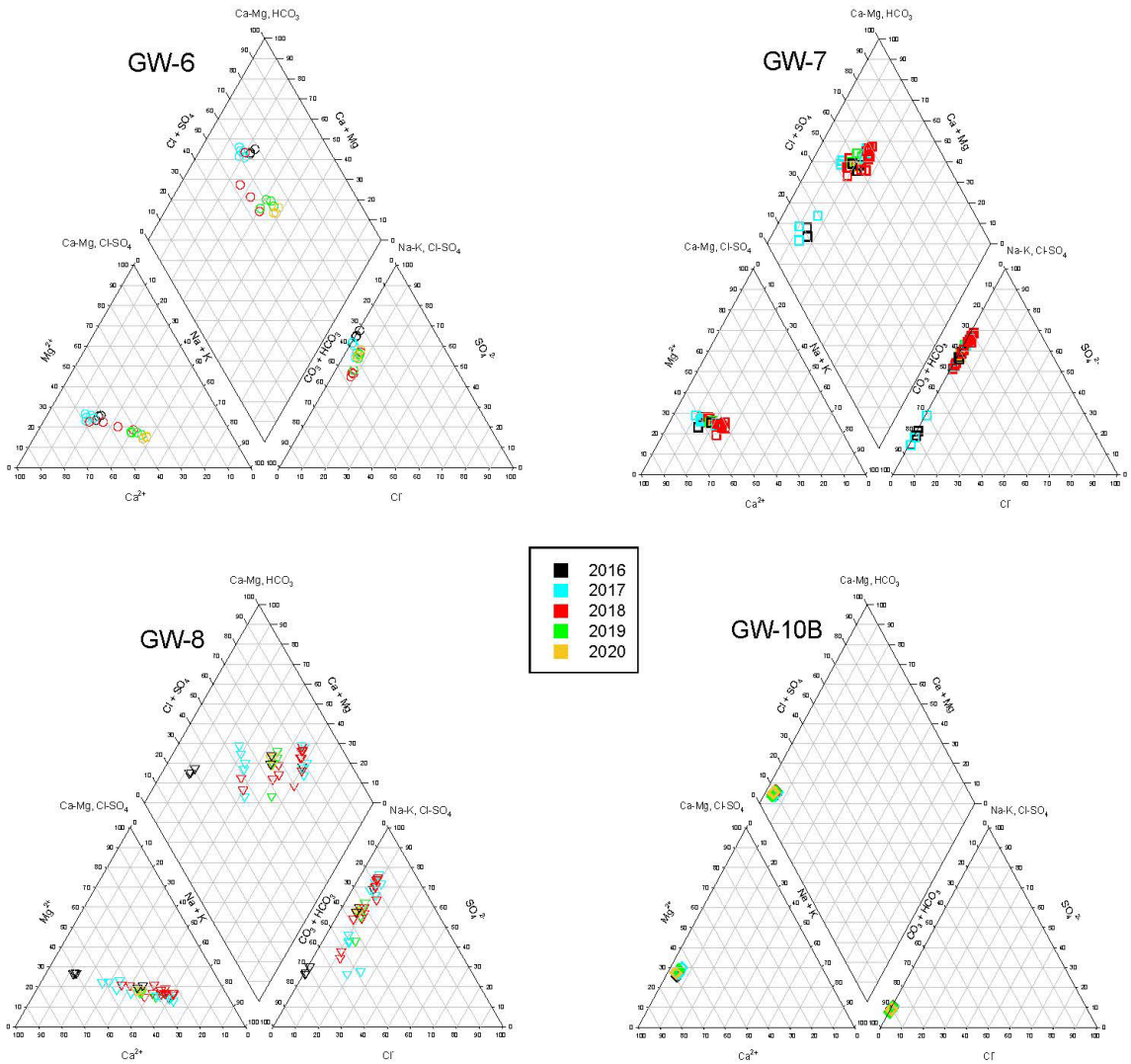

Figure 4-7: Major Ion Composition at RSEM Area R5B (2016 - 2020).

Temporal trends in the RSEM Area R5b down gradient groundwater monitoring wells (GW-6, GW-7 and GW-8) are plotted in Figure 4 to Figure 6 of Appendix 4-A. The monitoring data are tabulated in Appendix 4-B. Many of the acidic PAG seepage indicator parameters at GW-7 and GW-8 displayed increased concentrations starting as early as 2017 September but increasing trends of most parameters have leveled off into a stable range by 2020 July. Concentrations remained stable at GW-6 and up gradient well GW-10B. A summary of notable trends at the three down gradient wells are listed below:

- The upgradiant background well GW-10B water quality remained stable throughout the 2016 September through 2020 July monitoring period.
- pH remained stable over the 2016 September through 2020 July monitoring period with measurements from GW-6 and GW-8 remaining in the 7 to 7.8 range. GW-7 remained circumneutral throughout but a values slightly lower than the other two down gradient wells.
- GW-6 PAG indicator parameters (specific conductivity, TDS, HCO_3 and D-SO_4) remained relatively stable from 2016 through 2020, however D-Na and D-Cl increased from 100 to 280 mg/L and 10 to 65 mg/L, respectively.
- GW-7 and GW-8 PAG indicator parameter concentrations (specific conductivity, TDS, D-Na, SO_4 and D-Cl) showed a sharp increase starting September 2017 but then leveled off into a stable range since 2019 June. Although GW-8 displayed a rapid decrease in the final 2020 July measurement.
- Dissolved metal(oid) concentrations remained stable or decreased 2016 through 2020 July at the downgradient wells with the following notable exceptions:
    - D-As, D-Cd, D-Co and D-Mn increased at GW-7, and
    - D-Cr and D-Se increased at GW-8.

The frequent exceedance of Trigger 3 compliance targets for SC, TDS, D-Cl, D-SO_4, D-Cd, D-Cr, D-Co, and D-Na at GW-7 and GW-8 from 2017 through July 2020 triggered monthly monitoring and the development of Trigger 4 alert concentrations for wells GW-7 and GW-8. Groundwater concentrations at GW-7 and GW-8 were compliant with Trigger 4 alert concentrations for all 10 PAG Indicator Parameters throughout the monitoring program.

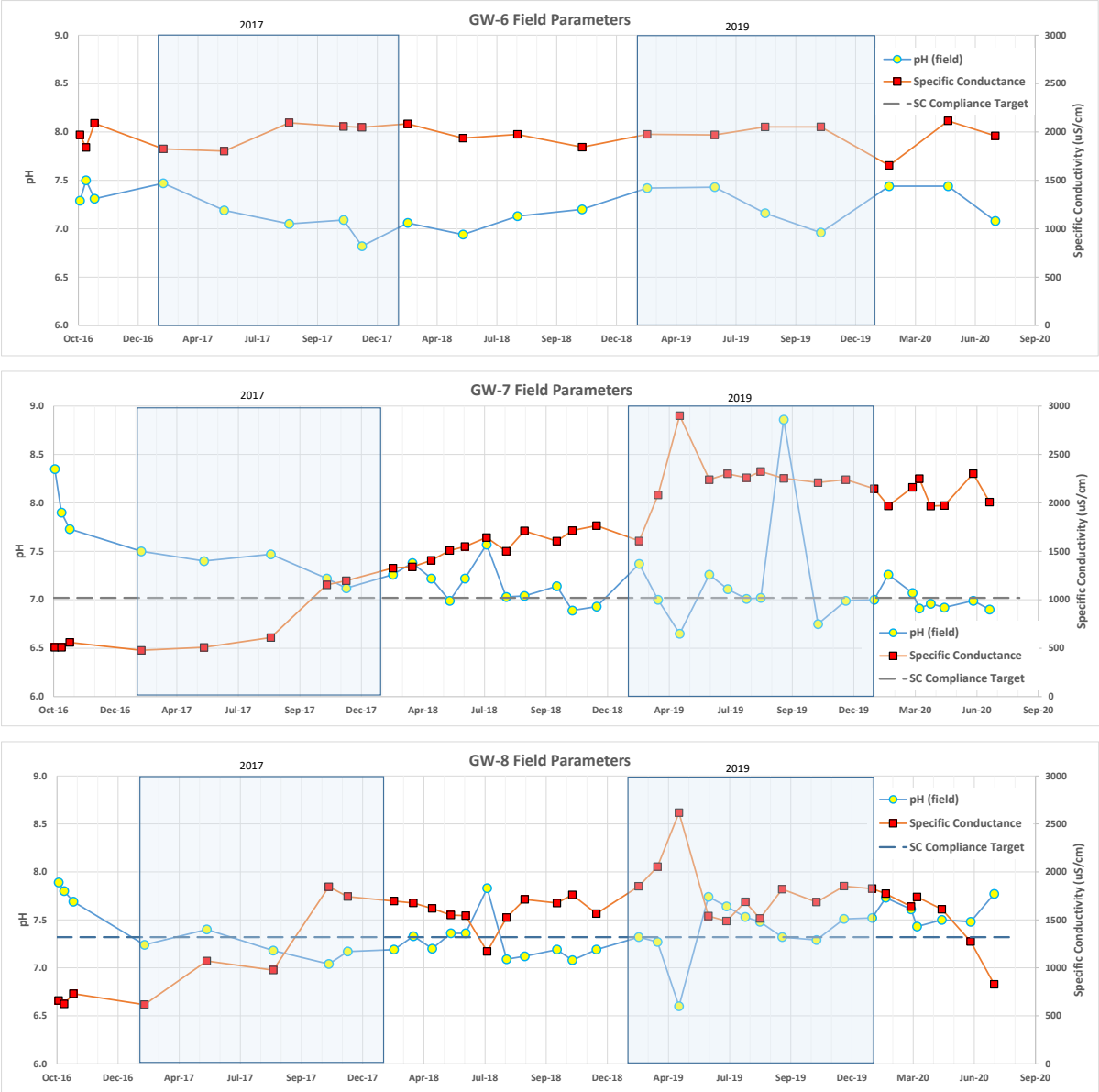

Figure 4-8: Field measured pH and Specific Conductance in RSEM Area R5B groundwater wells

Table 4-2:
Water Quality Summary Statistics for RSEM Area R5B Groundwater Wells

Parameter	pH-field	SC-field	TDS	D-SO_4	D-Na	D-Cl	D-Cd	D-Cr	D-Co	D-Cu	D-Zn
Units	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GW-6 Trigger 3	-	3940	2800	1380	238	12.6	0.000025	0.0005	0.00018	0.00025	0.00428
Maximum	7.50	2115	1580	724	**281**	**67**	0.000015	<0.001	**0.00173**	**0.000707**	<0.005
P90	7.446	2091	1512	693	**257**	**63**	0.0000065	0.000500	**0.000250**	0.000105	0.00250
Median	7.19	1975	1400	620	135	**51**	<0.000005	<0.0001	0.0000746	<0.00005	0.00030
Minimum	6.82	1654	1160	450	97	5	<0.000005	<0.0001	0.0000389	<0.00005	<0.0001
GW-7 Trigger 3	-	1020	548	90	35	3	0.000012	0.0005	0.00144	0.00019	0.0158
Maximum	8.86	**2901**	**2000**	**1000**	**158**	**24.10**	**0.000055**	<0.001	**0.00761**	0.00013	0.00948
P90	7.634	**2275**	**1864**	**927**	**145**	**14.9**	**0.0000439**	0.000446	**0.004238**	0.00010	0.003648
Median	7.11	**1714**	**1250**	**563**	**98**	**6.44**	**0.0000132**	<0.0001	**0.002130**	<0.0001	0.00209
Minimum	6.65	479	254	34	12	<0.1	<0.000005	<0.0001	<0.0005	<0.00005	0.00020
GW-8 Trigger 3	-	1320	728	181.6	38.2	3.6	0.000038	0.0005	0.00178	0.000596	0.0014
Maximum	7.89	**2617**	**1400**	**768**	**258**	**97.0**	**0.000063**	**0.00149**	0.00124	0.00035	**<0.005**
P90	7.755	**1848**	**1285**	**659**	**239**	**75.1**	**0.0000478**	**0.000670**	0.000855	0.000327	**0.002130**
Median	7.36	**1629**	**1100**	**486**	**183**	**60.3**	0.0000168	<0.0001	0.0000995	0.000260	0.000485
Minimum	6.60	616.9	330.0	79.0	17.2	1.40	<0.00001	<0.0001	0.0000174	0.000085	<0.0001

*Values in **Bold Text** exceed well-specific Trigger 3 compliance level.

4.4 Conclusions

The groundwater program was initiated to ensure seepage from RSEM Area R5A and RSEM Area R5B did not adversely affect water quality in the Peace River and to provide an early warning system to implement the necessary mitigation measures in the event of unacceptable groundwater quality degradation.

Groundwater quality in RSEM Area R5A groundwater wells GW-1, GW-2, and GW-3 periodically exceeded the Trigger 3 Compliance Targets, but the magnitude of the increases and the variable parameters displaying increases at the monitoring wells, suggest that PAG-contact seepage did not contribute to widespread degradation of groundwater quality adjacent to RSEM Area R5A during the monitoring period. As a result, the development of Trigger 4 Compliance Targets was not triggered for the RSEM Area R5A monitoring wells.

Groundwater quality in RSEM Area R5B groundwater wells GW-7 and GW-8 frequently exceeded Trigger 3 compliance targets from 2017 through July 2020, which indicated that groundwater quality was affected by the project and most likely associated with PAG storage and water management at RSEM Area R5B. The sustained change in groundwater quality at these wells triggered increased monitoring frequency and the development of Trigger 4 alert concentrations for wells GW-7 and GW-8. Water quality from the two wells remained compliant with Trigger 4 alert concentrations for all 10 PAG Indicator Parameters throughout the monitoring program, which confirmed that seepage from RSEM Area R5B was of low risk to increase concentrations in the river above BC WQG.

5. Key Findings

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5. 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 2020, a ML/ARD risk evaluation, a summary of exceedances of project-specific discharge limits that occurred in 2020, and an estimation of metal loads discharged to the Peace River.

5.1 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, R5B and R6E/R6W sediment control ponds is currently in use by PRHP field staff. Table 5-1 presents the 2019 TSS-turbidity relationships compared to the relationships developed using the 2020 monitoring data for each of the three RSEM sediment control ponds.

Table 5-1:
Turbidity to TSS Conversion Relationships for In Situ Monitoring Equipment

Location	2019 Relationship	2020 Relationship
RSEM-L5-SP	TSS = 0.8738 × (Turbidity) + 1.8301	TSS = 0.8007 x (Turbidity) + 0.7097
RSEM-R5B-SP	TSS = 0.8483 × (Turbidity) + 0.786	TSS = 0.7224 x (Turbidity) - 0.0098
RSEM-R6-SP	TSS = 0.7617 × (Turbidity) + 1.2223	TSS = 0.517 x (Turbidity) + 0.8011

Plots of the 2020 *in situ* field turbidity vs. analytical TSS measurement for RSEM L5, RSEM R5B and RSEM R6 sediment pond water are illustrated in Figure 5-1, Figure 5-2 and Figure 5-3. The best fit linear relationship for both the 2019 and 2020 data are included on the plots. The linear regressions for 2020 data plot below the 2019 relationship for all ponds and have a moderate to weak correlation as indicated by R^2 values L5E/L5W (R^2= 0.59), R5B (R^2 = 0.69) and R6E/R6W (R^2= 0.59).

The RSEM L5E/L5W ponds 2020 data display a best fit line for TSS vs turbidity relationship that is very similar to the 2019 relationship (Figure 5-1). The data fits the relationship reasonably well for turbidity values below 40 NTU; however, greater divergence from the line is observed at higher turbidity levels. Conversely, the linear relationships derived for the R5B sediment pond (Figure 5-2) is primarily defined by a relatively small number of samples showing elevated turbidity values up to ~70 NTU. At

the lower turbidity range (<15 NTU), the R5B pond results are near or below the 2019 linear regression.

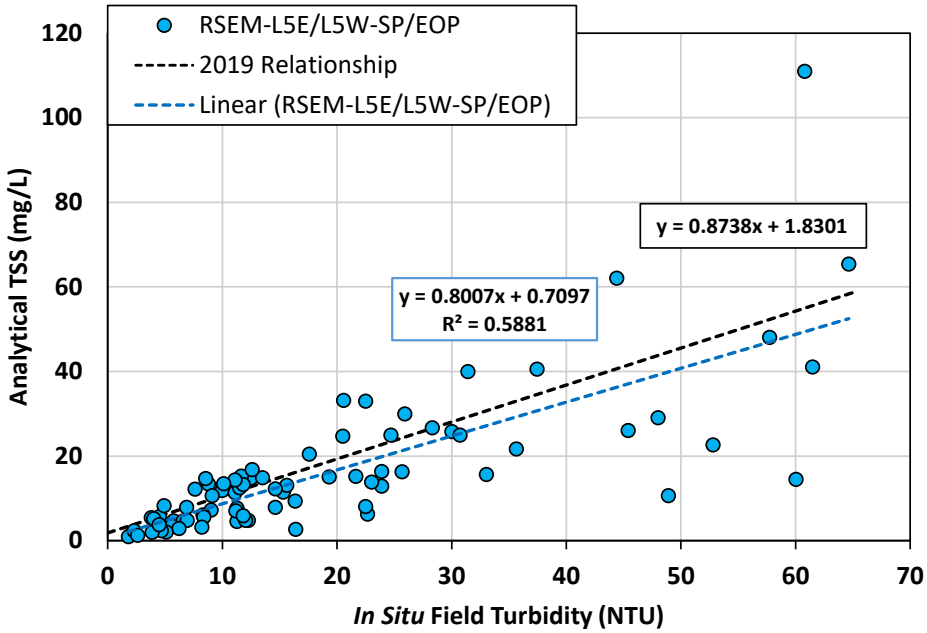


Figure 5-1: Analytical TSS versus *in situ* field turbidity at RSEM-L5E/L5W for 2020. A line of best of fit for the annual data is presented along with 2019 Turbidity-TSS conversion.

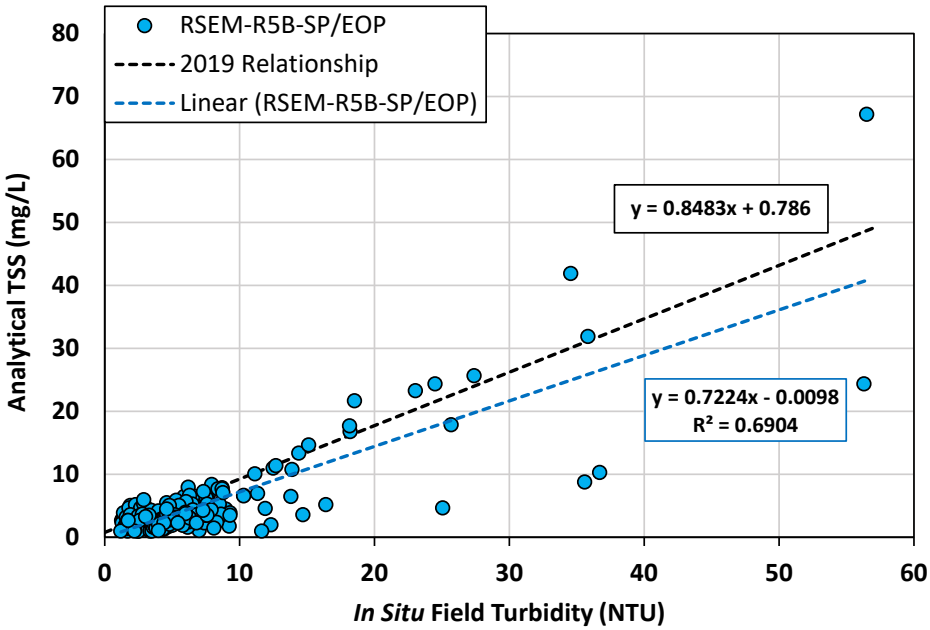


Figure 5-2: Analytical TSS versus *in situ* field turbidity at RSEM-R5B for 2020. A line of best of fit for the annual data is presented along with the 2019 Turbidity-TSS conversion.

Overall, the turbidity-TSS relationship derived for the RSEM R6E/R6W sediment ponds (Figure 5-3) shows the greatest divergence from the 2019 relationship with the slope of the 2020 regression being distinctly lower (0.52) than the slope of the 2019 regression (0.76). The cause of this divergence is likely in part due to changes in water management that introduced different source waters into the RSEM R6 sediment ponds including the MWTF effluent.

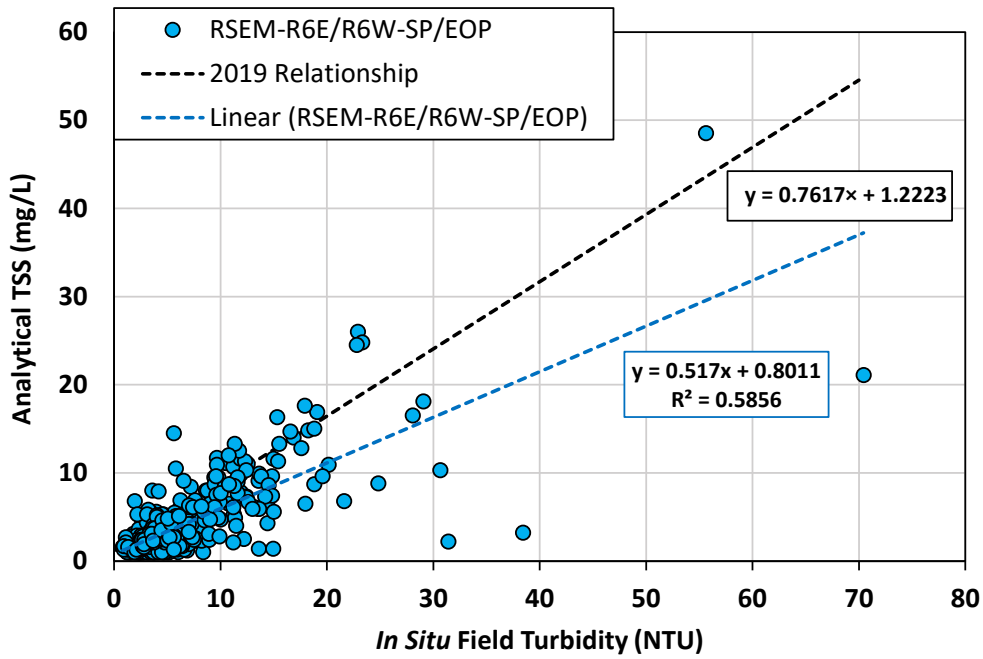


Figure 5-3: Analytical TSS versus *in situ* field turbidity at RSEM-R6E/R6W for 2020. A line of best of fit for the annual data is presented along with the 2019 Turbidity-TSS conversion.

A review of the 2020 data indicates that revisions are not required for the turbidity-TSS relationship that is currently in use by PRHP field staff. The 2020 relationships were similar to those currently in use for the RSEM L6 and RSEM R5B ponds. The relationship at the RSEM R6 pond did diverge substantively from the current relationship but the variable source waters directed to the RSEM R6 ponds produced scatter in the data that does not provide a strong correlation. In subsequent years, the turbidity-TSS relationship will continue to be reviewed and updated if warranted to provide more robust correlations.

5.2 Onset of ARD/ML

Surface water quality and geochemical monitoring data are reviewed on a weekly and quarterly basis, respectively, to identify trends in the onset of ARD/ML. This section presents the results of PAG rock monitoring in each construction water catchment and the effect the onset of ARD/ML from these exposures had on runoff water. Monitoring results

confirm previous evidence of localized acidic rock exposures on both the Left Bank and Right Bank.

There is one large and several smaller catchment areas on the Left Bank. Contact water catchments on the Left Bank include the:

- RSEM Area L5 (which includes RSEM L5 Extension) and LBEX catchment area;
- DTIP and DTOP working areas;
- Central Cofferdam area; and
- RSEM Area L6.

PAG material was sampled in the RSEM Area L5 and L5 Extension, and LBEX catchment area and the Central Cofferdam area in 2020. No samples were collected from the DTIP and DTOP working areas, as the PAG material excavated from the DTIP and DTOP is generally trucked directly to a RSEM Area approved for PAG disposal. PAG material deposited in 2020 Q1 at RSEM Area L6 was covered by July and not sampled in 2020.

There are three catchment areas within the construction site on the Right Bank including:

- RSEM Area R6 (which includes Area A, Area 20/21, SBIAR, RBDT, and RCC area),
- RSEM Area R5B (Approach Channel and Area 23), and
- RSEM Area R5A.

PAG material was sampled in each of these catchments in 2020.

5.2.1 Left Bank

Key observations with respect to the onset of ARD/ML on the Left Bank in 2020 are as follows:

- AG material was identified in RSEM Area L5, the Central Cofferdam/Dam Core, the LBDA, and the LBEX.
- The RSEM L5 East, L5 West, and L6 sediment ponds remained circumneutral to alkaline throughout 2020. The metal concentrations generally remained low and below the discharge limits in these sediment ponds. However, T-Cd exceeded the discharge limits from June 15-19 and July 5-7 and T-Zn concentrations exceeded the discharge limits from June 15-18 in discharge from the RSEM L5 East sediment pond (see Section 5.5). These exceedances were related to rainfall events which washed exposures of weathered shale in the southeast end of RSEM Area L5 and mobilized soluble ARD/ML products.

- Occasional acidic pH measurements (pH < 6.0) were recorded at surface water monitoring stations in 2020, including:
  - Three field pH measurements at LBGC-OUT; and
  - Laboratory pH measurements at the East and West Buffer Creek stations.

Results at LBGC are believed to be influenced primarily by Garbage Creek water quality upstream of the project area and Buffer Creek by ARD/ML runoff from PAG exposures adjacent to the sample locations.

5.2.2 Right Bank

Water quality and ARD monitoring on the Right Bank led to the following key observations:

- AG material was identified in the Approach Channel, parts of RSEM Area R5A, exposures within the RSEM Area R5B catchment (777 Haul Road excavation, West Ditch, and ACDC Ditch), along a minor exposure west of RSEM Area R5B, along the SBIAR, and from a small exposure in Area A. No AG samples were collected from the Right Bank Dam Core.
- The RSEM R6 East and West sediment ponds remained circumneutral to slightly alkaline. There were occassional exceedances of the discharge limits in 2020 (see Section 5.5). Discharge from RSEM R6 West sediment control pond exceeded the discharge limit for T-Zn on June 16 and both T-Cd and T-Zn were above their respective discharge limits from July 5-8. These exceedances were attributed to PAG-influenced runoff from rainfall events.
- The R5B sediment control pond was circumneutral to alkaline. Metal concentrations were generally low and below the discharge limits, excluding T-Cd and T-Zn concentrations between June 16-24 and July 5-9 (see Section 5.5). These exceedances are from PAG influenced runoff associated rainfall events. The precipitation washes soluble ARD/ML products, including Cd and Zn, from PAG exposures in the RSEM Area R5B catchment. Elevated metal concentrations were measured in the samples collected from RSEM-R5B-W in April and July.
- Acidic field pH measurements were recorded at AC-E-HAIRPIN-DITCH on two days in April. The low pH values measured at this monitoring station are related to acidic runoff from the exposed AG rock in the Approach Channel. The pH returned to circumneutral following these events.
- The RSEM R5A Ponds remained circumneutral to slightly alkaline. Metal concentrations were measured above the applicable guidelines; however,

concentrations in discharged water generally remained below guidelines and/or discharge limits (see Section 5.5). These elevated values were likely due to snow melt and rainfall causing turbid runoff in RSEM Area R5A.

5.3 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 that is employed 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.

5.3.1 Material Management

Weathered PAG material was excavated or covered to minimize potential ARD/ML on both the Left and Right Banks. The timely excavation or cover of weathered material is a key mitigation strategy, particularly in the RSEM Area L5 and RSEM Area R5A disposal areas, where relatively large volumes of PAG material have been deposited. The potential for ARD/ML due to bedrock exposed as a result of excavations in the vicinity of the Diversion Inlet and Outlet Portals and in the Central Cofferdam was mitigated with the application of shotcrete to the exposed PAG bedrock slopes and inundation of inlet and outlet by river water.

PAG material in RSEM Area L5 was redistributed and capped with NPAG material in Q3 and Q4 2020. On the Right Bank, the Approach Channel excavation was initiated in Autumn 2016 and mostly completed by the end of Q2 2017. Some excavated faces have remained exposed since that time and are at advanced stages of weathering. Since the original excavation, several minor excavations have been undertaken to scrape a thin layer of weathered material off of the exposed faces; however, the majority of samples are weathered, and have a rinse pH below 7 with several samples being classified as currently AG (rinse pH < 5.5). Until further excavation occurs in the Approach Channel to expose unweathered bedrock, the acidic runoff from this area is collected and treated, as needed. Excavation of the Approach Channel temporarily resumed in 2020 but is not yet complete.

5.3.2 Water Management

This section summarizes water movements that are undertaken to segregate possible ARD influenced water (*i.e.,* PAG contact water) from non-PAG contact waters 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, ditches, baker tanks, and active water management (*i.e.,* pumps, hoses and water trucks). Water quality monitoring data are used to identify ARD influenced water that requires treatment using the MWTF. RSEM sediment control ponds are used to treat suspended sediments (*i.e.,* TSS). The general water management objectives are to:

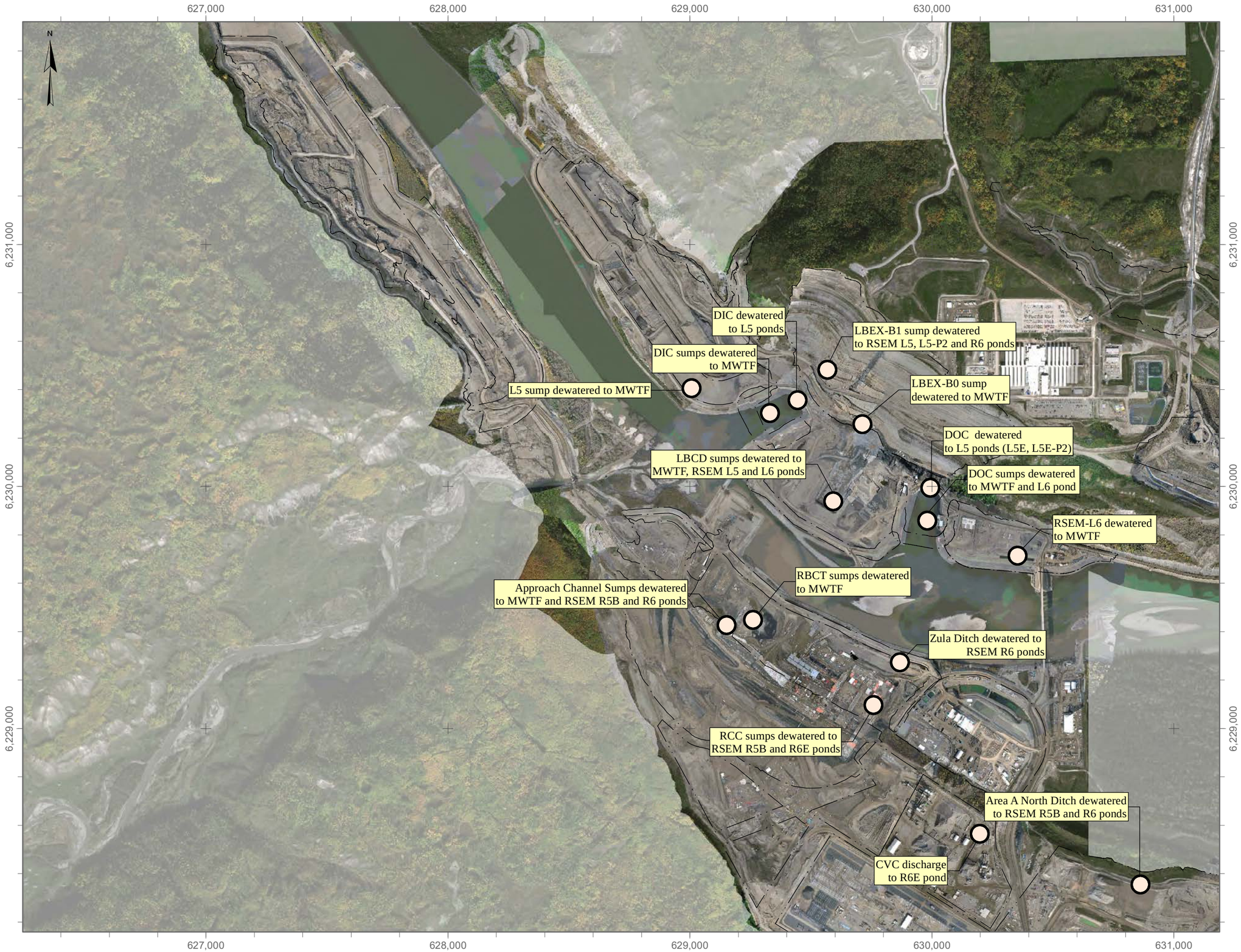
- Segregate ARD influenced water that must be treated by the MWTF;
- Maximize storage capacity for surges of PAG contact water associated with heavy runoff from rainfall or snowmelt; and,
- Minimize the number of treatment facilities (*i.e.,* sediment control ponds) that require daily management.

A quarterly summary of water transfers in 2020 to PAG containing RSEM sediment control ponds and to the MWTF Pre-Treatment Pond, from Left Bank and Right Bank catchment areas, is provided in Table 5-2. The movement of waters varied seasonally and in response to the transition from Phase 1 to Phase 2 of the Project. The source areas and destinations of relocated waters are also shown in Figure 5-4.

Table 5-2:
Quarterly Summary of PAG and Non-PAG Contact Water Transfer to PAG Containing RSEM Sediment Control Ponds and the MWTF Pre-Treatment Pond in 2020

Receiving Facility	Type of Water and Source Area			
	Q1	Q2	Q3	Q4
RSEM L5 West Sediment Control Pond	Non-contact from LBEX (Jan/Feb), LBCD	Non-contact from LBCD (Apr)	No transfer to pond (Pond decommissioned)	No transfer to pond (Pond decommissioned)
RSEM L5 East Sediment Control Pond	Non-contact from LBEX (Mar), LBCD (Jan)	Non-contact from LBEX, LBCD (mid-June)	Non-contact from LBEX (July/Aug), DIC (July), DOC (July)	No transfer to Pond (Pond decommissioned)
Phase 2 RSEM L5 East Sediment Control Pond	No transfer to pond	PAG-contact mid/late June from DIC, DOC, LBCD	Non-contact from LBEX (Sep),	Non-contact from LBEX
RSEM L6 Sediment Control Pond	No transfer to pond	Non-contact from LBCD (mid/late June)	Non-contact from LBCD (early July) PAG-contact from DOC (mid/late-July),	No transfer to pond
RSEM R6 East Sediment Control Pond	Non-contact from Area A, RCC, CVC	Non-contact from Area A (May/Jun) CVC (Q2)	Non-contact from Area A, CVC	Non-contact from Area A, CVC
RSEM R6 West Sediment Control Pond	No transfer to pond	Non-contact from RCC (May/Jun) MWTF effluent (May/Jun)	Non-contact from RCC, AC(Aug/Sep)	Non-contact from RCC, AC
RSEM R5B Sediment Control Pond	Non-contact from Area A, RCC, AC MWTF Effluent	Non-contact from Area A(Apr), RCC(Apr) MWTF Effluent (Apr)	Non-contact from AC(Jul/Aug)	No transfer to pond (Pond deactivated)
MWTF Pre-Treatment Pond	PAG-contact from LBEX, RSEM Area L5, DIC, DOC, LBCD, AC, RBCT	PAG-contact from LBEX, RSEM Area L5, DIC, DOC, LBCD, AC, RBCT	PAG-contact from LBEX, DIC (Jul/Aug), DOC (Jul/Aug), LBCD, AC, RBCT	PAG-contact from LBEX, LBCD, RSEM L6, AC, RBCT

Notes:
LBEX = Left Bank Excavation; DIC = Diversion Inlet Cofferdam; LBCD = Left Bank Cofferdam; DOC = Diversion Outlet Cofferdam; CVC = CVC Batch Plant; AC = Approach Channel; RBCT = Right Bank Core Trench.
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.



LEGEND

PAG Contact Water Collection Areas

Note: Site C aerial imagery collected between September 2019 - September 2020

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

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DATE SAVED:	Feb 24, 2021
DRAWN BY:	AL
REVIEWED:	NM
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2020 Annual Report

TITLE:

Overview of PAG and Non-PAG Contact Water Transfer to the MWT and Between Catchment Areas in 2020"

PROJECT #: A416-1 *FIGURE:* 5-4

P:\@Drafting\SiteC\Drafting Figures\MXD\2020_Q4_Annual_Report\Figure 5-4 Water Transfer.mxd

5.3.3 Water Treatment

Water treatment is implemented for contact waters from PAG containing excavations and RSEM deposition areas. Treatment is used to mitigate contact waters influenced by ARD (*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 are directed to the MWTF, and suspended sediments are removed by the RSEM sediment control ponds. This section describes the MWTF that is used to treat ARD influenced contact waters.

PRHP commissioned the MWTF 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 (Figure 5-5). 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. The configuration of the MWTF system components is illustrated in Figure 5-6. The final treated effluent was pumped to the RSEM R6 West sediment control pond from early May until early November 2020 when construction of a lined discharge channel was completed. For the balance of 2020 treated effluent was discharged passively to the RSEM R6 West sediment control pond.

The overall treatment system consists of three facilities: an influent storage pond, the metal precipitation facility, and a sludge pond, and is designed for continuous treatment of influent flows that range between approximately 3 to 10 L/s. The "MWTF" acronym generally refers to the overall treatment system, however, for the following discussion and in the figures used in this report, MWTF is 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. A new flocculant was introduced in 2018 Q4 to improve sludge settling and solids content. The resulting slurry mixture is discharged 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

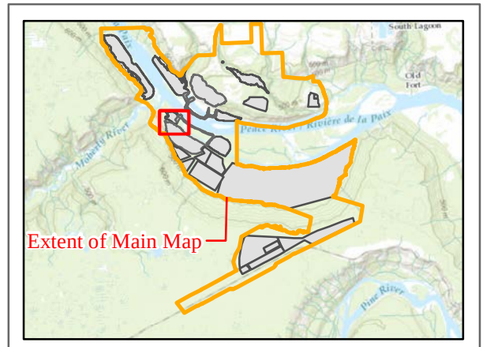
dewatered in RSEM Area R5A for long-term storage in the stockpile. The clarified water is adjusted to circum-neutral pH prior to discharge of treated effluent by sparging CO_2 into the final cell of the sludge pond.

ARD influenced water from the Approach Channel was directed to the Pre-Treatment pond throughout 2020, as well as waters from other PAG containing Project areas (LBEX, RSEM Area L5, DIC, LBCD, DOC and RBCT). The MWTF process was effective at buffering pH (Section 3.2.3.7) and reducing metal concentrations to within the project-specific discharge limits in treated water based on observations of water quality in the RSEM R5B and R6 West sediment control pond discharges.

Additional water treatment capacity may be warranted should material management and water management measures be unable to sustain acceptable water quality in discharges from RSEM sediment ponds. Material management and water management are the primary and secondary mitigation strategies as noted above, and additional water treatment will also be considered as a contingency measure, if necessary.

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 2.5.1, were triggered on several occasions in 2020 when sludge was removed from the Pre-Treatment Pond, the Sludge Pond and from within the MWTF reactor tanks. The testing and assessment of these materials is described in Section 2.5.3, and removal these materials was reported on the following dates:

- February 18-20: approximately 2 m^2 (2 bags) of sludge was removed from the first cell of the Sludge Pond and deposited in RSEM Area R5A for dewatering and storage;
- March 27-28: a vacuum truck removed approximately 150 m^3 of sludge from the Sludge Pond and deposited the material in RSEM Area R5A for dewatering and storage;
- June/July: the former Pre-Treatment Pond and Sludge Pond (Figure 5-5) were decommissioned, and accumulated sludges were relocated to RSEM Area R5A prior to backfilling these facilities in June and July;
- August 28-29: approximately 150 m^3 of sludge was removed from the Sludge Pond in RSEM Area R6. The sludge was relocated to RSEM Area R5A for dewatering and storage; and,
- November 9: during MWTF maintenance, approximately 4 m^3 of lime sludge accumulation in the reactor tanks was removed and transferred to RSEM R5A for dewatering and storage.



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Direction of Flow

Note: Site C aerial imagery collected between September 2019 - May 2020

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DRAWN BY: AL **VERSION:** 1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

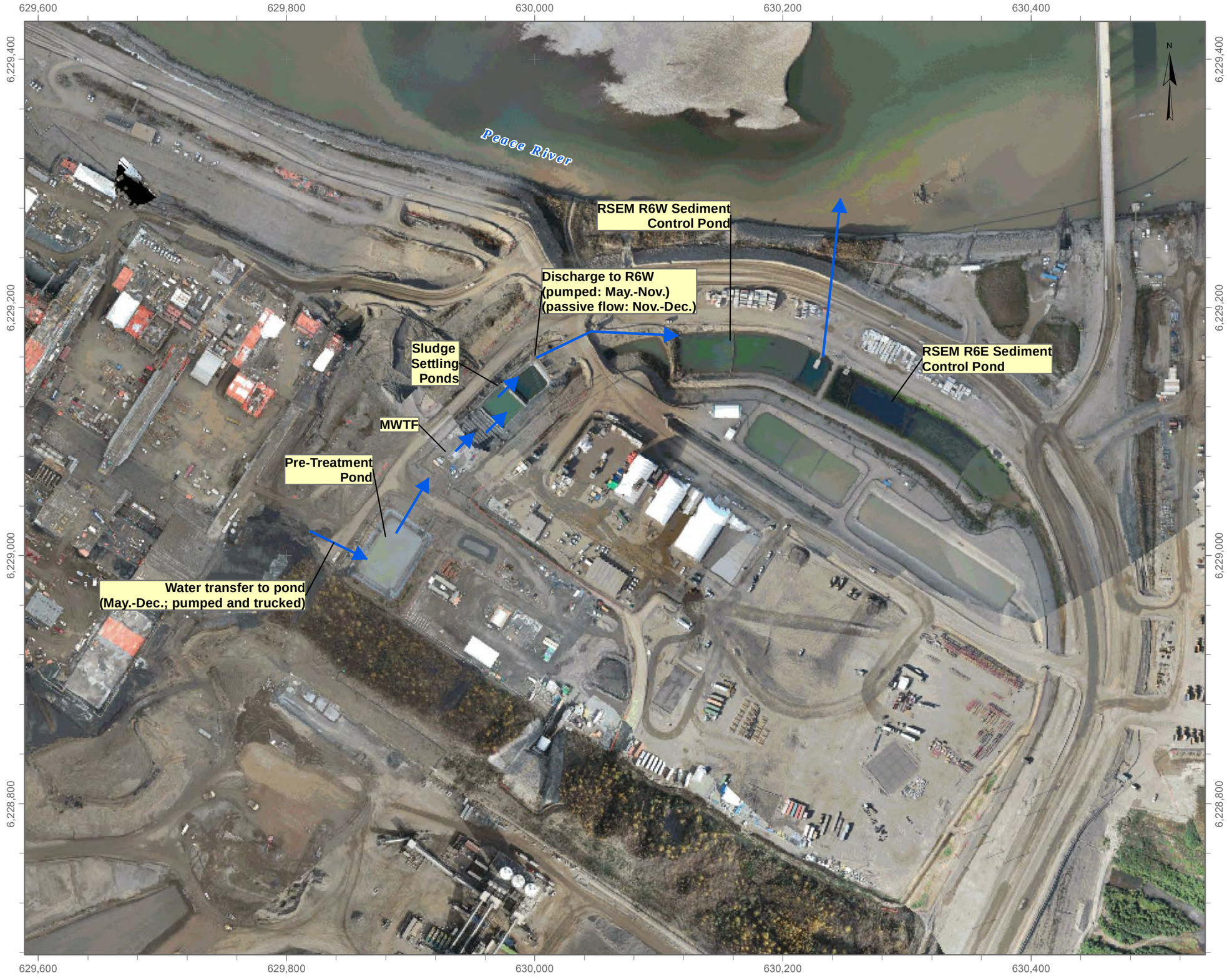
Site C Clean Energy Project
ARD/ML 2020 Annual Report

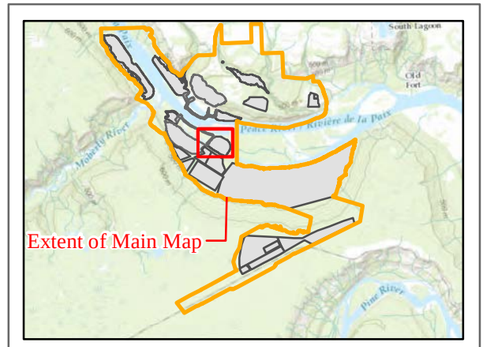
TITLE:

MWTF Layout in the Approach Channel and RSEM Area R5B (Jan. – Apr., 2020)

PROJECT #: A416-1 *FIGURE:* 5-5

Path: *P:\@Drafting\Site C\Drafting Figures\MXD\2020_Q4_Annual_Report\Fig_5_5_2020_Q2_R5B_MWTF_Infow_Outflow.mxd* ***Coordinate System:*** *NAD 1983 UTM Zone 10N* ***Datum:*** *North American 1983* ***Units:*** *Meter*





Legend

Direction of Flow

Note: Site C aerial imagery collected between May 2019 - May 2020

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DATE SAVED: Feb 24, 2021 **REVIEWED:** NM

DRAWN BY: AL **VERSION:** 1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2020 Annual Report

TITLE:

MWTF Lay out in RSEM Area R6 (May – Dec., 2020)

PROJECT #: A416-1 *FIGURE:* 5-6

Path: *P:\@Drafting\SiteC\Drafting Figures\MXD\2020_Q4_Annual_Report\Fig_5_6_2020_Q2_R6_MWTF_Infow_Outflow.mxd*

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

5.4 ML/ARD Risk Levels

5.4.1 Comparison of Predicted and Measured RSEM Discharge

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). 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 5-3) clearly 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 5-3:
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	CEMP discharge limit (mg/L)	MMER 30 day limit (mg/L)	R5B maximum prediction (mg/L)	R5A maximum prediction (mg/L)
T-Cu	0.011	0.3	0.15	2.5
T-Zn	0.033	0.5	0.7	13.3

At the end of 2020, the area of exposed PAG shale in the Approach Channel was approximately 8.9 ha, or 50% of the area that will ultimately be exposed. The total volume of PAG rock deposited in RSEM Area R5A is approximately 5.51 M m^3 (including approximately 57,000 m^3 placed in the RSEM R5A starter dyke) or approximately 59% of the total volume that was expected to be deposited by this time, which includes almost all of the material that was expected to be deposited to the completion of the project, as shown in Table 5-4 below. This is primarily due to the temporary deferral of the remaining Approach Channel excavation. PRHP and BC Hydro are developing a revised schedule for the excavation of the Approach Channel.

Table 5-4:
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[5]	59%
Diversion Stage 2[4]	4Q20 - 3Q21	-	33,692	9,284,900	5,513,665[5]	59%
	4Q21 - 3Q22	21,000	-	9,305,900	-	

[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 5,341,553m^3 deposited in RSEM R5A and 57,232 m^3 deposited in the RSEM R5A starter dyke

The predicted (KCB, 2016) and measured concentrations for total Cu and Zn for RSEM Area R5B (no mitigation) are shown in Figure 5-7 and Figure 5-8. 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 5-9 and Figure 5-10. The MMER and CEMP discharge limits are shown for comparison.

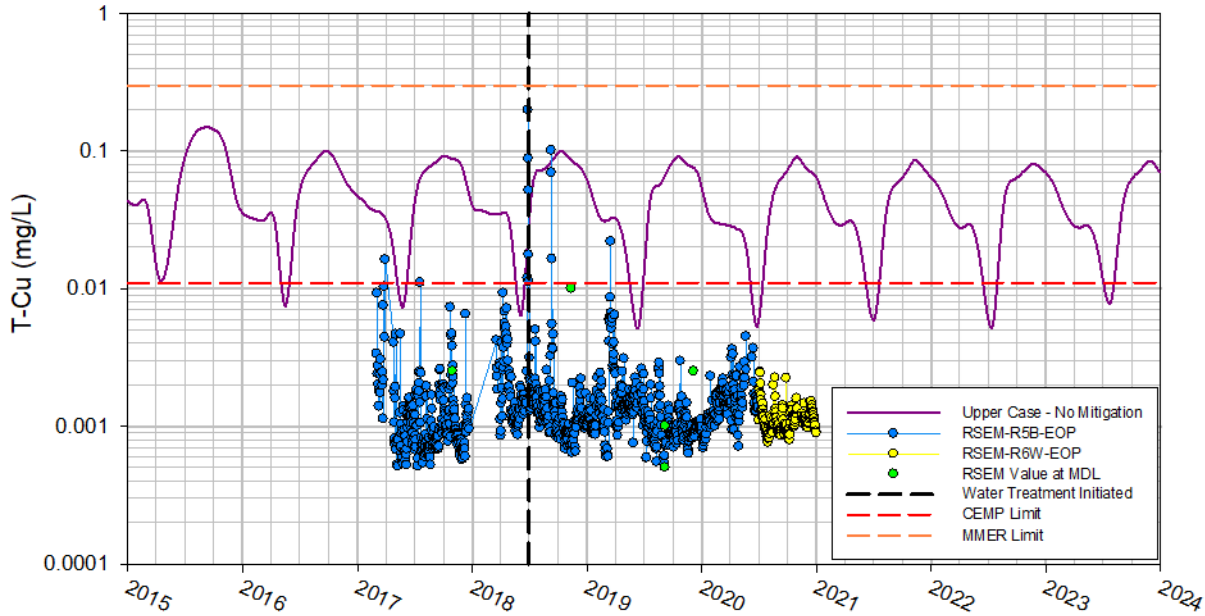

Figure 5-7: Cu Predicted at RSEM R5B / R6 (Upper Case – No Mitigation) and Measured at RSEM-R5B (through 2020 Q2) and R6 (through 2020 Q4)

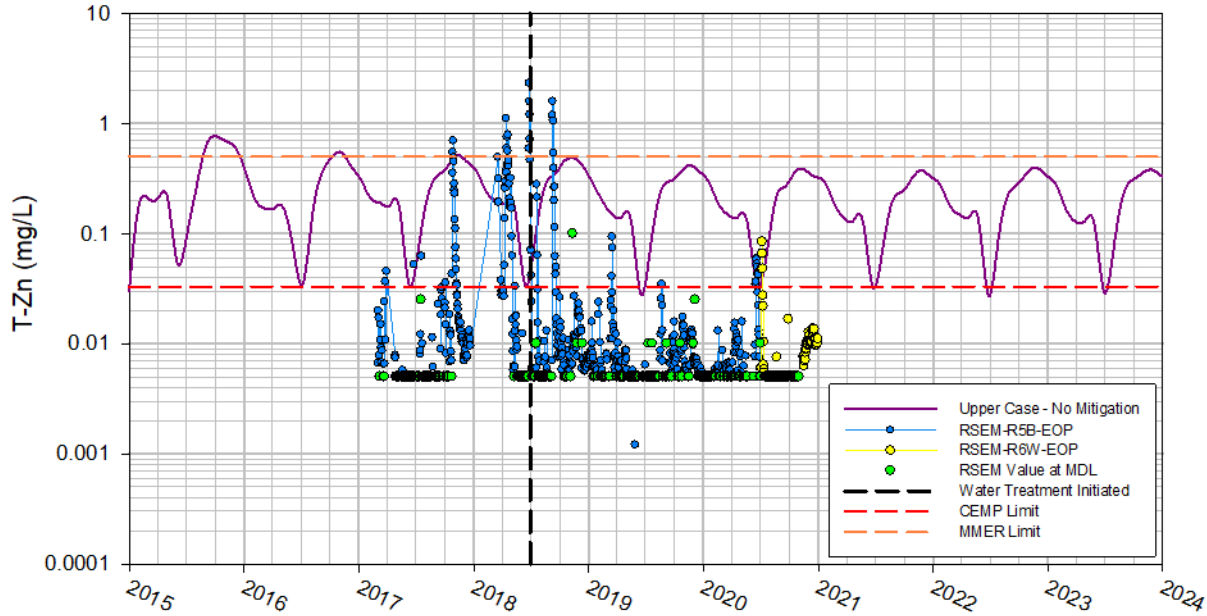

Figure 5-8: Zn Predicted at RSEM R5B / R6 (Upper Case – No Mitigation) and Measured at RSEM R5B (through 2020 Q2) and R6 (through 2020 Q4)

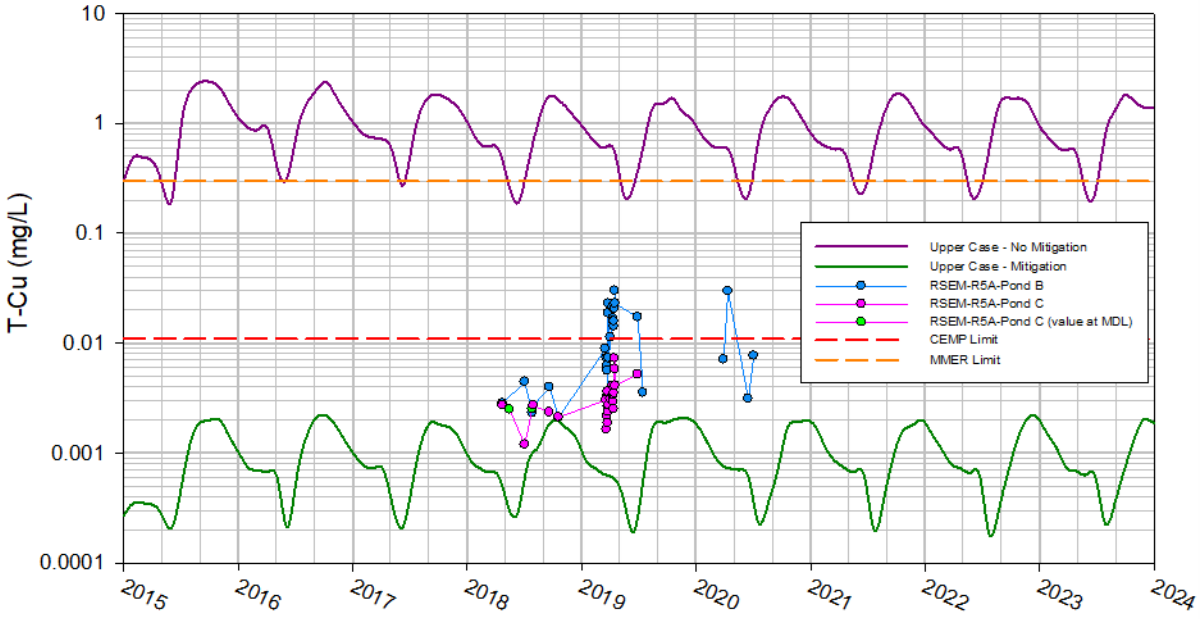

Figure 5-9: T-Cu Predicted at RSEM R5A (No Mitigation and 100% Mitigation) and Measured at RSEM R5A Pond B and Pond C

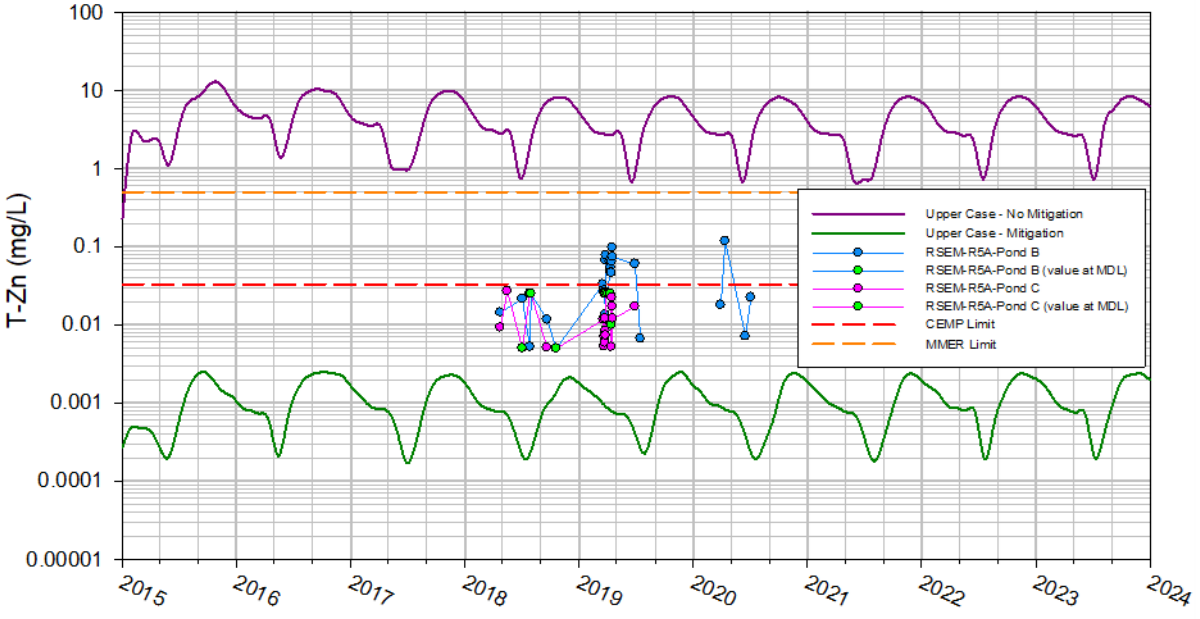

Figure 5-10: Zn Predicted at RSEM R5A (No Mitigation and 100% Mitigation) and Measured at RSEM R5A – Pond B and Pond C

The water quality model results for RSEM Area R5B indicate that Cu and Zn concentrations would often 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 relocated MWTF in RSEM Area R6.

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 % cover in Q4 2020 is estimated to be approximately 75%). 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 is expected to increase substantially in 2021. In the RSEM Area R5A catchment, covering PAG shale with freshly excavated material is necessary, and the volume of PAG material that will be deposited is also expected to increase substantially as excavation of the Approach Channel resumes.

A consideration for RSEM Area R5A in 2020 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 the difference between the cumulative volume of scheduled (9.3M m^3) and reported (5.51M m^3) PAG rock at the end of 2020 (roughly 3.79M m^3), will be deposited in RSEM Area R5A in 2021. Subsequent to this there will be relatively small volumes of additional material placed in the RSEM area to cover the PAG exposure and limit weathering of the PAG surface and reduce the amount of PAG runoff.

If this eventuality were to occur, it is likely that 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 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. Continued monitoring and scheduling of fresh PAG placement on weathered surfaces will be required

and during the final phases of construction, an interim strategy that will need to be developed to allow for a small area of active PAG placement while the majority of the RSEM will be covered.

5.4.2 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 2020 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, R5B, and R5A sediment ponds.

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 5-5 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 Area L5 at the end of 2020 was 1,009,108 m^3. In addition, there was 4,869 m^3 in the RSEM Area L5 Starter Dyke and 495,240 m^3 in the RSEM Area L5 Extension. There was 64,345 m^3 in RSEM Area R6, 24,240 m^3 in the L5 Garbage Creek area, and 12,345 m^3 in the Left Bank Dam Core.

At the end of 2020, RSEM Area R5A contained 5,456,423 m^3 of PAG bedrock and the Starter Dyke area contained 57,232 m^3 of PAG bedrock. The PAG material previously deposited in RSEM Area R5B (363,618 m^3) remains covered by NPAG material. No additional PAG rock was placed here in 2020.

The RSEM Area L5 is rated as moderate risk 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 (<1,000 mg/L and >2,000 µs/cm respectively) in the L5E pond. It is anticipated that the risk level will decline in 2021 as the majority of PAG material in this area has been redistributed and is now covered with NPAG material.

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.

The highest risk rating is assigned to RSEM R6 West sediment control pond as this pond now receives the majority of PAG-contact waters from the construction site. Approach Channel waters, and other PAG influenced site waters, are directed to the MWTF Pre-Treatment Pond which is discharged to the RSEM R6 West sediment pond following treatment. The high-risk rating is mitigated by the MWTF which produces water that meets the RSEM EOP limits.

A 'moderate' risk rating is assigned to RSEM R5B sediment control pond due to a number of PAG exposures in this catchment. This pond has been removed from service since early September when all inflows to the RSEM R5B pond were redirected to the RSEM R6 West sediment control pond. The RSEM R5B pond may temporarily be used as a sump, if needed, while a new RSEM R5B sump is being constructed upgradient of the existing pond. The existing pond will be backfilled in Q1 2021 after construction of the new sump is completed.

Table 5-5:
Risk Rating Matrix for PAG-Containing RSEM Sediment Ponds in 2020

Factor	Sediment Pond(s)			
	L5	**R6**	**R5B**	**R5A[1]**
% of exposed material with rinse pH < 5.5	0%	>75% (11/14 samples)	<25% (West Ditch and ACDC ditch exposures and 777 haul road extension)	Negligible (1 / 21 samples)
Field pH (in sediment pond)	≥ 7 in all samples	≥ 7.2 in all samples	≤ 6.8	≥ 7.8 in all samples
Sulphate (in sediment pond)	≤ 1,280 mg/L in E pond discharge	≤ 371 mg/L in E and ≤ 995 mg/L in W pond	≤ 662 mg/L	< 780 mg/L in all samples
Lab Conductivity (in sediment pond)	≤ 2,830 µS/cm in E Pond discharge	≤ 1,670 µS/cm in E and ≤ 2,170 µS/cm in W Pond	≤ 1,710 µS/cm	≤ 2,080 µS/cm in all samples
Risk Rating				
Rinse pH of exposed material in catchment	Low	**High[2]**	Moderate	Low
pH (in sediment pond)	Low	Low	Moderate	Low
Sulphate (in sediment pond)	Moderate	Moderate	Low	Moderate
Conductivity (in sediment pond)	Moderate	Moderate	Moderate	Moderate
Overall Risk Rating	**Moderate**	**High**	**Moderate**	**Moderate**

Notes:
1. Water quality sampling at RSEM R5A is less frequent than the R5B and R6 sediment ponds, these ponds are managed to not discharge to the Peace River.
2. Approach Channel runoff directed to R6 W sediment pond via MWTF

The RSEM R5A Phase 1 sediment control ponds were managed to not passively discharge, and active pumping from Pond A to Peace River was used as needed to maintain low water levels in the ponds. PAG material placed in RSEM Area R5A is compacted and covered with NAG soon after placement. This is reflected in the pond water quality which generally meets RSEM EOP limits and BC WQGs.

On the Right Bank, there is an estimated area of 8.9 ha of exposed PAG shale in the Approach Channel that is now conveyed into the RSEM Area R6 catchment. The requirement for water treatment was triggered in 2018, and the MWTF commissioned for this purpose. For this reason, a 'high' risk rating has been assigned. PAG influenced runoff from the Approach Channel is diverted to the MWTF for treatment prior to discharge to RSEM R6W pond, thereby mitigating the risk of RSEM discharge limit exceedances from these waters. The treatment process was effective throughout 2020. All Approach Channel runoff was stored for treatment prior to discharge.

Otherwise, there is little PAG material in the RSEM Area R6 catchment and the ML/ARD risk is low. Some exposed PAG material is located along the South Bank Initial Access Road (SBIAR). However, this relatively minor risk is managed by BC Hydro. 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 2020, PAG deposition reached an estimated 5,513,655 m^3 in RSEM Area R5A (including the material in the R5A starter dyke). The material originated primarily from the Dam and Core Buttress, Core Trench and the Spillway (included in the Approach Channel total). The risk is mitigated by covering PAG material before the onset of ML/ARD. The RSEM R5A ponds are currently rated as moderate risk, indicating that the onset of ARD/ML is evident in the upgradient catchment. Sulphate and conductivity were relatively stable through 2020. Dissolved concentrations of Cd, Cu and Zn were somewhat elevated but below EOP discharge limits.

Additional management measures to mitigate risk include: 1) minimizing exposures of acid generating surfaces by placement of fresh PAG and non-PAG material 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, pumping water between the different RSEM R5A ponds or transporting water by truck to the MWTF or other sediment ponds on site. Conveying or pumping water to the new RSEM Area R5B sump may also be warranted.

5.5 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.

Exceedances in surface water runoff discharged from the construction site in 2020 occurred as a result of large precipitation events in mid-June and early July. This resulted in exceedances on both the Left and Right Banks as summarized below. In addition, there was an exceedance in discharge from the RSEM-R6E Sediment Control Pond on November 3, 2020. This exceedance is also discussed below.

5.5.1 Snowmelt in mid-April

In mid-April, a large volume of alkaline water was generated when rapid snowmelt mixed with concrete wash water and accumulated in a sump in the Left Bank Core Trench. The accumulated water was pumped to the Left Bank Cofferdam baker tank (LBCD-Sump-BT) where it was continuously treated to reduce pH using carbon dioxide sparging, and then transferred to the RSEM L5 West sediment control pond, in accordance with routine water management procedures.

On April 19th a failure in the pH treatment system was detected through routine field monitoring. The CO_2 tank had been depleted more quickly than usual because of the excess contact water and was empty. The CO_2 tank was immediately replaced.

Site staff estimated that a relatively small volume (85 m^3) of slightly alkaline water was discharged from RSEM L5 West pond while the CO_2 tank was replaced. The exceedance is summarized in Table 5-6 below.

Table 5-6:
Summary of Exceedances for RSEM L5W Q2 2020

Measurement Type	Parameter	Date	Time	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged (m^3)
Field Measurement	pH	19 April	4:00 PM[1]	9.3[1]	6.0 – 9.0	85[1]
			4:45 PM	9.4		

Note: 1 These measurements were reported in Exceedance Report "EIR-OTH-20-04-03 (RSEM L5W pH) - Environmental Incident Report PRHP Document No. SCCEP-PRHP-ENV-RPT005-000192 Created 21 April 2020".

5.5.2 Rain in Mid-June

Heavy rains in mid-June led to rinsing of ARD/ML oxidation products from oxidized stockpiled material into the Left Bank RSEM L5 East sediment control pond and elevated concentrations of T-Cd and T-Zn in the pond discharge. The RSEM L5 East discharge exceeded T-Cd and T-Zn RSEM EOP limits from June 15th to June 19th, after which discharge levels returned to normal. The exceedances are summarized in Table 5-7.

Table 5-7:
Summary of Metal Exceedances for RSEM L5E – Q2 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
XY1608	15 June	24 June	T-Cd	0.00128	0.00029	2903
			T-Zn	0.0711	0.033	
XY1512	16 June	24 June	T-Cd	0.00151	0.00029	1376
			T-Zn	0.0567	0.033	
XY6281	17 June	29 June	T-Cd	0.00114	0.00029	904
			T-Zn	0.0500	0.033	
XY6288	18 June	29 June	T-Cd	0.00103	0.00029	563
			T-Zn	0.036	0.033	
XY6267	19 June	29 June	T-Cd	0.00050	0.00029	1,736

Heavy rains in mid-June led to a slumping of material upslope of the R6 Pre-Treatment Pond into the pond. In response to elevated water levels in the Pre-Treatment Pond, dewatering was initiated by direct pumping to RSEM R6 West sediment control pond for 13 hours on June 15th. As shown in Table 5-8, T-Zn slightly exceeded the RSEM EOP limit in discharge released June 16th. Concentrations of T-Zn in R6W discharge reduced to below the RSEM EOP limit after pumping was stopped.

Discharge from RSEM R5B sediment control pond exceeded RSEM EOP limits from June 16th through June 24th. The monitoring results are summarized in Table 5-9. Based on elevated field conductivity measurements it is speculated that PAG influenced runoff in the R5B West Ditch catchment likely resulted in the increased concentrations of T-Cd and T-Zn in the RSEM R5B pond. In order to prevent future exceedances a sump has been constructed along R5B West Ditch, upstream of the RSEM R5B pond, to intercept and store runoff during heavy rains.

Table 5-8:
Summary of Metal Exceedances for RSEM R6W – Q2 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
XY1505	16 June	24 June	T-Zn	0.034	0.033	2121

Table 5-9:
Summary of Exceedances for RSEM-R5B – Q2 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
XY1507	16 June	24 June	T-Cd	0.000404	0.00029	1265
			T-Zn	0.0347	0.033	
XY6279	17 June	29 June	T-Cd	0.00038	0.00029	184
			T-Zn	0.0363	0.033	
XY6286	18 June	29 June	T-Cd	0.00053	0.00029	148
			T-Zn	0.0590	0.033	
XY6265	19 June	29 June	T-Cd	0.00053	0.00029	227
			T-Zn	0.0585	0.033	
XY9032	20 June	2 July	T-Cd	0.000459	0.00029	77
			T-Zn	0.0526	0.033	
XY9119	21 June	30 June	T-Cd	0.000459	0.00029	27
			T-Zn	0.0492	0.033	
XZ0405	22 June	2 July	T-Cd	0.000408	0.00029	86.4
			T-Zn	0.0426	0.033	
XZ2251	23 June	3 July	T-Cd	0.000307	0.00029	86.4
XZ5350	24 June	3 July	T-Cd	0.000313	0.00029	43.2
			T-Zn	0.0419	0.033	

5.5.3 Rain in Early July

Very heavy rain in early July (over 74 mm from July 1-3) led to rinsing of ARD/ML oxidation products from oxidized stockpiled material into the Left Bank RSEM L5 East sediment control pond and elevated concentrations of T-Cd in the pond discharge. The RSEM L5 East discharge exceeded T-Cd RSEM EOP limits from July 5-7. The exceedances are summarized in Table 5-10.

Table 5-10:
Summary of Metal Exceedances for RSEM L5E – Q3 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentra-tion (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
YA6922	5 July	14 July	T-Cd	0.000657	0.00029	4887.4
YA8351	6 July	14 July	T-Cd	0.000361	0.00029	973.1
YB0053	7 July	14 July	T-Cd	0.000391	0.00029	221.3

The aforementioned heavy rain in early July also led to discharge from the RSEM R5A A, B and C sediment control ponds. The majority of the discharge was Pond A discharge that was pumped to the mainstem of the Peace River. Small amounts of water also passively discharged from Pond B (July 3rd, 9 m^3) and Pond C (July 4th, 1.2 m^3), however an analytical sample was only collected from Pond B. The concentration of Fe in Pond B on July 3rd exceeded the BC WQG for the protection of aquatic life. The exceedances are summarized in Table 5-11 below.

Table 5-11:
Summary of Metal Exceedances for RSEM-R5A-B-Pond – Q3 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentra-tion (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
YA5154	3 July	10 July	T-Fe	5.31	1.0[1]	9

1. **BC Water Quality Guidelines apply to discharge from RSEM Area R5A ponds**

The heavy rain in early July also resulted in discharge from the RSEM-R5B sediment pond that exceeded RSEM EOP limits from July 5-9. The exceedances are summarized in Table 5-12. Based on elevated field conductivity measurements it is speculated that PAG influenced runoff in the R5B West Ditch catchment likely resulted in the increased concentrations of T-Cd and T-Zn in the RSEM R5B pond. In order to prevent future exceedances a sump has been constructed along West Ditch, upstream of the RSEM R5B pond, to incept and store runoff during heavy rains.

Table 5-12:
Summary of Exceedances for RSEM-R5B – Q3 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentra-tion (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
YA6920	5 July	14 July	T-Cd	0.000517	0.00029	801.7
			T-Zn	0.0755	0.033	
YA8350	6 July	14 July	T-Cd	0.000638	0.00029	551.8
			T-Zn	0.0762	0.033	
YB0052	7 July	15 July	T-Cd	0.000787	0.00029	519.4
			T-Zn	0.103	0.033	
YB2462	8 July	17 July	T-Cd	0.000664	0.00029	303.6
			T-Zn	0.0863	0.033	
YB4138	9 July	20 July	T-Cd	0.000419	0.00029	453.3
			T-Zn	0.0491	0.033	

The heavy rain in early July also resulted in discharge from the RSEM R6W sediment pond that had concentrations of T-Cd and T-Zn that exceeded EOP discharge limits. These concentrations persisted from July 5-8. The exceedances are summarized in Table 5-13 below.

Table 5-13:
Summary of Metal Exceedances for RSEM-R6W-Pond – Q3 2020

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
YA6918	5 July	14 July	T-Cd	0.00044	0.00029	1604.1
			T-Zn	0.0473	0.033	
YA8349	6 July	14 July	T-Cd	0.000671	0.00029	1428.6
			T-Zn	0.0842	0.033	
YB0050	7 July	15 July	T-Cd	0.000595	0.00029	1541.5
			T-Zn	0.0655	0.033	
YB2461	8 July	17 July	T-Cd	0.000432	0.00029	1592.6
			T-Zn	0.0476	0.033	

5.5.4 T-Zn in discharge from RSEM-R6E in early November

On November 3, 2020 water was pumped from the RSEM-R6W pond to the RSEM-R6E pond temporarily to allow tie-in of a new lined passive discharge channel form the MWTF to the RSEM-R6W pond. On November 3rd, water was pumped at an average flow rate of 33.56 L/s. The concentration of T-Zn exceeded the RSEM EOP limit. The Exceedance is summarized in Table 5-14 below.

The cause of the exceedance has not been ascertained with certainty. Sample contamination is suspected and was observed in a field blank collected December 8th (0.041 mg/L) as noted in Section 3.2.4.3. Total Zn was below 0.008 mg/L in all samples collected at RSEM-R6E-EOP since September 1, excluding the November 3rd sample. T-Zn was also below 0.008 mg/L on the days immediately before and after the exceedance (0.0079 mg/L in the November 2nd sample and 0.0066 mg/L in the November 4th sample). The duplicate sample collected on November 3rd also had lower T-Zn (0.0072 mg/L). TSS was low in the November 3rd sample (6.1 mg/L), indicating that particulate concentrations were not generally high in the sample, and D-Zn was below the detection limit (<0.005 mg/L).

Table 5-14:
Summary of Metal Exceedances for RSEM-R6E-Pond – Q4 2020

Sample No.	Date Sampled	Date Reported	Parameter	Measured Concentration (mg/L)	RSEM Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3) [A]
YU4781	03/11/2020	12/11/2020	T-Zn	0.0439	0.033	2,910

[A] Discharge volume is calculated from the logged 24-hour flow for the calendar date sampled.

5.6 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.

The metal loads discharged from the Left Bank are summarized on a quarterly basis, followed by metal loads from the Right Bank. This is followed by a summary of the metal loads discharged from Site C in relation to the metal loads carried by the Peace River.

5.6.1 Left Bank

The metal loads discharged from the Left Bank included discharge from the RSEM-L5E and RSEM-L6 Sediment Control Ponds in Q2, Q3 and Q4. These are summarized in Table 5-15 and Table 5-16 below.

Table 5-15:
Quarterly Metal Load Discharged from RSEM L5 Sediment Control Pond -2020

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	0	471	1870	0	2341
Cl	0	394	772	0	1166
F	0	6.49	15.7	0	22.19
D-SO_4	0	12700	30500	0	43200
N-NH_3	0	2.21	4.01	0	6.22
N-NO_2	0	1.14	2.86	0	4.00
N-NO_3	0	82.6	203	0	285.6
T-Sb	0	0.0190	0.0329	0	0.0519
T-As	0	0.0225	0.0535	0	0.0760
T-Cd	0	0.0106	0.0126	0	0.0232
T-Co	0	0.187	0.248	0	0.435
T-Cu	0	0.0712	0.186	0	0.2572
T-Fe	0	24.6	82.4	0	107.0
T-Pb	0	0.0140	0.0468	0	0.0608
T-Mn	0	13.2	17.7	0	30.9
T-Mo	0	0.143	0.346	0	0.489
T-Se	0	0.166	0.602	0	0.768
T-Ag	0	0.000760	0.00126	0	0.00202
T-Zn	0	0.547	0.673	0	1.220
D-Al	0	0.538	0.636	0	1.174
D-Cd	0	0.00928	0.00942	0	0.01870
D-Co	0	0.166	0.209	0	0.375
D-Cu	0	0.0394	0.0638	0	0.1032
D-Fe	0	0.594	0.555	0	1.149
D-Zn	0	0.442	0.352	0	0.794

Table 5-16:
Quarterly Metal Load Discharged from RSEM L6 Sediment Control Pond -2020

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	0	8.08	0	0	8.08
Cl	0	157	0	0	157
F	0	0.768	0	0	0.768
D-SO_4	0	921	0	0	921
N-NH_3	0	0.0772	0	0	0.0772
N-NO_2	0	0.0447	0	0	0.0447
N-NO_3	0	1.11	0	0	1.11
T-Sb	0	0.00182	0	0	0.00182
T-As	0	0.00140	0	0	0.00140
T-Cd	0	0.000140	0	0	0.000140
T-Co	0	0.00146	0	0	0.00146
T-Cu	0	0.00330	0	0	0.00330
T-Fe	0	0.260	0	0	0.260
T-Pb	0	0.000528	0	0	0.000528
T-Mn	0	0.0473	0	0	0.0473
T-Mo	0	0.0219	0	0	0.0219
T-Se	0	0.0151	0	0	0.0151
T-Ag	0	0.0000528	0	0	0.0000528
T-Zn	0	0.0133	0	0	0.0133
D-Al	0	0.0326	0	0	0.0326
D-Cd	0	0.000123	0	0	0.000123
D-Co	0	0.000760	0	0	0.000760
D-Cu	0	0.00241	0	0	0.00241
D-Fe	0	0.0264	0	0	0.0264
D-Zn	0	0.0133	0	0	0.0133

5.6.2 Right Bank

The metal loads discharged from the Right Bank in 2020 included discharge from the RSEM-R5A Sediment Control Pond in Q2, and Q3, as well as metal loads from the RSEM-R5B, RSEM-R6E and RSEM-R6W Sediment Control Ponds. These are summarized in Table 5-17, Table 5-18, Table 5-19, and Table 5-20 below.

Table 5-17:
Quarterly Metal Load Discharged from RSEM-R5A Sediment Control Ponds -2020

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	0	1.57	47.1	0	48.67
Cl	0	5.64	60.8	0	66.44
F	0	0.0628	0.588	0	0.6508
D-SO_4	0	99.6	1110	0	1209.6
N-NH_3	0	0.00721	0.485	0	0.49221
N-NO_2	0	0.00386	0.170	0	0.17386
N-NO_3	0	0.210	4.60	0	4.81
T-Sb	0	0.000144	0.00134	0	0.001484
T-As	0	0.000268	0.00344	0	0.003708
T-Cd	0	0.00000746	0.000158	0	0.00016546
T-Co	0	0.000126	0.00338	0	0.003506
T-Cu	0	0.000708	0.00824	0	0.008948
T-Fe	0	0.211	4.78	0	4.991
T-Pb	0	0.000134	0.00284	0	0.002974
T-Mn	0	0.00409	0.121	0	0.12509
T-Mo	0	0.00175	0.0159	0	0.01765
T-Se	0	0.00133	0.0132	0	0.01453
T-Ag	0	0.00000515	0.0000531	0	0.00005825
T-Zn	0	0.00129	0.0250	0	0.02629
D-Al	0	0.00185	0.0116	0	0.01345
D-Cd	0	0.00000257	0.0000399	0	0.00004247
D-Co	0	0.0000515	0.00120	0	0.001252
D-Cu	0	0.000363	0.00257	0	0.002933
D-Fe	0	0.00257	0.0274	0	0.02997
D-Zn	0	0.00129	0.0114	0	0.01269

Table 5-18:
Quarterly Metal Load Discharged from RSEM-R5B Sediment Control Ponds -2020

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	185	283	335	0	803
Cl	2600	1110	499	0	4209
F	13.3	8.52	6.23	0	28.05
D-SO_4	12300	7730	3860	0	23890
N-NH_3	12.5	7.69	0.818	0	21.008
N-NO_2	1.52	1.12	0.309	0	2.949
N-NO_3	30.9	12.3	9.25	0	52.45
T-Sb	0.0512	0.0306	0.0127	0	0.0945
T-As	0.0498	0.0326	0.0173	0	0.0997
T-Cd	0.00100	0.00206	0.00272	0	0.00578
T-Co	0.0229	0.0569	0.0597	0	0.1395
T-Cu	0.0569	0.0511	0.0402	0	0.1482
T-Fe	4.12	10.4	15.3	0	29.82
T-Pb	0.00839	0.00769	0.00999	0	0.02607
T-Mn	0.631	1.80	1.60	0	4.031
T-Mo	0.467	0.257	0.0809	0	0.8049
T-Se	0.121	0.0900	0.0441	0	0.2551
T-Ag	0.000900	0.000498	0.000454	0	0.001852
T-Zn	0.223	0.254	0.350	0	0.827
D-Al	1.26	0.622	0.292	0	2.174
D-Cd	0.000784	0.00161	0.00192	0	0.004314
D-Co	0.0161	0.0404	0.0496	0	0.1061
D-Cu	0.0370	0.0243	0.0188	0	0.0801
D-Fe	0.410	0.263	0.218	0	0.891
D-Zn	0.204	0.207	0.277	0	0.688

Table 5-19:
Quarterly Metal Load Discharged from RSEM-R6W Sediment Control Ponds -2020

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	0	495	392	234	1121
Cl	0	6420	5740	4300	16460
F	0	44.7	60.6	22.0	127.3
D-SO_4	0	48800	67500	33400	149700
N-NH_3	0	16.9	16.8	19.6	53.3
N-NO_2	0	6.30	7.67	3.72	17.69
N-NO_3	0	63.6	116	62.2	241.8
T-Sb	0	0.216	0.162	0.113	0.491
T-As	0	0.171	0.104	0.0946	0.3696
T-Cd	0	0.00190	0.00655	0.000895	0.009345
T-Co	0	0.0516	0.101	0.0254	0.1780
T-Cu	0	0.125	0.140	0.0806	0.3456
T-Fe	0	18.6	14.1	4.99	37.69
T-Pb	0	0.0256	0.0263	0.0143	0.0662
T-Mn	0	1.16	2.08	0.536	3.776
T-Mo	0	1.57	1.05	1.03	3.65
T-Se	0	0.558	0.456	0.303	1.317
T-Ag	0	0.00216	0.00241	0.00143	0.00600
T-Zn	0	0.613	1.05	0.539	2.202
D-Al	0	7.31	3.20	1.51	12.02
D-Cd	0	0.00143	0.00568	0.000815	0.007925
D-Co	0	0.0308	0.0880	0.0218	0.1406
D-Cu	0	0.0809	0.0993	0.0617	0.2419
D-Fe	0	1.35	1.31	0.745	3.405
D-Zn	0	0.539	0.987	0.490	2.016

Table 5-20:
Quarterly Metal Load Discharged from RSEM-R6E Sediment Control Ponds -2020

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	213	312	661	220	1406
Cl	3320	5990	8580	5830	23720
F	14.4	20.0	49.1	19.3	102.8
D-SO_4	7490	7770	17400	13000	45660
N-NH_3	11.7	12.9	7.00	6.02	37.62
N-NO_2	1.27	1.63	2.09	1.16	6.15
N-NO_3	26.7	40.4	91.8	49.1	208.0
T-Sb	0.0528	0.0329	0.0795	0.0462	0.2114
T-As	0.0629	0.0293	0.0592	0.0353	0.1867
T-Cd	0.00117	0.00374	0.0102	0.00201	0.01712
T-Co	0.0427	0.179	0.432	0.0548	0.7085
T-Cu	0.0784	0.107	0.249	0.0794	0.5138
T-Fe	5.81	7.50	28.2	7.56	49.07
T-Pb	0.00947	0.0132	0.0330	0.0152	0.07087
T-Mn	3.04	4.25	8.70	2.38	18.37
T-Mo	1.13	0.698	0.688	0.463	2.979
T-Se	0.0784	0.0559	0.102	0.106	0.3423
T-Ag	0.000930	0.00128	0.00318	0.00151	0.00690
T-Zn	0.299	0.411	1.26	0.589	2.559
D-Al	2.52	4.46	13.6	1.37	21.95
D-Cd	0.000996	0.00323	0.00811	0.00174	0.014076
D-Co	0.0382	0.158	0.394	0.0485	0.6387
D-Cu	0.0563	0.0737	0.171	0.0540	0.355
D-Fe	0.465	0.803	3.54	0.822	5.630
D-Zn	0.256	0.357	0.867	0.438	1.918

5.6.3 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-3.88 (formerly PR-3) to provide benchmarks to which metal loading from Site C (above) can be compared. The dissolved, rather than total, metal fraction measured at PR-3.88 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 5-21 below. Flow data is available for all calendar months, with a total of 107 samples available in the dataset.

Table 5-21:
Estimated Mean Monthly Load in Peace River (station PR-3.88) for Dissolved Cd, Cu and Zn

Parameter	Monthly mean loads (kg)											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	n=3	**n=2**	**n=5**	**n=12**	**n=18**	**n=13**	**n=10**	**n=6**	**n=8**	**n=19**	**n=6**	**n=5**
D-Cd	*43.8*	*43*	*66.2*	*548*	*275*	*164*	*87.2*	*183*	*88.1*	*80.4*	*111*	*63.7*
D-Cu	*2,510*	*2,660*	*3,020*	*15,900*	*9,520*	*4,430*	*3,110*	*5,110*	*3,420*	*2,710*	*3,340*	*3,360*
D-Zn	*6,720*	*8,070*	*7,590*	*52,200*	*22,000*	*12,100*	*7,590*	*15,100*	*9,080*	*4,860*	*3,470*	*7,360*

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 2020 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-3.88 is included as Table 5-22 below.

Table 5-22:
Estimated Annual Load Discharged from Site C and Carried by Peace River (station PR-3.88) for Dissolved Cd, Cu and Zn

Parameter	Estimated Annual Load Discharged from Site C (From All Sediment Control Ponds) in 2020 (kg)	Estimated Annual Load Carried by Peace River in 2020 (kg)	Estimated Annual Load Discharged from Site C as Proportion of Annual Load Carried in Peace River (%)
D-Cd	0.045	1,753	0.003
D-Cu	0.786	59,090	0.001
D-Zn	5.68	156,140	0.004

6. Conclusions and Recommendations

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6. Conclusions and Recommendations

6.1 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 to date. Small exposures of bedrock have become acidic at several locations on both the Left Bank and Right Bank. The combined ARD/ML mitigation measures of material placement, water management and water treatment has been effective in limiting the exceedance of discharge limits for waters discharging from the site to the Peace River. General observations from 2020 are noted below, followed by the conclusions from the monitoring undertaken on the Left and Right Banks.

6.1.1 General Observations

- A total of 246 ARD samples were collected at the site and analysed for rinse pH. Approximately 10% of the 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 2020 were AG or PAG.

6.1.2 Left Bank

- In 2020, 199,800 m^3 of PAG bedrock was excavated on the Left Bank. The majority of the excavated PAG material was placed in RSEM Area L5, the RSEM Area L5 Extension and RSEM Area L5 Starter Dyke.
- The rinse pH results indicated that the majority of material exposed in RSEM Area L5 and L5 Extension remained pH-neutral. Although AG rock exposed along the lower edges at the southeast extent of the RSEM Area L5 stockpile contributed to discharge limit exceedance from the RSEM L5 ponds in 2020, recontouring and placement of cover material on the lower slopes of the facility below the Phase 2 ponds has significantly reduced PAG exposure in the facility.
- AG exposures remain near the northwestern edge of the LBEX, the bluff below the LBEX, and along Bench 0 of the LBEX.
- Left bank bedrock samples had total S > 0.5%. The dominant form of sulphur in these samples was sulphide S indicating that the PAG material has acid generating capacity.

6.1.3 Right Bank

- On the Right Bank, excavations during 2020 amounted to a total of 219,158 m^3 of PAG bedrock. All of the excavated material was deposited in RSEM Area R5A and RSEM Area R5A Starter Dyke.
- Only 2 of 74 samples collected in RSEM Area R5A in 2020 were AG samples. The continued placement of fresh PAG in RSEM Area R5A has minimized the exposure of AG material in the area above the Phase 2 sediment ponds. Final grading of the lower slopes below the Phase 2 sediment ponds and placement of the overburden cover material has limited PAG exposure around the perimeter of the facility.
- Despite excavation and removal of weathered material from the Approach Channel in 2019 and 2020, an extensive area within the Approach Channel remains AG as documented by the median rinse pH = 3.3 for the 43 samples collected there in 2020. Runoff from the weathered bedrock exposed in the Approach Channel will need to continue to be directed to the MWTF.
- AG samples were collected from exposed bedrock west of the Approach Channel and adjacent to RSEM Area R5B. Runoff from these areas will need to be managed by the construction of a drainage / pumping system to capture water and direct it to a newly constructed R5B Sump and ultimately the MWTF.
- The total S content of the bedrock samples collected from shale exposures and stockpiles from the Right Bank was typically > 1.0 %S. The dominant form of sulphur in the majority of samples was sulphide S, with little or no sulphate S detected. Only the strongly weathered samples had a higher proportion of sulphate S relative to sulphide S, which is likely due to the presence of acidic sulphate weathering products.

6.2 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. 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 RSEM Area L5, L6, R5A, R5B 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.

RSEM Sediment Pond monitoring identified four events that discharge limits were exceeded:

- a minor discharged of alkaline water from the RSEM Area L5W pond on April 19th during a period of rapid snow melt;
- discharge from the RSEM Area L5E, R5B and R6W following heavy rains in mid-June;
- discharge from the RSEM Area L5E, R5A-B, R5B, and R6W ponds following very heavy rain in early July; and
- discharge from the RSEM Area R6E pond one day in early November.

6.3 Groundwater Monitoring

The RSEM Areas R5A and R5B groundwater monitoring program that ran from 2016 September through 2020 July included quarterly monitoring of water quality and continuous monitoring of water levels. Water level in the monitoring wells within the alluvial plain at both RSEMs closely reflected Peace River water level fluctuations during the program. All wells were decommissioned September 23 – 25 by removing the surface monuments and backfilling with bentonite.

Groundwater quality in RSEM Area R5A groundwater wells GW-1, GW-2, and GW-3 periodically increased above background levels, but the magnitude of the increases and the variable parameters displaying increases at the monitoring wells, suggested that PAG-contact seepage did not contribute to widespread degradation of groundwater quality adjacent to RSEM Area R5A during the monitoring period.

Groundwater quality at two RSEM Area R5B groundwater wells displayed concentrations above background levels from 2017 through July 2020, which indicated that groundwater quality may be affected by seepage from PAG storage and water management at RSEM Area R5B. The sustained change in groundwater quality at for wells GW-7 and GW-8 triggered increased monitoring frequency and the development of science-based Trigger 4 alert concentrations to protect aquatic life in the groundwater discharge zone. Water quality from the two wells remained compliant with Trigger 4 alert concentrations for all 10 PAG Indicator Parameters throughout the monitoring program, which confirmed that seepage from RSEM Area R5B was of low risk to increase concentrations in the river above BC WQG.

6.4 Mitigation

Mitigation measures that are being implemented to minimize exceedances of EOP discharge limits due to ARD/ML include material management (excavating weathered rock in excavations and covering weathered rock in the RSEM R5B, RSEM R5A, RSEM L5 and RSEM L5 Extension deposition areas), water management to contain water that may be influenced by ARD/ML, and water treatment to remove total and dissolved metals.

Material management is the primary ARD/ML mitigation strategy on site. Weathered material (material that has been exposed for several months and is becoming acidic) is monitored and periodically excavated from the construction area. In addition, material that is placed in RSEM disposal areas is monitored, and weathered material is covered with newly placed PAG bedrock or overburden.

Water management is a secondary mitigation strategy. Surface water quality is monitored. 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 is treated by the Mobile Water Treatment Facility (MWTF) prior to discharge.

On the right bank the MWTF effectively treated water to remove dissolved metals and produced RSEM EOP effluent that met the Discharge Limits. The accumulated sludge in the MWTF Sludge Pond was removed and transferred to RSEM Area R5A stockpile.

The Left Bank waters are moderately PAG influenced, however, the RSEM L5E sediment control pond discharge only exceeded RSEM EOP limits due to the effects of ARD on two occasions, in mid-June and again in early July. Regrading and covering of PAG within RSEM Area L5 and L5 Extension has reduced the risk of this circumstance repeating in 2021. Water management limited discharge from RSEM Area L5W and L6 sediment control ponds and PAG influenced waters from the Left Bank were treated for dissolved metals prior to discharge through an RSEM sediment control pond.

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. Sparging was implemented in the CVC process waters and RCC Excavation on the Right Bank and at the DIC and DOC on the Left Bank.

6.5 Recommendations

In its role as Qualified Professional for ARD/ML, Lorax provided a number of recommendations through 2020. These have been communicated in technical memorandums, weekly conference calls, and in email correspondence. Key recommendations are summarized for the Left Bank and Right Bank below and reflect ongoing ARD/ML monitoring and management priorities.

- 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 2021 ARD/ML sampling plan that outlines adjustments to sampling frequency and locations as site development proceeds;
- The AG rock exposed in the areas adjacent to RSEM Area R5B should be excavated (if within the Approach Channel footprint) or 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 MWTF should be continued until final mitigation is implemented.
- Continued monitoring of exposed PAG placed in RSEM Area R5A and RSEM Area L5 and L5 Extension should be used to direct placement of new material to limit weathering and water contact with AG material. The RSEM design requires that the excavated bedrock is placed in 5 m thick layers and the surface compacted with 6 passes of a heavy vibratory compactor, which will limit the rate of infiltration. The final surface cover material should be NPAG material rather than fresh PAG material to reduce the amount of PAG-influenced runoff and lower risk of a water treatment requirement through to the end of construction when the final mitigation will be applied, flooding of the RSEMs.
- The selected mitigation from LBEX Bench 0 area is water management. The strategy is to collect water from Bench 0 transport it to the MWTF, which ensures it is discharged through an RSEM sediment pond. Monitoring of water in this area is recommended.
- Material placement in RSEM Area L6 has reached capacity and a NPAG cover has been placed over the facility. It is recommended that PRHP confirm that the surface of the RSEM and adjacent areas where precipitation runoff is directed to the RSEM L6 sediment control pond are fully covered to reduce the risk from L6 discharge.
- Runoff from weathered bedrock exposed in the Approach Channel will continue to require treatment at the MWTF. Significant excavations in the Approach Channel are expected for 2021 that should reduce the area of weathered AG bedrock exposed in the Approach Channel through 2021.

- 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 current water quality monitoring program includes the collection of daily samples from PAG containing RSEM sediment ponds that are sent to an accredited laboratory where they are analysed for total and dissolved metals, pH, TSS, sulphate, nitrates, conductivity, temperature, and hardness. Appendix E of the CEMP section 7.3.2 requires collection of data at an appropriate interval, sufficient to document changes due to weather events, construction activities, seasonal variability, following adverse events. Exceedance of EOP Discharge Limits for laboratory analytical parameters in 2020 were typically multi-day events that would be documented by collecting one sample on a two-day frequency. Short-term excedances in 2020 that would not have been documented by a two-day sampling frequency were associated with a minute discharge volume (RSEM R5A Pond B, July 3rd), a concentration within 0.001 mg/L of the discharge limit (RSEM R6W pond, June 24th) or suspected sample contamination (RSEM R6E pond, November 3rd). Therefore, based on the regulatory guidance and a review of the duration of exceedances from PAG containing RSEM sediment ponds in 2020, it is recommended that the frequency of sample collection for the laboratory analyses above be reduced from daily to one sample every two days.
- Field blanks should continue to be frequently collected to monitor the occurence of contaminants in the monitoring program (*e.g.*, T-Zn). Additional studies and further enhancements to field QC (*e.g.*, including but not limited to trip blanks and additional field duplicates) are recommended if there is an increase in the frequency and magnitude of contaminants detected by QC samples, or suspected based on data trends.
- Additional measures should be implemented to accelerate and maintain sample cooling during warmer summer months, 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.
- A minimum water quality monitoring frequency should be set to quarterly for all potential off-site discharge locations including RSEM Area sediment control ponds that are managed not to discharge and the Area 30 sediment control pond.
- A minimum monthly monitoring frequency should be set for field measurements at all active on-site surface water quality monitoring stations.

7. Closure

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7. Closure

This report was prepared for the use of PRHP, which has the right to reproduce, use and rely upon this ARD/ML Management 2020 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 BV. Please contact the undersigned should you have any questions or concerns or require additional information in support of this work.

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Appendices

PEACE RIVER
HYDRO PARTNERS

Appendix 1-A: 2020 RSEM Sediment Control Pond Daily Discharge

PEACE RIVER
HYDRO PARTNERS

Appendix 1-A: 2020 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)						
2020-01-01		0.87	18.40				
2020-01-02		0.79	18.05				
2020-01-03		1.96	17.72				
2020-01-04		6.65	13.23				
2020-01-05		7.48	11.06				
2020-01-06		4.69	15.73				
2020-01-07		4.49	13.57				
2020-01-08		4.33	15.90				
2020-01-09		5.09	16.55				
2020-01-10		5.96	14.61				
2020-01-11		3.78	7.26				
2020-01-12		3.58	5.95				
2020-01-13		3.96	9.04				
2020-01-14		4.23	7.88				
2020-01-15		4.07	5.62				
2020-01-16		3.36	5.14				
2020-01-17		2.95	2.78				
2020-01-18		3.51	6.45				
2020-01-19		2.63	6.45				
2020-01-20		3.91	6.89				
2020-01-21		3.54	12.94				
2020-01-22		0.92	9.58				
2020-01-23		0.82	7.67				
2020-01-24		0.86	7.55				
2020-01-25		0.82	9.91				
2020-01-26		1.65	12.64				
2020-01-27		1.81	8.18				
2020-01-28		1.19	8.53				
2020-01-29		2.90	7.66				
2020-01-30		3.05	11.26				
2020-01-31		3.04	12.88				
2020-02-01		1.63	9.75				
2020-02-02		1.38	11.46				
2020-02-03		0.72	8.97				
2020-02-04		0.18	4.32				
2020-02-05		0.25	3.31				
2020-02-06		0.39	6.70				
2020-02-07		0.73	7.00				
2020-02-08		4.00	3.49				
2020-02-09		5.00	1.89				
2020-02-10		9.98	0.29				
2020-02-11		0.50					
2020-02-12		0.50					
2020-02-13		10.00					
2020-02-14		10.00					
2020-02-15		22.00					
2020-02-16		20.00					
2020-02-17		12.00					
2020-02-18		3.90					
2020-02-19		4.18					
2020-02-20		6.55					
2020-02-21		6.45					
2020-02-22			5.00				
2020-02-23		6.26	7.76				
2020-02-24		5.10	3.55				
2020-02-25		6.69	3.63				
2020-02-26		6.06	3.62				
2020-02-27		9.21	6.91				
2020-02-28		5.68	7.28				
2020-02-29		8.19	11.58				
2020-03-01		3.91	5.30				
2020-03-02		8.00	4.58				
2020-03-03		8.00	9.85				
2020-03-04		7.00	7.41				
2020-03-05		6.00	1.82				
2020-03-06		5.00					
2020-03-07		4.40					
2020-03-08		4.40					
2020-03-09		4.50					
2020-03-10		4.00	4.00				
2020-03-11		5.00	9.80				
2020-03-12		5.00	0.20				
2020-03-13		6.00	0.20				

Appendix 1-A: 2020 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)						
2020-03-14		7.50					
2020-03-15		8.06					
2020-03-16		8.16	3.90				
2020-03-17		7.20	7.37				
2020-03-18		6.82	8.55				
2020-03-19		3.51	1.39				
2020-03-20		3.65	3.91				
2020-03-21		10.31	4.58				
2020-03-22		10.39	9.66				
2020-03-23		7.12	5.39				
2020-03-24		4.47	1.71				
2020-03-25		7.82	3.39				
2020-03-26		14.12	4.57				
2020-03-27		8.39	6.45				
2020-03-28		6.50	0.50				
2020-03-29		6.42					
2020-03-30		7.85					
2020-03-31		6.10					
2020-04-01		6.41					
2020-04-02		5.76					
2020-04-03		4.92					
2020-04-04		5.66					
2020-04-05		4.00					
2020-04-06		2.46	1.60				
2020-04-07		11.73	8.32				
2020-04-08		25.32	7.37				
2020-04-09		22.00	7.36				
2020-04-10		2.26	10.22				
2020-04-11		1.53	9.32				
2020-04-12		7.93	7.84				
2020-04-13		13.61	7.44		2.50		
2020-04-14		15.56	8.57		3.02		
2020-04-15		15.01	8.82		3.46		
2020-04-16		7.31	11.65		2.60		
2020-04-17		3.89	12.08		2.97		
2020-04-18		2.52	9.78		2.55		
2020-04-19		1.97	7.41		2.27	0.98	
2020-04-20		1.44	7.53		1.91		
2020-04-21		0.37	10.29		1.36		
2020-04-22		4.28	10.44		1.93		
2020-04-23		3.39	7.95		0.60		
2020-04-24		3.44	9.12		1.08		
2020-04-25		2.55	8.77		1.00		
2020-04-26		2.42	8.17	1.36	0.84		
2020-04-27		5.17	6.83	4.80	0.96		
2020-04-28		3.48	4.83	2.02	0.53		
2020-04-29		2.74	3.80	0.60	0.20		
2020-04-30		0.18	2.87	0.52	0.17		
2020-05-01		0.31		4.28	0.10		
2020-05-02		0.13		4.18	0.04		
2020-05-03		0.02		0.41	5.10		
2020-05-04		0.50		0.46	4.40		
2020-05-05				0.53	9.43		
2020-05-06				0.60	13.36		
2020-05-07		0.31		0.71	10.18		
2020-05-08		0.67		1.02	9.77		
2020-05-09		0.88		10.86	25.50		
2020-05-10		0.18		12.63	18.39		
2020-05-11		0.50		12.77	13.30		
2020-05-12		0.50		13.37	27.10		
2020-05-13		0.01		14.83	35.95		
2020-05-14				12.71	26.69		
2020-05-15		0.01		14.28	29.82		
2020-05-16		0.20		17.59	3.29		
2020-05-17		0.20		19.09	1.33		
2020-05-18		0.10		17.49	0.39		
2020-05-19				12.80	0.10		
2020-05-20				11.14	0.11		
2020-05-21				22.01	0.39		
2020-05-22			8.14	22.54	0.59		
2020-05-23			10.78	22.73	0.62		
2020-05-24			9.35	22.28	0.24		
2020-05-25			8.41	16.30	0.07		

Appendix 1-A: 2020 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)						
2020-05-26			8.36	8.82			
2020-05-27			7.88	8.45			
2020-05-28			9.09	7.27			
2020-05-29			6.17	6.74			
2020-05-30			7.17	5.86			
2020-05-31			8.62	5.96			
2020-06-01			8.53	6.63			
2020-06-02			7.52	6.94			
2020-06-03			6.05	7.17			
2020-06-04			5.64	7.88			
2020-06-05			4.82	7.18			
2020-06-06			7.38	9.92			
2020-06-07			7.68	12.38			
2020-06-08			8.59	17.23			
2020-06-09		0.50	8.05	17.12	2.75		
2020-06-10			8.93	12.87	2.63		
2020-06-11			10.85	11.47	0.97		
2020-06-12			11.56	12.12	0.31		
2020-06-13			10.31	21.86	0.10		
2020-06-14		24.28	25.53	33.96	19.86		
2020-06-15		33.98	20.13	42.35	33.59		
2020-06-16		14.64	23.40	24.55	15.93		
2020-06-17		2.13	24.31	24.50	10.47		3.40
2020-06-18		1.71	24.53	23.72	6.52		4.50
2020-06-19		2.62	19.32	21.68	20.09		1.40
2020-06-20		0.90	17.03	22.56	20.10		3.40
2020-06-21		0.31	20.00	20.96	12.51		0.51
2020-06-22		1.00	19.25	21.71	3.67		0.20
2020-06-23		1.00	21.16	22.05	0.94		0.02
2020-06-24		0.50	17.05	22.59	0.36		
2020-06-25		0.20	18.20	22.94	0.04		
2020-06-26		0.15	18.68	22.94	0.01		
2020-06-27		0.13	18.82	23.05			17.15
2020-06-28		1.62	19.11	22.32			
2020-06-29		0.78	20.03	23.08			
2020-06-30	2.98	5.14	26.50	51.84			
2020-07-01	2.98	24.10	9.95	12.96	2.03		
2020-07-02		10.26	22.54		23.77		
2020-07-03	0.10	35.30	97.57	11.15	64.11	2.80	
2020-07-04	5.25	26.79	73.25	22.77	47.31	0.90	
2020-07-05	12.00	9.28	54.79	18.57	56.57	3.40	
2020-07-06	6.00	6.39	56.79	16.53	11.26	2.28	
2020-07-07		6.01	57.41	17.84	2.56	4.85	
2020-07-08		3.51	57.24	18.43	0.33	1.85	
2020-07-09		5.25	58.41	20.77			
2020-07-10		4.55	57.62	18.40			
2020-07-11		4.03	52.48	17.65			
2020-07-12		4.31	48.82	23.19			
2020-07-13		5.29	46.93	21.65			
2020-07-14		4.59	39.90	17.23			
2020-07-15		6.27	37.29	17.69			
2020-07-16		7.78	48.36	18.18			
2020-07-17		7.82	32.50	26.20			
2020-07-18		5.38	38.34	18.50			
2020-07-19		6.08	31.51	20.74			
2020-07-20		7.30	25.61	17.61			
2020-07-21		5.97	26.78	19.41	14.30		
2020-07-22		4.80	22.80	17.94	30.23		
2020-07-23		3.60	18.95	17.68	23.50		
2020-07-24		2.73	14.14	17.17	3.00		
2020-07-25		2.12	24.41	17.15			
2020-07-26		2.45	18.98	24.24			
2020-07-27		2.82	16.42	17.00			
2020-07-28		2.29	17.63	16.81			
2020-07-29		1.48	15.32	14.27			
2020-07-30		1.28	14.74	12.09	21.00		
2020-07-31		1.08	16.55	6.48			
2020-08-01		1.41	15.83	11.38			
2020-08-02		1.68	14.77	20.75			
2020-08-03		2.70	16.35	15.80			
2020-08-04		1.17	16.18	17.67			
2020-08-05		0.50	16.16	17.33			
2020-08-06		0.48	16.32	16.21			

Appendix 1-A: 2020 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)						
2020-08-07		0.55	17.82	15.76			
2020-08-08		0.18	17.94	15.55			
2020-08-09		0.43	15.02	15.43			
2020-08-10		0.09	8.12	15.67			
2020-08-11		0.11	6.72	15.58			
2020-08-12		0.50	6.72	15.63			
2020-08-13		0.50	6.88	11.62			
2020-08-14		0.50	7.38	4.73			
2020-08-15		1.00	7.20	10.86			
2020-08-16		1.00	7.23	15.55			
2020-08-17		0.50	7.37	15.16			
2020-08-18		0.50	7.48	15.49			
2020-08-19			6.88	13.28			
2020-08-20			6.81	15.10			
2020-08-21			15.76	19.29			
2020-08-22			15.03	26.72			
2020-08-23		0.50	10.64	15.60			
2020-08-24		1.50	13.34	3.79			
2020-08-25		0.40	12.13	14.02			
2020-08-26		0.40	22.85	15.71			
2020-08-27		0.30	17.69	13.85			
2020-08-28		0.50	11.78	4.82			
2020-08-29		3.00	12.03	0.96	0.50		
2020-08-30		0.50	12.10	5.47	0.50		
2020-08-31		0.50	13.78	15.02	1.00		
2020-09-01		0.20	11.80	13.65	4.00		
2020-09-02		0.20	12.01	8.62	4.00		
2020-09-03		0.10	11.83	3.57	4.00		
2020-09-04		0.10	4.83	2.36			
2020-09-05			10.58	2.73			
2020-09-06			11.69	7.48			
2020-09-07			11.34	7.25			
2020-09-08			11.01	15.72			
2020-09-09			11.10	15.81			
2020-09-10			10.59	18.42			
2020-09-11			9.22	17.87			
2020-09-12			9.27	16.47			
2020-09-13			12.31	16.01			
2020-09-14			19.67	17.41			
2020-09-15			20.09	16.01			
2020-09-16			21.05	16.17			
2020-09-17			21.41	16.15			
2020-09-18			20.53	15.86			
2020-09-19			10.75	16.15			
2020-09-20			11.56	15.89			
2020-09-21			10.15	16.05			
2020-09-22			4.74	15.72			
2020-09-23			6.64	15.45			
2020-09-24			6.85	15.34			
2020-09-25			6.68	16.86			
2020-09-26			5.75	16.96			
2020-09-27			5.76	16.13			
2020-09-28			4.51	16.15			
2020-09-29			3.21	15.27			
2020-09-30			3.13	10.00			
2020-10-01			3.12	11.40			
2020-10-02			3.14	10.45			
2020-10-03			5.21	12.83			
2020-10-04			11.19	11.42			
2020-10-05			10.95	15.96			
2020-10-06			12.58	10.45			
2020-10-07			12.01	6.36			
2020-10-08			10.57	18.24			
2020-10-09			11.07	14.74			
2020-10-10			14.03	16.35			
2020-10-11			13.21	13.87			
2020-10-12			10.48	12.06			
2020-10-13			10.30	10.82			
2020-10-14			10.39	13.28			
2020-10-15			10.88	13.84			
2020-10-16			10.69	12.67			
2020-10-17			12.40	12.56			
2020-10-18			14.12	12.09			

Appendix 1-A: 2020 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)						
2020-10-19			10.31	8.36			
2020-10-20			10.58	8.71			
2020-10-21			12.74	8.66			
2020-10-22			13.91	8.67			
2020-10-23			11.43	8.55			
2020-10-24			11.44	8.62			
2020-10-25			11.37	8.01			
2020-10-26			13.02	7.23			
2020-10-27			11.60	14.88			
2020-10-28			11.15	18.02			
2020-10-29			13.71	20.36			
2020-10-30			13.78	13.66			
2020-10-31			11.15	9.72			
2020-11-01			13.59	5.82			
2020-11-02			29.66				
2020-11-03			33.68				
2020-11-04			32.89				
2020-11-05			14.73				
2020-11-06			11.43				
2020-11-07			11.10				
2020-11-08			9.07				
2020-11-09			9.53				
2020-11-10			9.68				
2020-11-11			8.68				
2020-11-12			8.80				
2020-11-13			8.53				
2020-11-14			9.74	0.11			
2020-11-15			10.92	8.69			
2020-11-16			12.07	14.79			
2020-11-17			3.77	21.94			
2020-11-18			2.33	21.48			
2020-11-19			1.96	13.75			
2020-11-20			2.33	16.74			
2020-11-21			1.55	12.61			
2020-11-22			1.81	11.06			
2020-11-23			2.08	11.41			
2020-11-24			4.54	10.73			
2020-11-25			1.52	9.27			
2020-11-26			9.54	7.35			
2020-11-27			17.34	7.95			
2020-11-28			16.65	7.27			
2020-11-29			12.38	8.98			
2020-11-30			10.09	12.47			
2020-12-01			14.37	7.27			
2020-12-02			12.88	9.09			
2020-12-03			11.57	7.40			
2020-12-04			8.40	7.69			
2020-12-05			10.74	12.46			
2020-12-06			10.15	12.88			
2020-12-07			16.41	13.85			
2020-12-08			19.23	12.25			
2020-12-09			16.89	11.56			
2020-12-10			14.57	10.55			
2020-12-11			6.93	11.21			
2020-12-12			2.01	9.89			
2020-12-13			3.52	8.41			
2020-12-14			2.33	7.63			
2020-12-15			2.05	7.71			
2020-12-16			1.89	4.89			
2020-12-17			1.83	5.28			
2020-12-18			2.37	12.00			
2020-12-19			2.61	5.99			
2020-12-20			3.40	6.49			
2020-12-21			1.54	6.92			
2020-12-22			4.28	5.82			
2020-12-23			3.82	5.93			
2020-12-24			4.33	5.72			
2020-12-25			5.17	5.59			
2020-12-26			4.41	5.38			
2020-12-27			2.64	5.28			
2020-12-28			4.78	5.34			
2020-12-29			4.53	6.89			
2020-12-30			4.60	6.27			
2020-12-31			3.70	7.55			

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

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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: 2020 Geochemistry Results

PEACE RIVER
HYDRO PARTNERS

Table 1: 2020 Rinse pH Results

Sample ID	Sample Location	Sample Type	Material Type	Sulphides Visible	Overburden Type	Easting	Northing	Date Sampled	Date Analyzed	Rinse_pH	Notes
Left Bank											
L5-2020-Apr-24-10	RSEM L5	RSEM Pile	Weathered Bedrock	No		629120	6230655	24-Apr-20	12-May-20	6.94	Duplicate pH: 6.93
L5-2020-Apr-24-11	RSEM L5	RSEM Pile	Weathered Bedrock	No		629104	6230615	24-Apr-20	12-May-20	9.67	
L5-2020-Apr-24-12	RSEM L5	RSEM Pile	Weathered Bedrock	No		629070	6230607	24-Apr-20	12-May-20	7.79	
L5-2020-Apr-24-13	RSEM L5	RSEM Pile	Weathered Bedrock	No		629053	6230654	24-Apr-20	12-May-20	9.41	
L5-2020-Apr-24-14	RSEM L5	RSEM Pile	Weathered Bedrock	No		629052	6230687	24-Apr-20	24-Apr-20	9.55	
L5-2020-Apr-24-15	RSEM L5	RSEM Pile	Weathered Bedrock	No		629072	6230649	24-Apr-20	12-May-20	9.55	Duplicate: 9.54
L5-2020-Apr-24-16	RSEM L5	RSEM Pile	Weathered Bedrock	Yes		629116	6230534	24-Apr-20	13-May-20	8.81	
L5-2020-Apr-24-17	RSEM L5	RSEM Pile	Weathered Bedrock	Yes		629091	6230543	24-Apr-20	17-May-20	8.61	
L5-2020-Apr-24-18	RSEM L5	RSEM Pile	Weathered Bedrock	No		629182	6230471	24-Apr-20	13-May-20	9.5	
L5-2020-Apr-24-19	RSEM L5	RSEM Pile	Weathered Bedrock	No		629155	6230446	24-Apr-20	13-May-20	9.58	
L5-2020-Apr-24-20	RSEM L5	RSEM Pile	Weathered Bedrock	Yes		629116	6230442	24-Apr-20	13-May-20	9.2	Duplicate: 9.12
L5-2020-Apr-24-21	RSEM L5	RSEM Pile	Weathered Bedrock	No		628991	6230523	24-Apr-20	13-May-20	7.79	
L5-2020-Apr-24-22	RSEM L5	RSEM Pile	Weathered Bedrock	No		629041	6230486	24-Apr-20	13-May-20	9.43	
L5-2020-Apr-24-23	RSEM L5	RSEM Pile	Weathered Bedrock	Yes		629055	6230459	24-Apr-20	13-May-20	8.46	
L5-2020-Apr-24-24	RSEM L5	RSEM Pile	Weathered Bedrock	Yes		629017	6230439	24-Apr-20	13-May-20	3.32	
L5-2020-Apr-24-25	RSEM L5	RSEM Pile	Weathered Bedrock	No		629086	6230397	24-Apr-20	13-May-20	3.13	Duplicate: 3.1
L5-2020-Apr-24-26	RSEM L5	RSEM Pile	Weathered Bedrock	No		629155	6230405	24-Apr-20	13-May-20	2.96	
L5-2020-July-26-06	RSEM L5	Active excavation area	Weathered Bedrock	No		629110	6230655	26-Jul-20	25-Aug-20	8.2	
L5-2020-July-26-07	RSEM L5	Active excavation area	Weathered Bedrock	No		629062	6230646	26-Jul-20	25-Aug-20	9.47	
L5-2020-July-26-08	RSEM L5	Active excavation area	Weathered Bedrock	No		629105	6230588	26-Jul-20	25-Aug-20	7.34	
L5-2020-July-26-09	RSEM L5	Active excavation area	Weathered Bedrock	No		629128	6230530	26-Jul-20	25-Aug-20	7.6	
L5-2020-July-26-10	RSEM L5	Active excavation area	Weathered Bedrock	No		629174	6230474	26-Jul-20	25-Aug-20	7.74	Duplicate pH 7.68
L5-2020-July-26-11	RSEM L5	Active excavation area	Weathered Bedrock	No		629021	6230701	26-Jul-20	25-Aug-20	7.92	
L5-2020-July-26-12	RSEM L5	Active excavation area	Weathered Bedrock	No		629020	6230706	26-Jul-20	25-Aug-20	9.46	
L5-2020-July-26-13	RSEM L5	Active excavation area	Weathered Bedrock	No		629182	6230426	26-Jul-20	25-Aug-20	7.52	
L5-2020-July-26-14	RSEM L5	Active excavation area	Weathered Bedrock	No		629197	6230437	26-Jul-20	25-Aug-20	6.5	
L5-2020-July-26-15	RSEM L5	Active excavation area	Weathered Bedrock	No		629188	6230366	26-Jul-20	25-Aug-20	7.15	Duplicate pH 7.18
L5-2020-July-26-16	RSEM L5	Active excavation area	Weathered Bedrock	No		628969	6230505	26-Jul-20	25-Aug-20	7.05	
L5-2020-July-26-17	RSEM L5	Active excavation area	Weathered Bedrock	No		628967	6230531	26-Jul-20	25-Aug-20	5.87	
L5-2020-Jun-17-81	RSEM L5	RSEM Pile	Overburden		Sand/Gravel	629097	6230777	17-Jun-20	23-Jun-20	8.22	
L5-2020-Jun-17-82	RSEM L5	RSEM Pile	Overburden		Sand/Gravel	629050	6230848	17-Jun-20	23-Jun-20	8.15	
L5-2020-Jun-17-83	RSEM L5	RSEM Pile	Overburden		Sand/Gravel	628978	6230861	17-Jun-20	23-Jun-20	8.04	
L5-2020-Jun-17-84	RSEM L5	RSEM Pile	Overburden		Sand/Gravel	628941	6230937	17-Jun-20	23-Jun-20	8.08	
L5-2020-Oct-07-14	RSEM L5	Active excavation area	Weathered Bedrock	No		629011.9	6230730.2	7-Oct-20	9-Oct-20	8.34	
L5-2020-Oct-07-15	RSEM L5	Active excavation area	Weathered Bedrock	No		629034.6	6230692.3	7-Oct-20	9-Oct-20	8.1	Sample Duplicate pH: 8.11
L5-2020-Oct-07-16	RSEM L5	Active excavation area	Weathered Bedrock	No		629039.3	6230667.2	7-Oct-20	9-Oct-20	6.53	
L5-2020-Oct-07-17	RSEM L5	Active excavation area	Weathered Bedrock	No		629113.4	6230491.5	7-Oct-20	9-Oct-20	7.35	
L5-2020-Oct-07-18	RSEM L5	Active excavation area	Weathered Bedrock	No		629098.5	6230540.9	7-Oct-20	9-Oct-20	7.5	
L5-2020-Oct-07-19	RSEM L5	Active excavation area	Weathered Bedrock	No		629077.9	6230647.7	7-Oct-20	9-Oct-20	8.06	
L5EX-2020-Apr-24-01	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	No		628456.6	6231338.4	24-Apr-20	12-May-20	9.89	
L5EX-2020-Apr-24-02	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	Yes		628444.6	6231338.4	24-Apr-20	12-May-20	7.54	
L5EX-2020-Apr-24-03	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	Yes		628403.3	6231242	24-Apr-20	12-May-20	6.69	
L5EX-2020-Apr-24-04	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	Yes		628484.6	6231124.9	24-Apr-20	12-May-20	5.13	
L5EX-2020-Apr-24-05	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	No		628593.6	6231059.9	24-Apr-20	12-May-20	8.71	Duplicate 8.72
L5EX--2020-Apr-24-06	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	No		628657.2	6231147.9	24-Apr-20	12-May-20	9.6	
L5EX-2020-Apr-24-07	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	No		628627.7	6231265.2	24-Apr-20	12-May-20	8.4	
L5EX-2020-Apr-24-08	RSEM L5 Extension	RSEM Pile	Weathered Bedrock	No		628689.9	6231212.1	24-Apr-20	12-May-20	9.98	
L5EX-2020-July-31-26	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628460	6231363	31-Jul-20	27-Aug-20	6.75	
L5EX-2020-July-31-27	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628406	6231392	31-Jul-20	27-Aug-20	7.21	
L5EX-2020-July-31-28	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628591	6231250	31-Jul-20	27-Aug-20	4.07	
L5EX-2020-July-31-29	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628627	6231181	31-Jul-20	27-Aug-20	8.61	
L5EX-2020-July-31-30	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628605	6231279	31-Jul-20	27-Aug-20	7.2	Duplicate pH: 7.21
L5EX-2020-July-31-31	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628638	6231229	31-Jul-20	27-Aug-20	7.83	
L5EX-2020-Jun-17-85	RSEM L5 Extension	RSEM Pile	Transition (>50% shale)			628608	6231155	17-Jun-20	23-Jun-20	8.88	Sample Duplicate pH: 8.87
L5EX-2020-Jun-17-86	RSEM L5 Extension	RSEM Pile	Transition (>50% shale)			628522	6231232	17-Jun-20	23-Jun-20	6.11	
L5EX-2020-Jun-17-87	RSEM L5 Extension	RSEM Pile	Transition (>50% shale)			628511	6231283	17-Jun-20	23-Jun-20	7.64	
L5EX-2020-Oct-07-08	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628607.8	6231318.3	7-Oct-20	9-Oct-20	8.01	
L5EX-2020-Oct-07-09	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628582.1	6231260.7	7-Oct-20	9-Oct-20	7.5	
L5EX-2020-Oct-07-10	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628529.8	6231285.4	7-Oct-20	9-Oct-20	7.66	Sample Duplicate pH: 7.65
L5EX-2020-Oct-07-11	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628637.2	6231205.1	7-Oct-20	9-Oct-20	7.9	
L5EX-2020-Oct-07-12	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628726.9	6231173.1	7-Oct-20	9-Oct-20	9.22	
L5EX-2020-Oct-07-13	RSEM L5 Extension	Active excavation area	Weathered Bedrock	No		628747.5	6231135.6	7-Oct-20	9-Oct-20	9.6	
L5-2020-Oct-22-76	RSEM L5 Extension	Exposed Surface	Overburden		Sand/Gravel	628560	6231225	22-Oct-20	31-Oct-20	7.13	

Table 1: 2020 Rinse pH Results

Sample ID	Sample Location	Sample Type	Material Type	Sulphides Visible	Overburden Type	Easting	Northing	Date Sampled	Date Analyzed	Rinse_pH	Notes
L5-2020-Oct-22-77	RSEM L5 Extension	Exposed Surface	Overburden		Sand/Gravel	628577	6231191	22-Oct-20	31-Oct-20	7.04	
Left Bank Cofferdam	Central Cofferdam/Left Bank Dam Core(LBDC)		Weathered Bedrock			629579	6230249	16-Jan-20	7-Mar-20	3.05	
LBCD-2020-Apr-30-74	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	No		629519	6230106	30-Apr-20	14-May-20	5.52	
LBCD-2020-Apr-30-75	Central Cofferdam/Left Bank Dam Core(LBDC)	Exposed Surface	Weathered Bedrock	No		629561	6230120	30-Apr-20	14-May-20	9.56	Sample Duplicate: 9.63
LBCD-2020-Apr-30-76	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	N/A		629652.9	6230017.9	30-Apr-20	14-May-20	9.74	
LBCD-2020-Apr-30-77	Central Cofferdam/Left Bank Dam Core(LBDC)	Exposed Surface	Weathered Bedrock	No		629700	6230113	28-Apr-20	14-May-20	9.94	
LBCD-2020-Apr-30-78	Central Cofferdam/Left Bank Dam Core(LBDC)	Exposed Surface	Weathered Bedrock	N/A		629699.2	6230167.5	30-Apr-20	14-May-20	9.93	
LBDC-2020-July-24-01	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	Yes		629583	6230134	24-Jul-20	25-Aug-20	3.44	
LBDC-2020-July-24-02	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	Yes		629592	6230124	24-Jul-20	25-Aug-20	6.2	
LBDC-2020-July-24-03	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	No		629715	6230070	24-Jul-20	25-Aug-20	7.75	
LBDC-2020-July-24-05	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	No		629698	6230112	24-Jul-20	25-Aug-20	6.52	Duplicate 6.52
LBDC-2020-Oct-07-62	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	Yes		629606.6	6230114.1	7-Oct-20	10-Oct-20	8.06	
LBCD-2020-Oct-07-63	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	Yes		629553	6230142	7-Oct-20	10-Oct-20	7.74	
LBDC-2020-Oct-07-64	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	Yes		629688	6230114	7-Oct-20	10-Oct-20	8.66	
LBDC-2020-Oct-07-65	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	No		629610.6	6230091.1	7-Oct-20	10-Oct-20	8.15	Sample Duplicate pH: 8.15
LBDC-2020-Oct-07-66	Central Cofferdam/Left Bank Dam Core(LBDC)	Active excavation area	Weathered Bedrock	No		629689.7	6230159.2	7-Oct-20	10-Oct-20	8.07	
L5EX-2020-Apr-24-09	Left Bank Excavation	RSEM Pile	Weathered Bedrock	Yes		629429	6230567	24-Apr-20	12-May-20	2.13	
LBEX-2020-Oct-07-06	Left Bank Excavation	Active excavation area	Overburden		Sand/Silt	629810.3	6230266.7	7-Oct-20	9-Oct-20	6.73	
LBEX-2020-Oct-07-07	Left Bank Excavation	Active excavation area	Overburden		Sand/Silt	629855.1	6230208.6	7-Oct-20	9-Oct-20	7.15	
GCE-2020-Oct-08-67	Garbage Creek Excavation	Exposed Surface	Weathered Bedrock	No		629185	6230585	7-Oct-20	10-Oct-20	7.41	
GCE-2020-Oct-08-68	Garbage Creek Excavation	Exposed Surface	Weathered Bedrock	No		629164	6230550	7-Oct-20	10-Oct-20	7.34	
Left Bank Drainage Adit	Left Bank Drainage Adit		Weathered Bedrock			629906	6230038	16-Jan-20	7-Mar-20	5.05	
Right Bank											
R5A-2020-Apr-29-47	RSEM R5a	RSEM Pile	Weathered Bedrock	No		628044.8	6230693.2	29-Apr-20	15-May-20	8.58	
R5A-2020-Apr-29-48	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627205.8	6231752.5	29-Apr-20	15-May-20	8.8	
R5A-2020-Apr-29-49	RSEM R5a	RSEM Pile	Weathered Bedrock	Yes		627169.4	6231652.9	29-Apr-20	15-May-20	8.24	
R5A-2020-Apr-29-50	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627046.4	6231847.8	29-Apr-20	13-May-20	7.16	Duplicate 7.19
R5A-2020-Apr-29-51	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627070.2	6231829.5	29-Apr-20	13-May-20	7.27	
R5A-2020-Apr-29-52	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627264.4	6231602.2	29-Apr-20	13-May-20	7.42	
R5A-2020-Apr-29-53	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627334.1	6231567.4	29-Apr-20	13-May-20	7.79	
R5A-2020-Apr-29-54	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627390.9	6231475.8	29-Apr-20	13-May-20	9.26	
R5A-2020-Apr-29-55	RSEM R5a	RSEM Pile	Weathered Bedrock	Yes		627484.3	6231413.5	29-Apr-20	13-May-20	9.29	Duplicate 9.27
R5A-2020-Apr-29-56	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627495.3	6231442.8	29-Apr-20	13-May-20	8.32	
R5A-2020-Apr-29-57	RSEM R5a	RSEM Pile	Weathered Bedrock	Yes		627452.4	6231237.3	29-Apr-20	13-May-20	3.48	
R5A-2020-Apr-29-58	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627477.1	6231191.5	29-Apr-20	13-May-20	9.39	
R5A-2020-Apr-29-59	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627574.9	6231350.3	29-Apr-20	13-May-20	8.2	
R5A-2020-Apr-29-60	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627654.1	6231126.1	29-Apr-20	14-May-20	9.73	Duplicate 9.7
R5A-2020-Apr-29-61	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627755.7	6231101.8	29-Apr-20	14-May-20	8.1	
R5A-2020-Apr-29-62	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627731.4	6231068.9	29-Apr-20	14-May-20	9.41	
R5A-2020-Apr-29-63	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627830.7	6231013.1	29-Apr-20	14-May-20	9.7	
R5A-2020-Apr-29-64	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627780.4	6230856.1	29-Apr-20	14-May-20	9.24	
R5A-2020-Apr-29-65	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627899.3	6230815	29-Apr-20	14-May-20	8.93	Duplicate 8.88
R5A-2020-Apr-29-66	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627826.1	6230885	29-Apr-20	14-May-20	8.24	
R5A-2020-Apr-29-67	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627773.1	6230956.8	29-Apr-20	14-May-20	9.72	
R5A-2020-Apr-29-68	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627806.9	6230972.8	29-Apr-20	14-May-20	8.74	
R5A-2020-Apr-29-69	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627833.9	6230994.8	29-Apr-20	14-May-20	9.24	
R5A-2020-Apr-29-70	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627929.5	6230871.2	29-Apr-20	14-May-20	7.1	Duplicate 7.15
R5A-2020-Apr-29-71	RSEM R5a	RSEM Pile	Weathered Bedrock	No		628128.6	6230599	29-Apr-20	14-May-20	7.7	
R5A-2020-Apr-29-72	RSEM R5a	RSEM Pile	Weathered Bedrock	No		628181.2	6230476.8	29-Apr-20	14-May-20	7.99	
R5A-2020-Apr-29-73	RSEM R5a	RSEM Pile	Weathered Bedrock	No		628212.3	6230340.5	29-Apr-20	14-May-20	8.59	
R5A-Dyke-2020-Aug-04-32	RSEM R5a	Active excavation area	Weathered Bedrock	No		627413	6231820	4-Aug-20	27-Aug-20	8.86	
R5A-Dyke-2020-Aug-04-33	RSEM R5a	Active excavation area	Weathered Bedrock	No		628040	6230918	4-Aug-20	27-Aug-20	8.27	
R5A-Dyke-2020-Aug-04-34	RSEM R5a	Active excavation area	Weathered Bedrock	No		628223	6230639	4-Aug-20	27-Aug-20	6.44	
R5A-2020-Aug-07-58	RSEM R5a	Active excavation area	Weathered Bedrock	No		627559	6231367	7-Aug-20	27-Aug-20	7.78	
R5A-2020-Aug-07-59	RSEM R5a	Active excavation area	Weathered Bedrock	No		627643	6231173	7-Aug-20	27-Aug-20	8.89	
R5A-2020-Aug-07-60	RSEM R5a	Active excavation area	Weathered Bedrock	No		627354	6231448	7-Aug-20	27-Aug-20	7.75	Duplicate pH: 7.76
R5A-2020-Aug-07-61	RSEM R5a	Active excavation area	Weathered Bedrock	No		627357	6231457	7-Aug-20	27-Aug-20	7.77	
R5A-2020-Aug-07-62	RSEM R5a	Active excavation area	Weathered Bedrock	No		627414	6231359	7-Aug-20	27-Aug-20	6.11	
R5A-2020-Aug-07-63	RSEM R5a	Active excavation area	Weathered Bedrock	No		627652	6231131	7-Aug-20	27-Aug-20	6.95	
R5A-2020-Aug-07-64	RSEM R5a	Active excavation area	Weathered Bedrock	No		627675	6231105	7-Aug-20	27-Aug-20	6.91	
R5A-2020-Aug-07-65	RSEM R5a	Active excavation area	Weathered Bedrock	No		627754	6231028	7-Aug-20	27-Aug-20	8.13	Duplicate pH: 8.14
R5A-2020-Aug-07-66	RSEM R5a	Active excavation area	Weathered Bedrock	No		627754	6230999	7-Aug-20	27-Aug-20	7.76	
R5A-2020-Aug-07-67	RSEM R5a	Active excavation area	Weathered Bedrock	No		627824	6231027	7-Aug-20	27-Aug-20	8.14	
R5A-2020-Aug-07-68	RSEM R5a	Active excavation area	Weathered Bedrock	No		628049	6230707	7-Aug-20	27-Aug-20	7.15	
R5A-2020-Aug-07-69	RSEM R5a	Active excavation area	Weathered Bedrock	No		627548	6231530	7-Aug-20	27-Aug-20	8.96	

Table 1: 2020 Rinse pH Results

Sample ID	Sample Location	Sample Type	Material Type	Sulphides Visible	Overburden Type	Easting	Northing	Date Sampled	Date Analyzed	Rinse_pH	Notes
R5A-2020-Aug-07-70	RSEM R5a	Active excavation area	Weathered Bedrock	No		627568	6231521	7-Aug-20	27-Aug-20	9.11	Duplicate pH: 9.13
R5A-2020-Aug-07-71	RSEM R5a	Active excavation area	Weathered Bedrock	No		627602	6231546	7-Aug-20	27-Aug-20	6.12	
R5A-2020-Aug-07-72	RSEM R5a	Active excavation area	Weathered Bedrock	No		627541	6231603	7-Aug-20	27-Aug-20	7.91	
R5A-2020-Aug-08-73	RSEM R5a	Active excavation area	Weathered Bedrock	No		628330	6230367	8-Aug-20	27-Aug-20	5.65	
R5A-2020-Aug-08-74	RSEM R5a	Active excavation area	Weathered Bedrock	No		628348	6230480	8-Aug-20	27-Aug-20	7.41	
R5A-2020-Aug-08-75	RSEM R5a	Active excavation area	Weathered Bedrock	No		628250	6230596	8-Aug-20	27-Aug-20	6.93	Duplicate pH: 7.20
R5A-2020-Aug-08-76	RSEM R5a	Active excavation area	Weathered Bedrock	No		628140	6230825	8-Aug-20	27-Aug-20	6.71	
R5A-2020-Aug-08-77	RSEM R5a	Active excavation area	Weathered Bedrock	No		628095	6230875	8-Aug-20	27-Aug-20	6.92	
R5A-2020-Aug-08-78	RSEM R5a	Active excavation area	Weathered Bedrock	No		628015	6230985	8-Aug-20	27-Aug-20	6.97	
R5A-2020-Aug-08-79	RSEM R5a	Active excavation area	Weathered Bedrock	No		627952	6231085	8-Aug-20	27-Aug-20	7.04	
R5A-2020-Aug-08-80	RSEM R5a	Active excavation area	Weathered Bedrock	No		627763	6231270	8-Aug-20	27-Aug-20	6.11	Duplicate pH: 6.13
R5A-2020-Oct-07-20	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627090.7	6231821.7	7-Oct-20	9-Oct-20	7.67	Sample Duplicate pH: 7.66
R5A-2020-Oct-07-21	RSEM R5a	RSEM Pile	Weathered Bedrock	Yes		627273.6	6231780.2	7-Oct-20	9-Oct-20	3.33	
R5A-2020-Oct-07-22	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627576.3	6231366.6	7-Oct-20	9-Oct-20	6.4	
R5A-2020-Oct-07-23	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627372.6	6231605.2	7-Oct-20	9-Oct-20	6.77	
R5A-2020-Oct-07-24	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627382.8	6231538.3	7-Oct-20	9-Oct-20	7.48	
R5A-2020-Oct-07-25	RSEM R5a	RSEM Pile	Weathered Bedrock	Yes		627226.6	6231625.6	7-Oct-20	9-Oct-20	7.59	Sample Duplicate pH: 7.59
R5A-2020-Oct-07-26	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627235.6	6231503.8	7-Oct-20	9-Oct-20	6.05	
R5A-2020-Oct-07-27	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627432.1	6231355.1	7-Oct-20	9-Oct-20	6.2	
R5A-2020-Oct-07-28	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627613.8	6231246.3	7-Oct-20	9-Oct-20	6.44	
R5A-2020-Oct-07-29	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627649.1	6231124.4	7-Oct-20	9-Oct-20	6.68	
R5A-2020-Oct-07-30	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627674	6231069	7-Oct-20	9-Oct-20	7.96	Sample Duplicate pH: 7.97
R5A-2020-Oct-07-31	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627747.5	6231068.1	7-Oct-20	9-Oct-20	7.59	
R5A-2020-Oct-07-32	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627910	6230903	7-Oct-20	9-Oct-20	7.52	
R5A-2020-Oct-07-33	RSEM R5a	RSEM Pile	Weathered Bedrock	No		628111.4	6230624.1	7-Oct-20	9-Oct-20	7.34	
R5A-2020-Oct-07-34	RSEM R5a	RSEM Pile	Weathered Bedrock	No		627797.7	6230877.3	7-Oct-20	9-Oct-20	7.88	
R5A-2020-Oct-07-35	RSEM R5a	RSEM Pile	Weathered Bedrock	No		628211.6	6230383.5	7-Oct-20	9-Oct-20	5.83	Sample Duplicate pH: 5.85
R5A-2020-Oct-22-69	RSEM R5a	RSEM Pile	Overburden		Sand/Gravel	627887	6231129	22-Oct-20	31-Oct-20	7.84	
R5A-2020-Oct-22-70	RSEM R5a	RSEM Pile	Overburden		Sand/Gravel	627902	6231117	22-Oct-20	31-Oct-20	7.85	Sample Duplicate pH: 7.83
R5A-2020-Oct-22-71	RSEM R5a	RSEM Pile	Overburden		Sand/Gravel	628097	6230833	22-Oct-20	31-Oct-20	7.64	
R5A-2020-Oct-22-72	RSEM R5a	RSEM Pile	Overburden		Sand/Gravel	628270	6230563	22-Oct-20	31-Oct-20	8.32	
R5A-2020-Oct-22-73	RSEM R5a	RSEM Pile	Overburden		Sand/Gravel	628305	6230500	22-Oct-20	31-Oct-20	8.27	
AC-2020-Apr-27-27	Approach Channel	Active excavation area	Weathered Bedrock	Yes		629108.4	6229273.5	27-Apr-20	13-May-20	6.94	
AC-2020-Apr-27-28	Approach Channel	Active excavation area	Weathered Bedrock	No		629120.8	6229259.2	27-Apr-20	13-May-20	7.14	
AC-2020-Apr-27-29	Approach Channel	Active excavation area	Weathered Bedrock	No		629176.1	6229202.6	27-Apr-20	13-May-20	2.86	
AC-2020-Apr-27-30	Approach Channel	Active excavation area	Weathered Bedrock	No		629220.6	6229171	27-Apr-20	13-May-20	2.6	Duplicate 2.59
AC-2020-Apr-27-31	Approach Channel	Active excavation area	Weathered Bedrock	No		629044	6229167	27-Apr-20	15-May-20	6.66	
AC-2020-Apr-27-32	Approach Channel	Active excavation area	Weathered Bedrock	No		629086.1	6229291.3	27-Apr-20	15-May-20	7.48	
AC-2020-Apr-27-33	Approach Channel	Active excavation area	Weathered Bedrock	No		629599.4	6228971.5	27-Apr-20	15-May-20	7.82	
AC-2020-Apr-27-34	Approach Channel	Active excavation area	Weathered Bedrock	No		629494.7	6229088.7	27-Apr-20	15-May-20	6.87	
AC-2020-Apr-27-35	Approach Channel	Active excavation area	Weathered Bedrock	No		629637.4	6228936.3	27-Apr-20	15-May-20	7.6	Duplicate 7.7
AC-2020-Apr-27-36	Approach Channel	Active excavation area	Weathered Bedrock	Yes		629525.8	6228992.1	27-Apr-20	15-May-20	2.78	
AC-2020-Apr-27-37	Approach Channel	Active excavation area	Weathered Bedrock	Yes		629476	6229012.3	27-Apr-20	15-May-20	6.46	
AC-2020-Apr-27-38	Approach Channel	Active excavation area	Weathered Bedrock	No		629438	6229044	27-Apr-20	15-May-20	2.2	
AC-2020-Apr-27-39	Approach Channel	Active excavation area	Weathered Bedrock	No		629392	6229057.5	27-Apr-20	15-May-20	6.21	
AC-2020-Apr-27-40	Approach Channel	Active excavation area	Weathered Bedrock	No		628960.8	6229460.1	27-Apr-20	15-May-20	6.39	Duplicate 6.36
AC-2020-Apr-27-41	Approach Channel	Active excavation area	Weathered Bedrock	No		628936.4	6229493.7	27-Apr-20	15-May-20	2.21	
AC-2020-Apr-27-42	Approach Channel	Active excavation area	Weathered Bedrock	Yes		628930.7	6229509.5	27-Apr-20	15-May-20	2.58	
AC-2020-Aug-05-41	Approach Channel	Active excavation area	Weathered Bedrock	No		629573	6228953	5-Aug-20	27-Aug-20	7.65	
AC-2020-Aug-05-42	Approach Channel	Active excavation area	Weathered Bedrock	No		629520	6228930	5-Aug-20	27-Aug-20	3.9	
AC-2020-Aug-05-43	Approach Channel	Active excavation area	Weathered Bedrock	No		629536	6228871	5-Aug-20	27-Aug-20	2.41	
AC-2020-Aug-05-44	Approach Channel	Active excavation area	Weathered Bedrock	No		629632	6228970	5-Aug-20	27-Aug-20	7.03	
AC-2020-Aug-05-45	Approach Channel	Active excavation area	Weathered Bedrock	Yes		629553	6229010	5-Aug-20	27-Aug-20	3.13	Duplicate pH: 3.13
AC-2020-Aug-05-46	Approach Channel	Active excavation area	Weathered Bedrock	No		629513	6228998	5-Aug-20	27-Aug-20	4.45	
AC-2020-Aug-05-47	Approach Channel	Active excavation area	Weathered Bedrock	No		629431	6229022	5-Aug-20	27-Aug-20	2.41	
AC-2020-Aug-05-48	Approach Channel	Active excavation area	Weathered Bedrock	No		629455	6229026	5-Aug-20	27-Aug-20	3.33	
AC-2020-Aug-05-49	Approach Channel	Active excavation area	Weathered Bedrock	No		629491	6229016	5-Aug-20	27-Aug-20	3.75	
AC-2020-Aug-05-50	Approach Channel	Active excavation area	Weathered Bedrock	No		629354	6229080	5-Aug-20	27-Aug-20	2.34	Duplicate pH: 2.35
AC-2020-Aug-05-51	Approach Channel	Active excavation area	Weathered Bedrock	No		629218	6229158	5-Aug-20	27-Aug-20	2.49	
AC-2020-Aug-05-52	Approach Channel	Active excavation area	Weathered Bedrock	No		629200	6229180	5-Aug-20	27-Aug-20	2.39	
AC-2020-Aug-05-53	Approach Channel	Active excavation area	Weathered Bedrock	No		629162	6229210	5-Aug-20	27-Aug-20	2.62	
AC-2020-Aug-05-54	Approach Channel	Active excavation area	Weathered Bedrock	No		629161	6229210	5-Aug-20	27-Aug-20	5.13	
AC-2020-Aug-05-55	Approach Channel	Active excavation area	Weathered Bedrock	No		629099	6229270	5-Aug-20	27-Aug-20	2.52	Duplicate pH: 2.50
AC-2020-Oct-07-36	Approach Channel	Active excavation area	Weathered Bedrock	No		629589.5	6228938.9	7-Oct-20	9-Oct-20	4.99	
AC-2020-Oct-07-37	Approach Channel	Active excavation area	Weathered Bedrock	No		629531.5	6228872.9	7-Oct-20	9-Oct-20	7.34	

Table 1: 2020 Rinse pH Results

Sample ID	Sample Location	Sample Type	Material Type	Sulphides Visible	Overburden Type	Easting	Northing	Date Sampled	Date Analyzed	Rinse_pH	Notes
AC-2020-Oct-07-38	Approach Channel	Active excavation area	Weathered Bedrock	No		629512	6228927.4	7-Oct-20	9-Oct-20	3.36	
AC-2020-Oct-07-39	Approach Channel	Active excavation area	Weathered Bedrock	Yes		629537.5	6228997.5	7-Oct-20	9-Oct-20	6.08	
AC-2020-Oct-07-40	Approach Channel	Active excavation area	Weathered Bedrock	No		629432.5	6229041.1	7-Oct-20	10-Oct-20	2.39	Sample Duplicate pH: 2.40
AC-2020-Oct-07-41	Approach Channel	Active excavation area	Weathered Bedrock	No		629360.8	6229073.2	7-Oct-20	10-Oct-20	2.44	
AC-2020-Oct-07-42	Approach Channel	Active excavation area	Weathered Bedrock	No		629352.9	6229105.8	7-Oct-20	10-Oct-20	2.36	
AC-2020-Oct-07-43	Approach Channel	Active excavation area	Weathered Bedrock	No		629213.8	6229167.1	7-Oct-20	10-Oct-20	2.27	
AC-2020-Oct-07-44	Approach Channel	Active excavation area	Weathered Bedrock	No		629158.9	6229206.7	7-Oct-20	10-Oct-20	2.56	
AC-2020-Oct-07-45	Approach Channel	Active excavation area	Weathered Bedrock	No		629077.8	6229298	7-Oct-20	10-Oct-20	6.48	Sample Duplicate pH: 6.46
AC-2020-Oct-22-74	Approach Channel	Exposed Surface	Weathered Bedrock	No		629074	6229387	22-Oct-20	31-Oct-20	2.57	
AC-2020-Oct-22-75	Approach Channel	Exposed Surface	Weathered Bedrock	No		629157	6229296	22-Oct-20	31-Oct-20	2.43	Sample Duplicate pH: 2.44
Aux_Spill-2020-Oct-07-54	Auxiliary Spillway	Exposed Surface	Weathered Bedrock	Yes		629627	6228875	7-Oct-20	10-Oct-20	2.39	
Aux_Spill-2020-Oct-07-55	Auxiliary Spillway	Exposed Surface	Weathered Bedrock	Yes		629560	6228863	7-Oct-20	10-Oct-20	2.66	Sample Duplicate pH: 2.68
ACDC-2020-Oct-07-46	Approach Channel Drainage Channel	Active excavation area	Weathered Bedrock	No		628951.7	6229444.1	7-Oct-20	10-Oct-20	2.61	
ACDC-2020-Oct-07-47	Approach Channel Drainage Channel	Active excavation area	Weathered Bedrock	No		628970.2	6229424.4	7-Oct-20	10-Oct-20	2.69	
777-2020-Oct-07-48	777 Haul Road	Active excavation area	Fresh Bedrock	Yes		628925	6229474	7-Oct-20	10-Oct-20	6.51	
777-2020-Oct-07-49	777 Haul Road	Active excavation area	Fresh Bedrock	Yes		628918	6229429	7-Oct-20	10-Oct-20	6.49	
777-2020-Oct-07-50	777 Haul Road	Active excavation area	Fresh Bedrock	Yes		628918	6229386	7-Oct-20	10-Oct-20	6.44	Sample Duplicate pH: 6.45
777-2020-Oct-07-51	777 Haul Road	Active excavation area	Fresh Bedrock	Yes		628878	6229380	7-Oct-20	10-Oct-20	6.59	
777-2020-Oct-07-52	777 Haul Road	Active excavation area	Fresh Bedrock	Yes		628879	6229445	7-Oct-20	10-Oct-20	7.03	
777-2020-Oct-07-53	777 Haul Road	Active excavation area	Fresh Bedrock	Yes		628887	6229536	7-Oct-20	10-Oct-20	5.07	
RBDC-2020-Apr-28-43	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629013	6229613	28-Apr-20	15-May-20	7.21	
RBDC-2020-Apr-28-44	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629109	6229500	28-Apr-20	15-May-20	8.03	
RBDC-2020-Apr-28-45	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	Yes		629242	6229358	28-Apr-20	15-May-20	8.89	Sample Duplicate: 8.89
RBDC-2020-Apr-28-46	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629244	6229512	28-Apr-20	15-May-20	7.2	
RBDC-2020-July-28-18	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629249	6229514	28-Jul-20	25-Aug-20	7.68	
RBDC-2020-July-28-19	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	Yes		629301	6229493	28-Jul-20	25-Aug-20	7.25	
RBDC-2020-July-28-20	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	Yes		629262	6229377	28-Jul-20	25-Aug-20	8.07	Dupplicate pH: 8.03
RBDC-2020-July-28-21	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	Yes		629281	6229353	28-Jul-20	25-Aug-20	8.58	
RBDC-2020-July-28-22	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629312	6229427	28-Jul-20	25-Aug-20	7.97	
RBDC-2020-Oct-07-58	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629355.9	6229437.8	7-Oct-20	10-Oct-20	7.67	
RBDC-2020-Oct-07-59	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629318.9	6229477.2	7-Oct-20	10-Oct-20	7.11	
RBDC-2020-Oct-07-60	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629291.3	6229370.5	7-Oct-20	10-Oct-20	8.62	Sample Duplicate pH: 8.60
RBDC-2020-Oct-07-61	Right Bank Dam Core(RBDC)	Active excavation area	Weathered Bedrock	No		629321.1	6229412.8	7-Oct-20	10-Oct-20	9.01	
RBUSCD-2020-Oct-07-56	RightBank Upstream Cofferdam	Exposed Surface	Overburden		Sand/Gravel	628984	6229611	7-Oct-20	10-Oct-20	6.73	
RBUSCD-2020-Oct-07-57	RightBank Upstream Cofferdam	Exposed Surface	Overburden		Sand/Gravel	629108	6229515	7-Oct-20	10-Oct-20	6.53	
ACDC-2020-Aug-05-35	RSEM R5B West Ditch Exposure	Active excavation area	Fresh Bedrock	No		628698	6229643	5-Aug-20	27-Aug-20	3.7	Sample Duplicate pH: 3.72
ACDC-2020-Aug-05-36	RSEM R5B West Ditch Exposure	Active excavation area	Fresh Bedrock	No		628677	6229653	5-Aug-20	27-Aug-20	3.69	
ACDC-2020-Aug-05-37	RSEM R5B West Ditch Exposure	Active excavation area	Weathered Bedrock	No		628667	6229661	5-Aug-20	27-Aug-20	4.12	
ACDC-2020-Aug-05-38	RSEM R5B West Ditch Exposure	Active excavation area	Fresh Bedrock	No		628618	6229741	5-Aug-20	27-Aug-20	5.13	
ACDC-2020-Aug-05-39	RSEM R5B West Ditch Exposure	Active excavation area	Fresh Bedrock	No		628579	6229787	5-Aug-20	27-Aug-20	6.67	
ACDC-2020-Aug-05-40	RSEM R5B West Ditch Exposure	Active excavation area	Fresh Bedrock	No		628580	6229842	5-Aug-20	27-Aug-20	7.37	Sample Duplicate pH: 7.39
R5B-West-2020-Oct-06-01	RSEM R5B West Ditch Exposure	Active excavation area	Weathered Bedrock	No		628580	6229789	6-Oct-20	9-Oct-20	7.62	
R5B-West-2020-Oct-06-02	RSEM R5B West Ditch Exposure	Active excavation area	Weathered Bedrock	No		628594.9	6229765.4	6-Oct-20	9-Oct-20	5.1	
R5B-West-2020-Oct-06-03	RSEM R5B West Ditch Exposure	Active excavation area	Weathered Bedrock	No		628647.4	6229713.3	6-Oct-20	9-Oct-20	4.93	
R5B-West-2020-Oct-06-04	RSEM R5B West Ditch Exposure	Active excavation area	Weathered Bedrock	No		628690.3	6229663.8	6-Oct-20	9-Oct-20	3.71	
R5B-West-2020-Oct-06-05	RSEM R5B West Ditch Exposure	Active excavation area	Weathered Bedrock	No		628593.1	6229731.8	6-Oct-20	9-Oct-20	6.12	Sample Duplicate pH: 6.13
R5b-West-2020-July-30-23	Exposure west of RSEM Area R5B	Active excavation area	Weathered Bedrock	No		628666	6229926	30-Jul-20	27-Aug-20	8.16	
R5b-West-2020-July-30-24	Exposure west of RSEM Area R5B	Active excavation area	Weathered Bedrock	No		628638	6229959	30-Jul-20	27-Aug-20	3.61	
R5b-West-2020-July-30-25	Exposure west of RSEM Area R5B	Active excavation area	Weathered Bedrock	No		628589	6229990	30-Jul-20	27-Aug-20	4.81	Duplicate pH: 4.85
SBIAR-2020-Apr-30-79	SBIAR	Exposed Surface	Weathered Bedrock	No		630285	6228546	30-Apr-20	14-May-20	7.68	Formerly known as Memorial Hill-2020-Apr-30-79
SBIAR-2020-Apr-30-80	SBIAR	Exposed Surface	Weathered Bedrock	Yes		630357	6228484	30-Apr-20	15-May-20	2.35	Sample Duplicate: 2.36<NL>Formerly called Memorial Hill-2020-Apr-30-80
SBIAR-2020-Aug-05-56	SBIAR	Active excavation area	Weathered Bedrock	No		630297	6228569	5-Aug-20	27-Aug-20	3.28	
SBIAR-2020-Aug-05-57	SBIAR	Active excavation area	Weathered Bedrock	No		630352	6228523	5-Aug-20	27-Aug-20	2.49	
Area A	Area A	Stockpile	Relatively Fresh			632028	6227940	18-Jan-20	7-Mar-20	3.40	

Table 2: 2020 ABA Results, Left Bank and Right Bank

Sample ID	Lab Report ID	Field Rinse pH	Rinse pH	Paste pH	Total-S	Sulphate-S	Sulphide-S	Non Extractable S	TAP	SAP	Mod. ABA NP	Net NP	NPR[a]	Fizz-Rating
		pH 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		N/A
Left Bank														
L5-2020-Apr-24-14	C034735	9.55	6.21	7.80	0.70	0.05	0.51	0.14	21.9	20.3	17.2	-3.10	0.79	SLIGHT
L5-2020-Apr-24-20	C034735	9.2	8.54	8.42	0.79	0.04	0.56	0.19	24.7	23.4	25.2	1.80	1.02	SLIGHT
L5-2020-July-26-07	C062106	9.47	9.85	8.85	1.09	0.02	0.72	0.35	34.1	22.5	14.6	-7.90	0.43	SLIGHT
L5-2020-July-26-12	C062106	9.46	9.89	8.96	0.89	0.02	0.62	0.25	27.8	19.4	13.5	-5.90	0.49	SLIGHT
L5-2020-Oct-07-14	C077583	8.34	8.22	8.20	1.13	0.09	0.71	0.33	35.3	22.2	13.9	-8.30	0.39	NONE
L5EX-2020-Apr-24-05	C034735	8.71	9.67	8.44	0.57	0.02	0.46	0.09	17.8	17.2	17.8	0.600	1.00	SLIGHT
L5EX-2020-Oct-07-08	C077583	8.01	7.84	8.02	0.93	0.12	0.54	0.27	29.1	16.9	25.0	8.10	0.86	SLIGHT
LBDC-2020-Oct-07-64	C077583	8.66	8.88	9.09	0.80	0.04	0.48	0.28	25.0	15.0	18.8	3.80	0.75	SLIGHT
Right Bank									0.0					
R5A-2020-Apr-29-62	C034735	9.41	5.58	7.61	0.37	0.03	0.25	0.09	11.6	10.6	6.20	-4.40	0.54	NONE
R5A-2020-Apr-29-70	C034735	7.1	5.62	6.12	1.63	0.11	1.25	0.27	50.9	47.5	5.30	-42.2	0.10	NONE
R5A-2020-Apr-29-54	C034735	9.26	6.22	8.29	0.50	0.03	0.37	0.10	15.6	14.7	10.9	-3.80	0.70	NONE
R5A-2020-Aug-08-73	C062106	5.65	5.24	7.78	1.92	0.06	1.28	0.58	60.0	40.0	6.80	-33.2	0.11	NONE
R5A-2020-Aug-07-61	C062106	7.77	7.63	7.54	0.65	0.07	0.31	0.27	20.3	9.7	55.3	45.6	2.72	SLIGHT
R5A-2020-Oct-07-27	C077583	6.2	4.85	4.99	1.77	0.13	1.17	0.47	55.3	36.6	3.00	-33.6	0.05	NONE
AC-2020-Apr-27-30	C034735	2.6	2.32	2.81	1.48	0.76	0.33	0.39	46.3	22.5	-17.5	-40.0	-0.38	NONE
AC-2020-Apr-27-42	C034735	2.58	2.78	4.25	1.13	0.14	0.88	0.11	35.3	30.9	-0.800	-31.7	-0.02	NONE
AC-2020-Apr-27-36	C034735	2.78	2.98	4.20	1.01	0.28	0.58	0.15	31.6	22.8	-0.800	-23.6	-0.03	NONE
AC-2020-Aug-05-53	C062106	2.62	2.88	2.99	1.94	0.74	0.72	0.48	60.6	22.5	-12.8	-35.3	-0.21	NONE
AC-2020-Aug-05-42	C062106	3.9	4.16	4.12	1.49	0.29	0.84	0.36	46.6	26.3	-1.20	-27.5	-0.03	NONE
AC-2020-Oct-07-43	C077583	2.27	2.42	2.56	1.56	0.91	0.13	0.52	48.8	4.1	-14.7	-18.8	-0.30	NONE
AC-2020-Oct-07-36	C077583	4.99	5.67	5.88	1.18	0.13	0.73	0.32	36.9	22.8	5.50	-17.3	0.15	NONE
777-2020-Oct-07-52	C077583	7.03	5.65	5.56	1.81	0.14	1.15	0.52	56.6	35.9	8.20	-27.7	0.14	NONE
R5b-West-2020-July-30-24	C062106	3.61	3.69	4.29	0.45	0.35	0.01	0.09	14.1	0.3	-5.10	-5.40	-0.36	NONE
ACDC-2020-Aug-05-37	C062106	4.12	4.21	4.28	0.91	0.70	<0.01	0.21	28.4	<0.3	-5.80	-5.80	-0.20	NONE
SBIAR-APR-30-80	C034735	2.35	2.47	2.95	0.70	0.59	0.03	0.08	21.9	3.4	-8.60	-12.0	-0.39	NONE

Notes:

[a]Net Potential Ratio (NPR) is calculated using the total sulphur acid potential.

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 & carbonate carbon (CO_2; HCl direct method) by Leco.

Sulphate Sulphur and Sulphide Sulphur are based on a modified version of ASTM Method D 2492-02

Non Extractable Sulphur = (Total Sulphur)-(Sulphate Sulphur)-(Sulphide Sulphur)

TAP = Total Acid Potential = Total S x 31.25

SAP = Sulphide Acid Potential = Sulphide S x 31.25

Mod. ABA Neutralization Potential (NP) - 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 (HNO3 Extr))

Net Potential Ratio = (Neutralization Potential)/(Acid Generation Potential)

Grey shading indicates an NPR <2

Fizz Rating - Reference method used is based on NP method.

Table 3: 2020 Solid-Phase Elemental Results, Left Bank and Right Bank

Sample ID	**Silver-Ag**	**Aluminum-Al**	**Arsenic-As**	**Gold-Au**	**Boron-B**	**Barium-Ba**	**Bismuth-Bi**	**Calcium-Ca**	**Cadmium-Cd**	**Cobalt-Co**	**Chromium-Cr**	**Copper-Cu**	**Iron-Fe**
Units	**ppb**	**%**	**ppm**	**ppb**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**%**
ACA	*53*	*8.15*	*4.8*	*1.5*	*17*	*628*	*0.16*	*2.57*	*0.09*	*17.3*	*92*	*28*	*3.92*
Left Bank													
L5-2020-Apr-24-14	306	0.96	13.9	<0.2	<20	370	0.26	0.70	0.28	10.2	24.4	25.7	2.24
L5-2020-Apr-24-20	304	0.99	11.9	0.7	<20	377	0.32	1.14	0.28	9.2	18.2	28.6	2.14
L5-2020-July-26-07	307	1.17	13.6	1.3	<20	223	0.22	0.72	0.23	9.5	31.9	27.2	2.43
L5-2020-July-26-12	312	1.20	12.5	1.2	<20	351	0.25	0.67	0.27	10.5	28.5	31.1	2.40
L5-2020-Oct-07-14	374	0.85	10.7	0.8	<20	465	0.28	0.65	0.34	7.9	23.5	29.2	1.71
L5EX-2020-Apr-24-05	260	0.91	10.1	0.3	<20	396	0.26	0.72	0.27	10.1	18.9	25.2	1.89
L5EX-2020-Oct-07-08	316	0.83	18.4	1.5	<20	410	0.27	1.07	0.37	10.0	30.1	29.6	2.47
LBDC-2020-Oct-07-64	306	0.96	12.9	0.3	<20	567	0.26	0.92	0.28	10.4	24.3	29.8	2.04
Right Bank													
R5A-2020-Apr-29-62	243	0.91	8.3	1.0	<20	469	0.30	0.32	0.28	10.8	20.4	28.0	1.46
R5A-2020-Apr-29-70	545	0.80	14.6	2.8	<20	111	0.34	0.40	0.71	9.1	20.6	34.6	2.14
R5A-2020-Apr-29-54	234	0.96	9.5	0.9	<20	458	0.23	0.50	0.22	8.1	31.3	24.1	2.38
R5A-2020-Aug-08-73	451	0.94	15.3	0.9	<20	83.9	0.29	0.38	0.86	8.8	17.1	37.6	2.34
R5A-2020-Aug-07-61	238	0.96	8.3	1.0	<20	426	0.14	2.10	0.64	7.2	83.8	23.1	2.05
R5A-2020-Oct-07-27	490	0.90	15.4	0.9	<20	292	0.36	0.39	0.71	9.1	16.8	38.5	2.21
AC-2020-Apr-27-30	425	0.88	11.5	1.5	<20	182	0.31	0.45	0.43	6.1	47.0	30.2	1.99
AC-2020-Apr-27-42	378	0.97	12.6	2.5	<20	209	0.32	0.28	0.75	10.2	24.3	36.5	1.70
AC-2020-Apr-27-36	357	0.98	12.1	1.3	<20	288	0.29	0.28	0.31	7.8	25.7	29.0	1.78
AC-2020-Aug-05-53	444	1.07	16.9	1.0	<20	119	0.29	0.39	0.71	9.1	20.8	43.4	2.41
AC-2020-Aug-05-42	464	1.00	14.8	1.1	<20	163	0.31	0.28	0.51	8.1	18.9	37.7	2.50
AC-2020-Oct-07-43	471	0.90	12.9	0.6	<20	232	0.34	0.39	0.56	6.7	16.5	31.3	2.04
AC-2020-Oct-07-36	415	0.92	12.1	0.4	<20	493	0.35	0.31	0.41	9.0	19.0	35.2	1.72
777-2020-Oct-07-52	448	0.86	14.2	0.5	<20	343	0.32	0.53	0.93	9.4	17.9	37.3	2.32
R5b-West-2020-July-30-24	513	0.85	6.6	1.3	<20	480	0.31	0.11	0.09	2.5	18.9	32.0	1.60
ACDC-2020-Aug-05-37	283	0.73	15.8	2.1	<20	310	0.29	0.08	0.02	2.6	17.6	30.9	4.10
SBIAR-APR-30-80	432	0.86	9.5	3.3	<20	200	0.31	0.41	0.15	2.4	26.9	20.6	1.54

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: 2020 Solid-Phase Elemental Results, Left Bank and Right Bank

Sample ID	Gallium-Ga	Mercury-Hg	Potassium-K	Lanthanum-La	Magnesium-Mg	Manganese-Mn	Molybdenum-Mo	Sodium-Na	Nickel-Ni	Phosphorus-P	Lead-Pb	Sulphur-S
Units	**ppm**	**ppm**	**%**	**ppm**	**%**	**ppm**	**ppm**	**%**	**ppm**	**%**	**ppm**	**%**
ACA	*17.5*	*0.05*	*2.32*	*31*	*1.5*	*774*	*1.1*	*2.43*	*47*	*0.0655*	*17*	*0.0621*
Left Bank												
L5-2020-Apr-24-14	2.5	0.065	0.25	5.0	0.29	124	0.74	0.226	26.2	0.097	13.6	0.72
L5-2020-Apr-24-20	2.8	0.075	0.26	6.0	0.31	139	0.57	0.252	26.1	0.113	15.7	0.76
L5-2020-July-26-07	3.1	0.083	0.32	5.1	0.30	142	1.06	0.183	30.1	0.103	13.7	0.97
L5-2020-July-26-12	3.5	0.087	0.32	5.4	0.33	138	1.18	0.206	31.8	0.090	15.3	0.81
L5-2020-Oct-07-14	2.5	0.095	0.24	5.5	0.29	69	1.54	0.206	26.2	0.074	15.4	1.02
L5EX-2020-Apr-24-05	2.6	0.069	0.22	5.2	0.26	111	0.52	0.224	23.9	0.098	12.3	0.61
L5EX-2020-Oct-07-08	2.6	0.113	0.22	5.0	0.32	169	1.25	0.202	28.4	0.084	13.4	0.87
LBDC-2020-Oct-07-64	2.9	0.082	0.26	5.1	0.29	116	0.78	0.218	27.4	0.094	13.6	0.69
Right Bank												
R5A-2020-Apr-29-62	2.4	0.045	0.24	4.7	0.26	129	0.49	0.218	26.3	0.076	16.6	0.39
R5A-2020-Apr-29-70	2.3	0.06	0.23	3.9	0.27	62	4.01	0.065	33.9	0.060	16.5	1.66
R5A-2020-Apr-29-54	2.8	0.059	0.25	5.7	0.36	132	0.67	0.218	23.2	0.130	11.5	0.51
R5A-2020-Aug-08-73	2.6	0.094	0.28	4.4	0.30	61	5.03	0.143	36.3	0.068	16.8	1.85
R5A-2020-Aug-07-61	2.9	0.059	0.21	6.6	0.52	265	2.24	0.017	28.2	0.090	10.8	0.58
R5A-2020-Oct-07-27	2.6	0.09	0.26	4.5	0.31	61	3.39	0.062	33.1	0.063	19.1	1.65
AC-2020-Apr-27-30	2.5	0.064	0.28	3.8	0.21	45	3.73	0.025	23.5	0.050	15.7	1.51
AC-2020-Apr-27-42	2.7	0.066	0.29	4.6	0.23	47	1.98	0.016	38.0	0.066	16.2	1.19
AC-2020-Apr-27-36	2.8	0.072	0.29	4.4	0.26	58	1.29	0.144	26.8	0.068	15.1	1.08
AC-2020-Aug-05-53	2.9	0.098	0.33	4.3	0.30	58	3.73	0.033	35.6	0.072	16.7	1.88
AC-2020-Aug-05-42	2.9	0.095	0.31	4.6	0.26	60	3.82	0.102	31.3	0.071	17.5	1.43
AC-2020-Oct-07-43	2.5	0.103	0.31	3.7	0.24	50	4.51	0.032	25.0	0.049	17.5	1.51
AC-2020-Oct-07-36	2.6	0.098	0.27	4.7	0.26	56	1.41	0.221	30.9	0.072	18.0	1.09
777-2020-Oct-07-52	2.3	0.093	0.25	4.4	0.32	79	4.58	0.074	34.3	0.068	17.9	1.67
R5b-West-2020-July-30-24	2.9	0.1	0.33	4.4	0.14	14	3.47	0.048	6.9	0.049	18.0	0.41
ACDC-2020-Aug-05-37	2.6	0.096	0.36	3.4	0.06	14	4.87	0.185	4.8	0.058	16.5	0.87
SBIAR-APR-30-80	2.7	0.075	0.31	2.9	0.17	38	3.21	0.020	9.6	0.035	16.8	0.77

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: 2020 Solid-Phase Elemental Results, Left Bank and Right Bank

Sample ID	Antimony-Sb	Scandium-Sc	Selenium-Se	Strontium-Sr	Tellurium-Te	Thorium-Th	Titanium-Ti	Thallium-Tl	Uranium-U	Vanadium-V	Tungsten-W	Zinc-Zn
Units	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
ACA	*0.4*	*14*	*0.09*	*320*	*-*	*10.5*	*0.384*	*0.9*	*2.7*	*97*	*1.9*	*67*
Left Bank												
L5-2020-Apr-24-14	0.10	4.6	1.1	71.6	0.06	6.4	0.001	0.05	1.4	27	<0.1	115
L5-2020-Apr-24-20	0.13	4.7	1.1	88.3	0.08	7.2	0.001	0.06	1.2	28	<0.1	120
L5-2020-July-26-07	0.11	5.1	0.6	74.3	0.06	6.1	0.002	0.04	1.6	32	<0.1	106
L5-2020-July-26-12	0.10	5.3	0.9	76.6	0.08	6.7	0.002	0.05	1.5	31	<0.1	121
L5-2020-Oct-07-14	0.22	4.0	1.3	58.4	0.08	6.7	0.001	0.15	1.3	25	<0.1	115
L5EX-2020-Apr-24-05	0.12	4.4	0.9	70.6	0.06	6.8	0.001	0.05	1.5	24	<0.1	112
L5EX-2020-Oct-07-08	0.27	4.1	4.1	75.1	0.11	6.6	0.002	0.11	1.5	24	<0.1	98.4
LBDC-2020-Oct-07-64	0.23	4.8	0.9	76.9	0.09	7.7	0.002	0.11	1.7	25	<0.1	118
Right Bank												
R5A-2020-Apr-29-62	0.08	4.3	1.0	61.9	0.06	7.1	0.001	0.04	1.0	23	<0.1	159
R5A-2020-Apr-29-70	0.09	4.3	1.8	41.1	0.06	6.3	<0.001	0.08	1.2	25	<0.1	145
R5A-2020-Apr-29-54	0.12	4.9	1.0	65.8	0.08	6.6	0.001	0.04	1.7	29	<0.1	97.4
R5A-2020-Aug-08-73	0.10	5.0	1.7	68.2	0.06	6.6	<0.001	0.10	1.3	28	<0.1	153
R5A-2020-Aug-07-61	0.20	3.9	0.5	63.3	0.04	4.6	0.005	0.10	1.1	36	<0.1	95.0
R5A-2020-Oct-07-27	0.15	4.8	1.8	53.2	0.09	8.0	<0.001	0.22	1.4	25	<0.1	143
AC-2020-Apr-27-30	0.06	3.5	2.0	30.8	0.07	4.6	<0.001	0.11	0.9	28	<0.1	89.8
AC-2020-Apr-27-42	0.11	5.0	1.9	29.3	0.07	6.9	<0.001	0.07	1.6	28	<0.1	164
AC-2020-Apr-27-36	0.06	4.5	1.1	62.3	0.08	6.6	<0.001	0.07	1.0	28	<0.1	107
AC-2020-Aug-05-53	0.07	5.1	1.9	41.6	0.05	7.0	0.001	0.08	1.4	32	<0.1	139
AC-2020-Aug-05-42	0.08	4.7	1.3	85.3	0.07	6.4	0.001	0.11	1.3	31	<0.1	135
AC-2020-Oct-07-43	0.09	3.9	1.5	32.7	0.09	5.9	<0.001	0.25	1.0	26	<0.1	106
AC-2020-Oct-07-36	0.18	4.4	1.2	62.6	0.08	7.7	0.001	0.14	1.3	27	<0.1	124
777-2020-Oct-07-52	0.16	4.2	1.8	64.7	0.07	7.4	<0.001	0.24	1.3	25	<0.1	155
R5b-West-2020-July-30-24	0.11	3.3	1.2	39.5	0.08	7.6	<0.001	0.20	0.9	32	<0.1	71.1
ACDC-2020-Aug-05-37	0.10	3.0	1.7	132	0.07	5.5	<0.001	0.22	0.8	31	<0.1	96.1
SBIAR-APR-30-80	0.08	2.9	1.5	27.8	0.07	2.5	<0.001	0.12	0.4	29	<0.1	41.7

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 and Sludge Results

PEACE RIVER
HYDRO PARTNERS

Your P.O. #: 34974
Your C.O.C. #: 24538

Attention: Kael Hanak

LORAX ENVIRONMENTAL SERVICES LTD.
2289 BURRARD STREET
VANCOUVER, BC
CANADA V6J 3H9

Report Date: 2020/05/28
Report #: R2883922
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C033147
Received: 2020/05/15, 13:00

Sample Matrix: Sludge
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BC Hydrocarbons in Soil by GC/FID (1)	1	2020/05/21	2020/05/22	CAL SOP-00239	BCMOE EPH S 12/16
EPH less PAH in Soil By GC/FID (1)	1	N/A	2020/05/24		Auto Calc
Elements by ICPMS (total) (1)	1	2020/05/25	2020/05/26	CAL SOP-00265	EPA 6020 m
ICPMS Metals on TCLP Leachate (1, 2)	1	2020/05/26	2020/05/27	AB SOP-00043	EPA 6020b R2 m
Moisture (1)	1	N/A	2020/05/22	AB SOP-00002	CCME PHC-CWS m
PAH in Soil by GC/MS (1)	1	2020/05/21	2020/05/22	AB SOP-00003 AB SOP-00036	EPA 3540C/8270E m
Total LMW, HMW, Total PAH Calc (1)	1	N/A	2020/05/24		Auto Calc
TCLP pH Measurements (1)	1	2020/05/26	2020/05/27	AB SOP-00006	SM 23 4500 H+B m
pH (2:1 DI Water Extract) (1)	1	2020/05/25	2020/05/25	AB SOP-00033 / AB SOP-00006	SM 23 4500 H+B m
Total Oil and Grease	1	2020/05/26	2020/05/26	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX (1)	1	2020/05/21	2020/05/25		Auto Calc
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID (1)	1	N/A	2020/05/25	CAL SOP-00240	BC MELP VH 2014

Remarks:

Bureau Veritas Laboratories are accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by BV Labs 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 BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 dilution methods.
Results relate to samples tested. When sampling is not conducted by BV Labs, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Bureau Veritas Laboratories Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 34974
Your C.O.C. #: 24538

Attention: Kael Hanak

LORAX ENVIRONMENTAL SERVICES LTD.
2289 BURRARD STREET
VANCOUVER, BC
CANADA V6J 3H9

Report Date: 2020/05/28
Report #: R2883922
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C033147
Received: 2020/05/15, 13:00

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 BV Labs Calgary Environmental
(2) Samples were extracted as per EPA 1311 unless otherwise noted in the report.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bvlabs.com
Phone# (250)385-6112
==========
This report has been generated and distributed using a secure automated process.
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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

RESULTS OF CHEMICAL ANALYSES OF SLUDGE

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
Misc. Inorganics				
Leachable Initial pH of Sample	pH	9.52	N/A	9862034
Leachable pH after HCl	pH	5.71	N/A	9862034
Leachable Final pH of Leachate	pH	5.93	N/A	9862034
OIL & GREASE				
Total Oil and grease	ug/g	ND (1)	350	9861170
Physical Properties				
Soluble (2:1) pH	pH	8.56	N/A	9859031

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limit raised due to high moisture.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

PHYSICAL TESTING (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	71	0.30	9857585
RDL = Reportable Detection Limit				

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

SEMIVOLATILE ORGANICS BY GC-MS (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Acenaphthene	mg/kg	ND (1)	0.016	9857798
Acenaphthylene	mg/kg	ND (1)	0.016	9857798
Acridine	mg/kg	ND (1)	0.16	9857798
Anthracene	mg/kg	ND (1)	0.013	9857798
Benzo(a)anthracene	mg/kg	ND (1)	0.032	9857798
Benzo(b&j)fluoranthene	mg/kg	0.043 (1)	0.032	9857798
Benzo(k)fluoranthene	mg/kg	ND (1)	0.032	9857798
Benzo(g,h,i)perylene	mg/kg	0.079 (1)	0.064	9857798
Benzo(a)pyrene	mg/kg	ND (1)	0.032	9857798
Chrysene	mg/kg	ND (1)	0.032	9857798
Dibenz(a,h)anthracene	mg/kg	ND (1)	0.064	9857798
Fluoranthene	mg/kg	ND (1)	0.032	9857798
Fluorene	mg/kg	0.047 (1)	0.032	9857798
Indeno(1,2,3-cd)pyrene	mg/kg	ND (1)	0.064	9857798
1-Methylnaphthalene	mg/kg	0.32 (1)	0.032	9857798
2-Methylnaphthalene	mg/kg	0.51 (1)	0.032	9857798
Naphthalene	mg/kg	0.35 (1)	0.032	9857798
Phenanthrene	mg/kg	0.17 (1)	0.032	9857798
Pyrene	mg/kg	0.055 (1)	0.032	9857798
Quinoline	mg/kg	ND (1)	0.064	9857798
Low Molecular Weight PAH`s	mg/kg	1.1	0.16	9857059
High Molecular Weight PAH`s	mg/kg	0.18	0.064	9857059
Total PAH	mg/kg	1.3	0.16	9857059
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	83		9857798
D8-ACENAPHTHYLENE (sur.)	%	79		9857798
D8-NAPHTHALENE (sur.)	%	77		9857798
D9-Acridine (sur.)	%	40 (2)		9857798

RDL = Reportable Detection Limit

(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

SEMIVOLATILE ORGANICS BY GC-MS (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
TERPHENYL-D14 (sur.)	%	105		9857798
RDL = Reportable Detection Limit				

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

ELEMENTS BY ATOMIC SPECTROSCOPY (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
Elements				
Leachable Antimony (Sb)	mg/L	ND	1.0	9862293
Leachable Arsenic (As)	mg/L	ND	0.50	9862293
Leachable Barium (Ba)	mg/L	1.0	1.0	9862293
Leachable Beryllium (Be)	mg/L	ND	0.50	9862293
Leachable Boron (B)	mg/L	ND	1.0	9862293
Leachable Cadmium (Cd)	mg/L	ND	0.10	9862293
Leachable Chromium (Cr)	mg/L	ND	0.50	9862293
Leachable Cobalt (Co)	mg/L	ND	1.0	9862293
Leachable Copper (Cu)	mg/L	ND	1.0	9862293
Leachable Iron (Fe)	mg/L	4.6	1.0	9862293
Leachable Lead (Pb)	mg/L	ND	0.50	9862293
Leachable Mercury (Hg)	mg/L	ND	0.020	9862293
Leachable Nickel (Ni)	mg/L	0.52	0.50	9862293
Leachable Selenium (Se)	mg/L	ND	0.10	9862293
Leachable Silver (Ag)	mg/L	ND	0.50	9862293
Leachable Thallium (Tl)	mg/L	ND	0.50	9862293
Leachable Uranium (U)	mg/L	ND	0.20	9862293
Leachable Vanadium (V)	mg/L	ND	1.0	9862293
Leachable Zinc (Zn)	mg/L	ND	1.0	9862293
Leachable Zirconium (Zr)	mg/L	ND	1.0	9862293
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	9470	100	9860174
Total Antimony (Sb)	mg/kg	1.06	0.10	9860174
Total Arsenic (As)	mg/kg	10.7	0.20	9860174
Total Barium (Ba)	mg/kg	666	0.10	9860174
Total Beryllium (Be)	mg/kg	0.69	0.20	9860174
Total Bismuth (Bi)	mg/kg	0.18	0.10	9860174
Total Cadmium (Cd)	mg/kg	0.798	0.050	9860174
Total Calcium (Ca)	mg/kg	94600 (1)	2000	9860174
Total Chromium (Cr)	mg/kg	19.2	0.50	9860174

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

ELEMENTS BY ATOMIC SPECTROSCOPY (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	MWTF-SLP	RDL	QC Batch
Total Cobalt (Co)	mg/kg	18.6	0.10	9860174
Total Copper (Cu)	mg/kg	33.6	0.50	9860174
Total Iron (Fe)	mg/kg	26200	100	9860174
Total Lead (Pb)	mg/kg	11.0	0.10	9860174
Total Lithium (Li)	mg/kg	17.2	0.50	9860174
Total Magnesium (Mg)	mg/kg	7030	100	9860174
Total Manganese (Mn)	mg/kg	464	0.20	9860174
Total Mercury (Hg)	mg/kg	0.055	0.050	9860174
Total Molybdenum (Mo)	mg/kg	2.49	0.10	9860174
Total Nickel (Ni)	mg/kg	62.6	0.50	9860174
Total Phosphorus (P)	mg/kg	830	10	9860174
Total Potassium (K)	mg/kg	1950	100	9860174
Total Selenium (Se)	mg/kg	1.25	0.50	9860174
Total Silver (Ag)	mg/kg	0.191	0.050	9860174
Total Sodium (Na)	mg/kg	1560	100	9860174
Total Strontium (Sr)	mg/kg	293 (1)	1.0	9860174
Total Thallium (Tl)	mg/kg	0.107	0.050	9860174
Total Tin (Sn)	mg/kg	1.44	0.10	9860174
Total Titanium (Ti)	mg/kg	23.6	1.0	9860174
Total Uranium (U)	mg/kg	2.94	0.050	9860174
Total Vanadium (V)	mg/kg	32.1	1.0	9860174
Total Zinc (Zn)	mg/kg	179	1.0	9860174
Total Zirconium (Zr)	mg/kg	3.52	0.50	9860174

RDL = Reportable Detection Limit

(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

BTEX BY GC-MS (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
Volatiles				
Xylenes (Total)	mg/kg	0.63	0.25	9857060
VH C6-C10	mg/kg	ND	38	9857060
VPH (VH6 to 10 - BTEX)	mg/kg	ND	38	9857060
Field Preserved Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	ND (1)	0.44	9860165
Benzene	mg/kg	0.12 (1)	0.022	9860165
Toluene	mg/kg	0.34 (1)	0.22	9860165
Ethylbenzene	mg/kg	0.20 (1)	0.044	9860165
m & p-Xylene	mg/kg	0.33 (1)	0.18	9860165
o-Xylene	mg/kg	0.30 (1)	0.18	9860165
Styrene	mg/kg	0.45 (1)	0.13	9860165
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	99		9860165
4-Bromofluorobenzene (sur.)	%	96		9860165
D10-o-Xylene (sur.)	%	99		9860165
D4-1,2-Dichloroethane (sur.)	%	90		9860165

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains >= 50% moisture. Detection limits raised based on sample weight used for analysis.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

TOTAL PETROLEUM HYDROCARBONS (SLUDGE)

BV Labs ID		XT9969		
Sampling Date		2020/05/14 11:45		
COC Number		24538		
	UNITS	**MWTF-SLP**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon				
EPH (C10-C19)	mg/kg	ND (1)	340	9857772
EPH (C19-C32)	mg/kg	ND (1)	340	9857772
LEPH (C10-C19 less PAH)	mg/kg	ND	340	9857062
HEPH (C19-C32 less PAH)	mg/kg	ND	340	9857062
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	95		9857772

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	11.3°C

Results relate only to the items tested.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9857585	RV5	Method Blank	Moisture	2020/05/22	ND, RDL=0.30		%	
9857585	RV5	RPD	Moisture	2020/05/22	2.8		%	20
9857772	LSH	Matrix Spike	O-TERPHENYL (sur.)	2020/05/22		100	%	60 - 140
			EPH (C10-C19)	2020/05/22		90	%	60 - 130
			EPH (C19-C32)	2020/05/22		89	%	60 - 130
9857772	LSH	Spiked Blank	O-TERPHENYL (sur.)	2020/05/22		98	%	60 - 140
			EPH (C10-C19)	2020/05/22		88	%	70 - 130
			EPH (C19-C32)	2020/05/22		89	%	70 - 130
9857772	LSH	Method Blank	O-TERPHENYL (sur.)	2020/05/22		98	%	60 - 140
			EPH (C10-C19)	2020/05/22	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2020/05/22	ND, RDL=100		mg/kg	
9857772	LSH	RPD	EPH (C10-C19)	2020/05/22	NC		%	50
			EPH (C19-C32)	2020/05/22	3.5		%	50
9857798	NK3	Matrix Spike	D10-ANTHRACENE (sur.)	2020/05/22		88	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		86	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		85	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		61	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		104	%	50 - 140
			Acenaphthene	2020/05/22		89	%	50 - 140
			Acenaphthylene	2020/05/22		85	%	50 - 140
			Acridine	2020/05/22		61	%	50 - 140
			Anthracene	2020/05/22		63	%	50 - 140
			Benzo(a)anthracene	2020/05/22		90	%	50 - 140
			Benzo(b&j)fluoranthene	2020/05/22		77	%	50 - 140
			Benzo(k)fluoranthene	2020/05/22		76	%	50 - 140
			Benzo(g,h,i)perylene	2020/05/22		61	%	50 - 140
			Benzo(a)pyrene	2020/05/22		77	%	50 - 140
			Chrysene	2020/05/22		92	%	50 - 140
			Dibenz(a,h)anthracene	2020/05/22		80	%	50 - 140
			Fluoranthene	2020/05/22		86	%	50 - 140
			Fluorene	2020/05/22		86	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2020/05/22		72	%	50 - 140
			1-Methylnaphthalene	2020/05/22		83	%	50 - 140
			2-Methylnaphthalene	2020/05/22		83	%	50 - 140
			Naphthalene	2020/05/22		87	%	50 - 140
			Phenanthrene	2020/05/22		87	%	50 - 140
			Pyrene	2020/05/22		84	%	50 - 140
			Quinoline	2020/05/22		103	%	50 - 140
9857798	NK3	Spiked Blank	D10-ANTHRACENE (sur.)	2020/05/22		94	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		97	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		96	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		71	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		116	%	50 - 140
			Acenaphthene	2020/05/22		95	%	50 - 140
			Acenaphthylene	2020/05/22		93	%	50 - 140
			Acridine	2020/05/22		71	%	50 - 140
			Anthracene	2020/05/22		67	%	50 - 140
			Benzo(a)anthracene	2020/05/22		108	%	50 - 140
			Benzo(b&j)fluoranthene	2020/05/22		91	%	50 - 140
			Benzo(k)fluoranthene	2020/05/22		97	%	50 - 140
			Benzo(g,h,i)perylene	2020/05/22		67	%	50 - 140

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(a)pyrene	2020/05/22		88	%	50 - 140
			Chrysene	2020/05/22		110	%	50 - 140
			Dibenz(a,h)anthracene	2020/05/22		71	%	50 - 140
			Fluoranthene	2020/05/22		94	%	50 - 140
			Fluorene	2020/05/22		94	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2020/05/22		90	%	50 - 140
			1-Methylnaphthalene	2020/05/22		93	%	50 - 140
			2-Methylnaphthalene	2020/05/22		91	%	50 - 140
			Naphthalene	2020/05/22		97	%	50 - 140
			Phenanthrene	2020/05/22		94	%	50 - 140
			Pyrene	2020/05/22		92	%	50 - 140
			Quinoline	2020/05/22		107	%	50 - 140
9857798	NK3	Method Blank	D10-ANTHRACENE (sur.)	2020/05/22		94	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		94	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		92	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		66	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		122	%	50 - 140
			Acenaphthene	2020/05/22	ND, RDL=0.0050		mg/kg	
			Acenaphthylene	2020/05/22	ND, RDL=0.0050		mg/kg	
			Acridine	2020/05/22	ND, RDL=0.050		mg/kg	
			Anthracene	2020/05/22	ND, RDL=0.0040		mg/kg	
			Benzo(a)anthracene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(b&j)fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(k)fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(g,h,i)perylene	2020/05/22	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Chrysene	2020/05/22	ND, RDL=0.010		mg/kg	
			Dibenz(a,h)anthracene	2020/05/22	ND, RDL=0.020		mg/kg	
			Fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Fluorene	2020/05/22	ND, RDL=0.010		mg/kg	
			Indeno(1,2,3-cd)pyrene	2020/05/22	ND, RDL=0.020		mg/kg	
			1-Methylnaphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			2-Methylnaphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			Naphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			Phenanthrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Pyrene	2020/05/22	ND, RDL=0.010		mg/kg	

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			Quinoline	2020/05/22	ND, RDL=0.020		mg/kg	
9857798	NK3	RPD	Acenaphthene	2020/05/22	16		%	50
			Acenaphthylene	2020/05/22	NC		%	50
			Acridine	2020/05/22	NC		%	50
			Anthracene	2020/05/22	NC		%	50
			Benzo(a)anthracene	2020/05/22	8.2		%	50
			Benzo(b&j)fluoranthene	2020/05/22	13		%	50
			Benzo(k)fluoranthene	2020/05/22	3.1		%	50
			Benzo(g,h,i)perylene	2020/05/22	12		%	50
			Benzo(a)pyrene	2020/05/22	14		%	50
			Chrysene	2020/05/22	21		%	50
			Dibenz(a,h)anthracene	2020/05/22	NC		%	50
			Fluoranthene	2020/05/22	9.8		%	50
			Fluorene	2020/05/22	10		%	50
			Indeno(1,2,3-cd)pyrene	2020/05/22	2.4		%	50
			1-Methylnaphthalene	2020/05/22	12		%	50
			2-Methylnaphthalene	2020/05/22	12		%	50
			Naphthalene	2020/05/22	15		%	50
			Phenanthrene	2020/05/22	12		%	50
			Pyrene	2020/05/22	8.5		%	50
			Quinoline	2020/05/22	NC		%	50
9859031	KKC	QC Standard	Soluble (2:1) pH	2020/05/25		101	%	98 - 102
9859031	KKC	Spiked Blank	Soluble (2:1) pH	2020/05/25		100	%	97 - 103
9859031	KKC	RPD	Soluble (2:1) pH	2020/05/25	0.12		%	20
9860165	GP4	Matrix Spike	1,4-Difluorobenzene (sur.)	2020/05/25		92	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		97	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		107	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		84	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25		80	%	50 - 140
			Benzene	2020/05/25		86	%	50 - 140
			Toluene	2020/05/25		93	%	50 - 140
			Ethylbenzene	2020/05/25		89	%	50 - 140
			m & p-Xylene	2020/05/25		91	%	50 - 140
			o-Xylene	2020/05/25		93	%	50 - 140
			Styrene	2020/05/25		98	%	50 - 140
9860165	GP4	Spiked Blank	1,4-Difluorobenzene (sur.)	2020/05/25		99	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		98	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		97	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		92	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25		80	%	60 - 130
			Benzene	2020/05/25		97	%	60 - 130
			Toluene	2020/05/25		97	%	60 - 130
			Ethylbenzene	2020/05/25		92	%	60 - 130
			m & p-Xylene	2020/05/25		94	%	60 - 130
			o-Xylene	2020/05/25		95	%	60 - 130
			Styrene	2020/05/25		95	%	60 - 130
9860165	GP4	Method Blank	1,4-Difluorobenzene (sur.)	2020/05/25		98	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		96	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		95	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		88	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25	ND, RDL=0.10		mg/kg	

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			Benzene	2020/05/25	ND, RDL=0.0050		mg/kg	
			Toluene	2020/05/25	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2020/05/25	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2020/05/25	ND, RDL=0.040		mg/kg	
			o-Xylene	2020/05/25	ND, RDL=0.040		mg/kg	
			Styrene	2020/05/25	ND, RDL=0.030		mg/kg	
9860165	GP4	RPD	Methyl-tert-butylether (MTBE)	2020/05/25	NC		%	50
			Benzene	2020/05/25	1.6		%	50
			Toluene	2020/05/25	5.4		%	50
			Ethylbenzene	2020/05/25	3.7		%	50
			m & p-Xylene	2020/05/25	0.49		%	50
			o-Xylene	2020/05/25	4.1		%	50
			Styrene	2020/05/25	0.15		%	50
9860174	ANE	Matrix Spike	Total Aluminum (Al)	2020/05/26		NC	%	75 - 125
			Total Antimony (Sb)	2020/05/26		111	%	75 - 125
			Total Arsenic (As)	2020/05/26		99	%	75 - 125
			Total Barium (Ba)	2020/05/26		NC	%	75 - 125
			Total Beryllium (Be)	2020/05/26		100	%	75 - 125
			Total Bismuth (Bi)	2020/05/26		93	%	75 - 125
			Total Cadmium (Cd)	2020/05/26		100	%	75 - 125
			Total Calcium (Ca)	2020/05/26		NC	%	75 - 125
			Total Chromium (Cr)	2020/05/26		122	%	75 - 125
			Total Cobalt (Co)	2020/05/26		93	%	75 - 125
			Total Copper (Cu)	2020/05/26		NC	%	75 - 125
			Total Iron (Fe)	2020/05/26		NC	%	75 - 125
			Total Lead (Pb)	2020/05/26		101	%	75 - 125
			Total Lithium (Li)	2020/05/26		104	%	75 - 125
			Total Magnesium (Mg)	2020/05/26		NC	%	75 - 125
			Total Manganese (Mn)	2020/05/26		NC	%	75 - 125
			Total Mercury (Hg)	2020/05/26		94	%	75 - 125
			Total Molybdenum (Mo)	2020/05/26		NC	%	75 - 125
			Total Nickel (Ni)	2020/05/26		NC	%	75 - 125
			Total Phosphorus (P)	2020/05/26		NC	%	75 - 125
			Total Potassium (K)	2020/05/26		NC	%	75 - 125
			Total Selenium (Se)	2020/05/26		107	%	75 - 125
			Total Silver (Ag)	2020/05/26		97	%	75 - 125
			Total Sodium (Na)	2020/05/26		NC	%	75 - 125
			Total Strontium (Sr)	2020/05/26		NC	%	75 - 125
			Total Thallium (Tl)	2020/05/26		90	%	75 - 125
			Total Tin (Sn)	2020/05/26		105	%	75 - 125
			Total Titanium (Ti)	2020/05/26		90	%	75 - 125
			Total Uranium (U)	2020/05/26		96	%	75 - 125
			Total Vanadium (V)	2020/05/26		NC	%	75 - 125
			Total Zinc (Zn)	2020/05/26		NC	%	75 - 125
			Total Zirconium (Zr)	2020/05/26		NC	%	75 - 125
9860174	ANE	QC Standard	Total Aluminum (Al)	2020/05/26		83	%	70 - 130
			Total Arsenic (As)	2020/05/26		111	%	70 - 130
			Total Barium (Ba)	2020/05/26		102	%	70 - 130

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			Total Beryllium (Be)	2020/05/26		95	%	70 - 130
			Total Cadmium (Cd)	2020/05/26		97	%	70 - 130
			Total Calcium (Ca)	2020/05/26		101	%	70 - 130
			Total Chromium (Cr)	2020/05/26		88	%	70 - 130
			Total Cobalt (Co)	2020/05/26		92	%	70 - 130
			Total Copper (Cu)	2020/05/26		104	%	70 - 130
			Total Iron (Fe)	2020/05/26		109	%	70 - 130
			Total Lead (Pb)	2020/05/26		111	%	70 - 130
			Total Lithium (Li)	2020/05/26		83	%	70 - 130
			Total Magnesium (Mg)	2020/05/26		93	%	70 - 130
			Total Manganese (Mn)	2020/05/26		96	%	70 - 130
			Total Mercury (Hg)	2020/05/26		109	%	70 - 130
			Total Molybdenum (Mo)	2020/05/26		105	%	70 - 130
			Total Nickel (Ni)	2020/05/26		103	%	70 - 130
			Total Phosphorus (P)	2020/05/26		98	%	70 - 130
			Total Potassium (K)	2020/05/26		75	%	70 - 130
			Total Silver (Ag)	2020/05/26		128	%	70 - 130
			Total Sodium (Na)	2020/05/26		81	%	70 - 130
			Total Strontium (Sr)	2020/05/26		99	%	70 - 130
			Total Thallium (Tl)	2020/05/26		98	%	70 - 130
			Total Tin (Sn)	2020/05/26		105	%	70 - 130
			Total Uranium (U)	2020/05/26		100	%	70 - 130
			Total Vanadium (V)	2020/05/26		96	%	70 - 130
			Total Zinc (Zn)	2020/05/26		104	%	70 - 130
9860174	ANE	Spiked Blank	Total Aluminum (Al)	2020/05/26		105	%	75 - 125
			Total Antimony (Sb)	2020/05/26		128 (1)	%	75 - 125
			Total Arsenic (As)	2020/05/26		98	%	75 - 125
			Total Barium (Ba)	2020/05/26		99	%	75 - 125
			Total Beryllium (Be)	2020/05/26		96	%	75 - 125
			Total Bismuth (Bi)	2020/05/26		96	%	75 - 125
			Total Cadmium (Cd)	2020/05/26		97	%	75 - 125
			Total Calcium (Ca)	2020/05/26		107	%	75 - 125
			Total Chromium (Cr)	2020/05/26		97	%	75 - 125
			Total Cobalt (Co)	2020/05/26		95	%	75 - 125
			Total Copper (Cu)	2020/05/26		97	%	75 - 125
			Total Iron (Fe)	2020/05/26		106	%	75 - 125
			Total Lead (Pb)	2020/05/26		100	%	75 - 125
			Total Lithium (Li)	2020/05/26		95	%	75 - 125
			Total Magnesium (Mg)	2020/05/26		98	%	75 - 125
			Total Manganese (Mn)	2020/05/26		96	%	75 - 125
			Total Mercury (Hg)	2020/05/26		92	%	75 - 125
			Total Molybdenum (Mo)	2020/05/26		97	%	75 - 125
			Total Nickel (Ni)	2020/05/26		96	%	75 - 125
			Total Phosphorus (P)	2020/05/26		113	%	75 - 125
			Total Potassium (K)	2020/05/26		105	%	75 - 125
			Total Selenium (Se)	2020/05/26		106	%	75 - 125
			Total Silver (Ag)	2020/05/26		96	%	75 - 125
			Total Sodium (Na)	2020/05/26		109	%	75 - 125
			Total Strontium (Sr)	2020/05/26		99	%	75 - 125
			Total Thallium (Tl)	2020/05/26		101	%	75 - 125
			Total Tin (Sn)	2020/05/26		95	%	75 - 125
			Total Titanium (Ti)	2020/05/26		101	%	75 - 125
			Total Uranium (U)	2020/05/26		100	%	75 - 125
			Total Vanadium (V)	2020/05/26		97	%	75 - 125

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			Total Zinc (Zn)	2020/05/26		102	%	75 - 125
			Total Zirconium (Zr)	2020/05/26		103	%	75 - 125
9860174	ANE	Method Blank	Total Aluminum (Al)	2020/05/26	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Cadmium (Cd)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2020/05/26	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Cobalt (Co)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2020/05/26	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2020/05/26	ND, RDL=100		mg/kg	
			Total Manganese (Mn)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Molybdenum (Mo)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2020/05/26	ND, RDL=10		mg/kg	
			Total Potassium (K)	2020/05/26	ND, RDL=100		mg/kg	
			Total Selenium (Se)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2020/05/26	ND, RDL=100		mg/kg	
			Total Strontium (Sr)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2020/05/26	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 Tin (Sn)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Uranium (U)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2020/05/26	ND, RDL=0.50		mg/kg	
9860174	ANE	RPD	Total Aluminum (Al)	2020/05/26	2.2		%	40
			Total Antimony (Sb)	2020/05/26	1.6		%	30
			Total Arsenic (As)	2020/05/26	1.2		%	30
			Total Barium (Ba)	2020/05/26	1.6		%	40
			Total Beryllium (Be)	2020/05/26	3.0		%	30
			Total Bismuth (Bi)	2020/05/26	2.0		%	30
			Total Cadmium (Cd)	2020/05/26	0.96		%	30
			Total Calcium (Ca)	2020/05/26	3.5		%	30
			Total Chromium (Cr)	2020/05/26	3.2		%	30
			Total Cobalt (Co)	2020/05/26	1.6		%	30
			Total Copper (Cu)	2020/05/26	0.16		%	30
			Total Iron (Fe)	2020/05/26	1.2		%	30
			Total Lead (Pb)	2020/05/26	0.19		%	40
			Total Lithium (Li)	2020/05/26	5.1		%	30
			Total Magnesium (Mg)	2020/05/26	0.91		%	30
			Total Manganese (Mn)	2020/05/26	2.1		%	30
			Total Mercury (Hg)	2020/05/26	2.4		%	40
			Total Molybdenum (Mo)	2020/05/26	19		%	40
			Total Nickel (Ni)	2020/05/26	0.48		%	30
			Total Phosphorus (P)	2020/05/26	0.81		%	30
			Total Potassium (K)	2020/05/26	0.16		%	40
			Total Selenium (Se)	2020/05/26	1.7		%	30
			Total Silver (Ag)	2020/05/26	3.5		%	40
			Total Sodium (Na)	2020/05/26	1.2		%	40
			Total Strontium (Sr)	2020/05/26	3.5		%	40
			Total Thallium (Tl)	2020/05/26	5.5		%	30
			Total Tin (Sn)	2020/05/26	4.0		%	40
			Total Titanium (Ti)	2020/05/26	13		%	40
			Total Uranium (U)	2020/05/26	7.7		%	30
			Total Vanadium (V)	2020/05/26	2.1		%	30
			Total Zinc (Zn)	2020/05/26	0.28		%	30
			Total Zirconium (Zr)	2020/05/26	4.7		%	40
9861170	MPE	Matrix Spike [XT9969-01]	Total Oil and grease	2020/05/26		98	%	65 - 135
9861170	MPE	Spiked Blank	Total Oil and grease	2020/05/26		98	%	65 - 135
9861170	MPE	Method Blank	Total Oil and grease	2020/05/26	ND, RDL=100		ug/g	
9861170	MPE	RPD [XT9969-01]	Total Oil and grease	2020/05/26	NC (2)		%	30
9862034	JAX	Spiked Blank	Leachable Initial pH of Sample	2020/05/27		100	%	97 - 103
			Leachable pH after HCl	2020/05/27		100	%	97 - 103
			Leachable Final pH of Leachate	2020/05/27		99	%	97 - 103
9862034	JAX	RPD	Leachable Initial pH of Sample	2020/05/27	1.4		%	N/A
			Leachable pH after HCl	2020/05/27	NC (3)		%	N/A

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Final pH of Leachate	2020/05/27	0.38		%	N/A
9862293	ANE	Matrix Spike [XT9969-01]	Leachable Antimony (Sb)	2020/05/27		98	%	75 - 125
			Leachable Arsenic (As)	2020/05/27		91	%	75 - 125
			Leachable Barium (Ba)	2020/05/27		NC	%	75 - 125
			Leachable Beryllium (Be)	2020/05/27		97	%	75 - 125
			Leachable Boron (B)	2020/05/27		NC	%	75 - 125
			Leachable Cadmium (Cd)	2020/05/27		96	%	75 - 125
			Leachable Chromium (Cr)	2020/05/27		95	%	75 - 125
			Leachable Cobalt (Co)	2020/05/27		95	%	75 - 125
			Leachable Copper (Cu)	2020/05/27		94	%	75 - 125
			Leachable Iron (Fe)	2020/05/27		NC	%	75 - 125
			Leachable Lead (Pb)	2020/05/27		95	%	75 - 125
			Leachable Mercury (Hg)	2020/05/27		79	%	75 - 125
			Leachable Nickel (Ni)	2020/05/27		100	%	75 - 125
			Leachable Selenium (Se)	2020/05/27		98	%	75 - 125
			Leachable Silver (Ag)	2020/05/27		96	%	75 - 125
			Leachable Thallium (Tl)	2020/05/27		95	%	75 - 125
			Leachable Uranium (U)	2020/05/27		97	%	75 - 125
			Leachable Vanadium (V)	2020/05/27		95	%	75 - 125
			Leachable Zinc (Zn)	2020/05/27		99	%	75 - 125
			Leachable Zirconium (Zr)	2020/05/27		102	%	75 - 125
9862293	ANE	Spiked Blank	Leachable Antimony (Sb)	2020/05/27		99	%	80 - 120
			Leachable Arsenic (As)	2020/05/27		89	%	80 - 120
			Leachable Barium (Ba)	2020/05/27		103	%	80 - 120
			Leachable Beryllium (Be)	2020/05/27		97	%	80 - 120
			Leachable Boron (B)	2020/05/27		109	%	80 - 120
			Leachable Cadmium (Cd)	2020/05/27		97	%	80 - 120
			Leachable Chromium (Cr)	2020/05/27		92	%	80 - 120
			Leachable Cobalt (Co)	2020/05/27		91	%	80 - 120
			Leachable Copper (Cu)	2020/05/27		98	%	80 - 120
			Leachable Iron (Fe)	2020/05/27		106	%	80 - 120
			Leachable Lead (Pb)	2020/05/27		97	%	80 - 120
			Leachable Mercury (Hg)	2020/05/27		101	%	80 - 120
			Leachable Nickel (Ni)	2020/05/27		90	%	80 - 120
			Leachable Selenium (Se)	2020/05/27		100	%	80 - 120
			Leachable Silver (Ag)	2020/05/27		96	%	80 - 120
			Leachable Thallium (Tl)	2020/05/27		95	%	80 - 120
			Leachable Uranium (U)	2020/05/27		95	%	80 - 120
			Leachable Vanadium (V)	2020/05/27		90	%	80 - 120
			Leachable Zinc (Zn)	2020/05/27		98	%	80 - 120
			Leachable Zirconium (Zr)	2020/05/27		101	%	80 - 120
9862293	ANE	Method Blank	Leachable Antimony (Sb)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Arsenic (As)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Barium (Ba)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Beryllium (Be)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Boron (B)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Cadmium (Cd)	2020/05/27	ND, RDL=0.10		mg/L	

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Chromium (Cr)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Cobalt (Co)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Copper (Cu)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Iron (Fe)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Lead (Pb)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Mercury (Hg)	2020/05/27	ND, RDL=0.020		mg/L	
			Leachable Nickel (Ni)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Selenium (Se)	2020/05/27	ND, RDL=0.10		mg/L	
			Leachable Silver (Ag)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Thallium (Tl)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Uranium (U)	2020/05/27	ND, RDL=0.20		mg/L	
			Leachable Vanadium (V)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Zinc (Zn)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Zirconium (Zr)	2020/05/27	ND, RDL=1.0		mg/L	
9862293	ANE	RPD [XT9969-01]	Leachable Antimony (Sb)	2020/05/27	NC		%	35
			Leachable Arsenic (As)	2020/05/27	NC		%	35
			Leachable Barium (Ba)	2020/05/27	3.3		%	35
			Leachable Beryllium (Be)	2020/05/27	NC		%	35
			Leachable Boron (B)	2020/05/27	NC		%	35
			Leachable Cadmium (Cd)	2020/05/27	NC		%	35
			Leachable Chromium (Cr)	2020/05/27	NC		%	35
			Leachable Cobalt (Co)	2020/05/27	NC		%	35
			Leachable Copper (Cu)	2020/05/27	NC		%	35
			Leachable Iron (Fe)	2020/05/27	4.9		%	35
			Leachable Lead (Pb)	2020/05/27	NC		%	35
			Leachable Mercury (Hg)	2020/05/27	NC		%	35
			Leachable Nickel (Ni)	2020/05/27	0.41		%	35
			Leachable Selenium (Se)	2020/05/27	NC		%	35
			Leachable Silver (Ag)	2020/05/27	NC		%	35
			Leachable Thallium (Tl)	2020/05/27	NC		%	35
			Leachable Uranium (U)	2020/05/27	NC		%	35
			Leachable Vanadium (V)	2020/05/27	NC		%	35
			Leachable Zinc (Zn)	2020/05/27	NC		%	35

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Zirconium (Zr)	2020/05/27	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).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) High moisture content

(3) Sample excceds calibration range.

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BV Labs Job #: C033147
Report Date: 2020/05/28

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

Dennis Ngondu, B.Sc., P.Chem., QP, Supervisor, Organics

Luba Shymushovska, B.Sc., QP, Senior Analyst, Organics

Harry (Peng) Liang, Senior Analyst

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

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Custody Tracking Form

643

W24538

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 BV Labs eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples.

First Sample: MWTF-SLP
Last Sample: MWTF-SLP
Sample Count: 1

Relinquished By				Received By			
Lukas Bennete		Date	2020/05/15			Date	2020/05/15
		Time (24 HR)	12:00			Time (24 HR)	13:00
		Date		SARA BISCHOFF		Date	2020/05/16
		Time (24 HR)				Time (24 HR)	06:00
		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.bvlabs.com

Submission Triage Information

Sampled By: LB

# of Coolers/Pkgs: 1

Rush ☐ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LAB USE ONLY ***

Received At: FSS

Labeled By:

Verified By:

Comments:

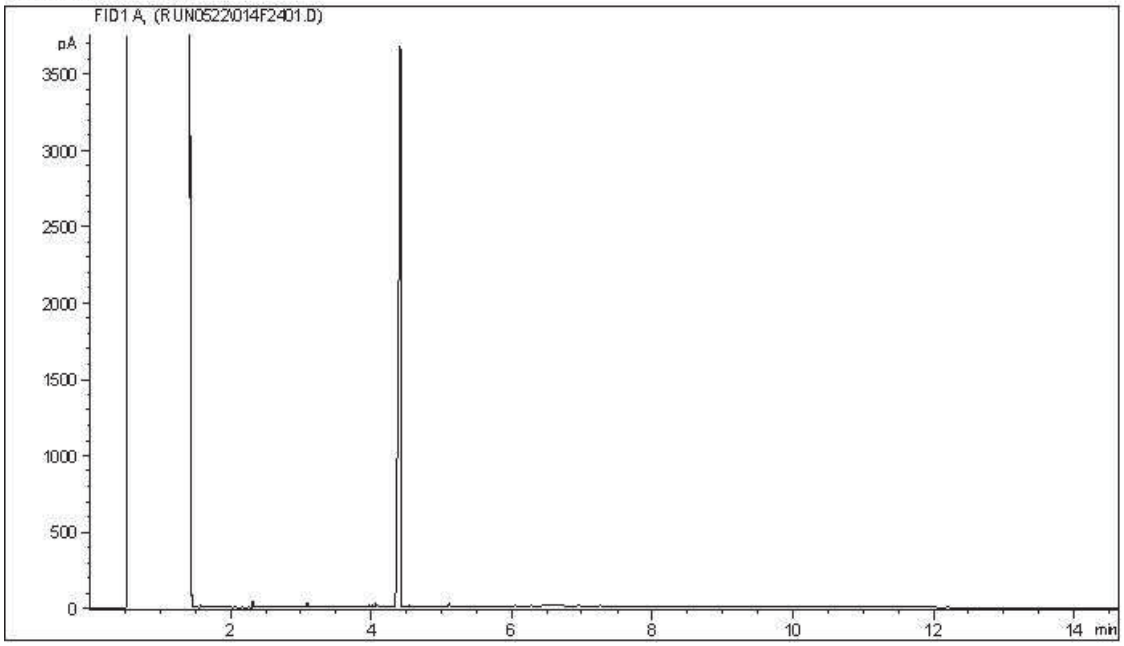
15-May-20 13:00
Debbie Nordbruget
C033147

SBZ INS-0085

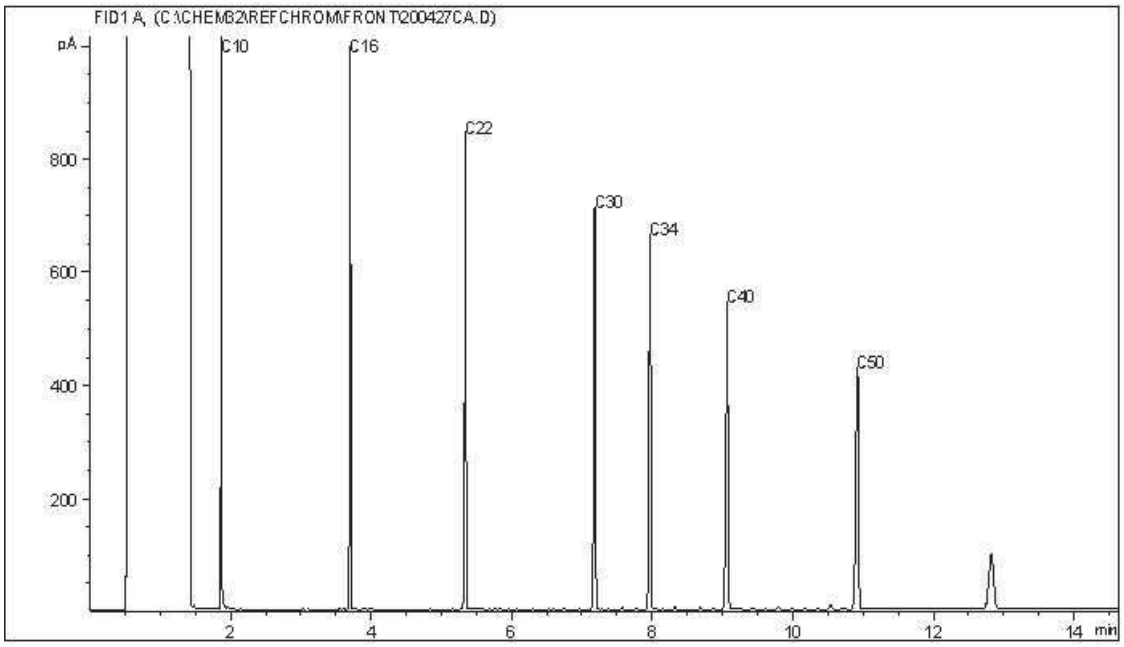
Custody Seal		Cooling	Temperature °C		
Present (Y/N)	Intact (Y/N)	Cooling Media (Y/N)	1	2	3
No		yes	12	11	11
Y	Y	Y	0	2	2

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



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.

Your P.O. #: 34974
Your C.O.C. #: 24539

Attention: Kael Hanak

LORAX ENVIRONMENTAL SERVICES LTD.
2289 BURRARD STREET
VANCOUVER, BC
CANADA V6J 3H9

Report Date: 2020/06/08
Report #: R2887509
Version: 7 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C033148
Received: 2020/05/15, 13:00

Sample Matrix: Slurry
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acid Gen. Potential S-S by Diff. - ARD	5	N/A	2020/06/08	BBY WI-00033	Auto Calc
BC Hydrocarbons in Soil by GC/FID (1)	5	2020/05/21	2020/05/22	CAL SOP-00239	BCMOE EPH S 12/16
EPH less PAH in Soil By GC/FID (1)	5	N/A	2020/05/24		Auto Calc
Fizz Rating - ARD	5	2020/05/28	2020/05/27	BBY0SOP-00020 / BBY0SOP-00023	MEND 2008 1.16.1 b
Elements by ICPMS (total) (1)	5	2020/05/25	2020/05/26	CAL SOP-00265	EPA 6020 m
ICPMS Metals on TCLP Leachate (1, 2)	5	2020/05/26	2020/05/27	AB SOP-00043	EPA 6020b R2 m
Moisture (1)	5	N/A	2020/05/22	AB SOP-00002	CCME PHC-CWS m
Net Neut. Potential (MABA-MPA S-S diff)	5	N/A	2020/06/08	BBY WI-00033	Auto Calc
Modified ABA Neut. Potential - ARD	5	2020/05/28	2020/05/28	BBY0SOP-00020	MEND 2008 1.16.1b
Modified ABA Neut. Potential - PREP	5	2020/05/28	2020/05/28	BBY0SOP-00020	MEND 2008 1.16.1b
Neut. Potential Ratio - ARD	5	N/A	2020/06/08	BBY WI-00033	Auto Calc
PAH in Soil by GC/MS (1)	5	2020/05/21	2020/05/22	AB SOP-00003 AB SOP-00036	EPA 3540C/8270E m
Total LMW, HMW, Total PAH Calc (1)	5	N/A	2020/05/24		Auto Calc
TCLP pH Measurements (1)	5	2020/05/26	2020/05/27	AB SOP-00006	SM 23 4500 H+B m
pH (2:1 DI Water Extract) (1)	5	2020/05/25	2020/05/25	AB SOP-00033 / AB SOP-00006	SM 23 4500 H+B m
Paste pH - ARD	5	2020/05/26	2020/05/26	BBY0SOP-00016	MEND 2009 1.20.1 m
Rinse pH - ARD	5	N/A	2020/05/26	BBY0SOP-00012	MEND 2009 1.20.1 m
Sulphate on HCL Extracts from ARD	5	N/A	2020/06/04	BBY6SOP-00017	SM 23 4500-SO42- E m
HCl Extractable Sulphate Sulphur - ARD	5	N/A	2020/06/08	BBY ARD-00009	ASTM D2492-02 m
Sulphide Sulphur (Calc) - ARD	5	N/A	2020/06/08	BBY WI-00033	Auto Calc
Total Carbon & Total Sulphur by LECO	5	N/A	2020/06/05		
Total Oil and Grease	5	2020/05/26	2020/05/26	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX (1)	5	2020/05/21	2020/05/25		Auto Calc
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID (1)	5	N/A	2020/05/25	CAL SOP-00240	BC MELP VH 2014

Remarks:

Bureau Veritas Laboratories are accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by BV Labs 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 BV Labs profession using

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Your P.O. #: 34974
Your C.O.C. #: 24539

Attention: Kael Hanak

LORAX ENVIRONMENTAL SERVICES LTD.
2289 BURRARD STREET
VANCOUVER, BC
CANADA V6J 3H9

Report Date: 2020/06/08
Report #: R2887509
Version: 7 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C033148
Received: 2020/05/15, 13:00

accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 dilution methods.
Results relate to samples tested. When sampling is not conducted by BV Labs, 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 BV Labs Calgary Environmental
(2) Samples were extracted as per EPA 1311 unless otherwise noted in the report.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bvlabs.com
Phone# (250)385-6112
==========
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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

RESULTS OF CHEMICAL ANALYSES OF SLURRY

BV Labs ID		XT9970		XT9971		XT9972	XT9973	XT9974		
Sampling Date		2020/05/14 10:45		2020/05/14 11:00		2020/05/14 13:15	2020/05/14 13:30	2020/05/14 12:30		
COC Number		24539		24539		24539	24539	24539		
	UNITS	**R5a-A-Pond**	**RDL**	**R5a-B-Pond**	**RDL**	**R5a-C-Pond**	**R5a-D-Pond**	**L5-WP**	**RDL**	**QC Batch**
Calculated Parameters										
HCSO4 Sulphur (S)	wt%	0.03	0.01	0.07	0.01	0.07	0.12	0.11	0.01	9857391
S2 Sulphur (S)	wt%	0.21	0.02	0.14	0.02	0.21	0.18	0.22	0.02	9857392
S-S Acid Generation Potential	Kg CaCO3/T	6.6	0.6	4.4	0.6	6.6	5.6	6.9	0.6	9857384
S-S Net Neut. Potential Modified ABA	Kg CaCO3/T	30.6		33.2		45.6	71.4	89.9		9857385
Neutralization Potential Ratio	N/A	5.6	0.1	8.5	0.1	7.9	13.8	14.0	0.1	9857387
Misc. Inorganics										
Leachable Initial pH of Sample	pH	9.42	N/A	8.95	N/A	9.45	9.00	9.38	N/A	9862034
Leachable pH after HCl	pH	<1.68 (1)	N/A	1.91	N/A	<1.68 (1)	3.39	2.26	N/A	9862034
Leachable Final pH of Leachate	pH	5.34	N/A	5.25	N/A	5.44	5.85	6.28	N/A	9862034
Anions										
HCl Extracted Sulphate (SO4)	mg/L	9.24	0.50	21.9	0.50	20.0	37.0	33.5	0.50	9873531
OIL & GREASE										
Total Oil and grease	ug/g	ND	100	ND (2)	300	ND	ND	ND	100	9861170
Physical Properties										
Paste pH	pH Units	8.12	N/A	7.12	N/A	8.32	8.37	8.42	N/A	9862158
Rinse pH	pH Units	8.20	N/A	6.86	N/A	8.40	8.16	8.27	N/A	9862159
Soluble (2:1) pH	pH	8.19	N/A	8.31	N/A	8.56	8.20	8.38	N/A	9859031
Total Carbon	wt%	2.25	0.02	2.08	0.02	1.84	2.63	2.69	0.02	9877320
MOABA Final pH	N/A	1.65		1.65		1.60	1.62	1.69		9865099
Total Sulphur (S)	wt%	0.24	0.02	0.21	0.02	0.28	0.30	0.33	0.02	9877320
MOABA HCl (N)	N/A	0.100		0.100		0.100	0.100	0.100		9865099
MOABA HCl (mL)	N/A	35.0		40.0		45.0	60.0	70.0		9865099
MOABA NaOH (N)	N/A	0.100		0.100		0.100	0.100	0.100		9865099
MOABA NaOH (mL)	N/A	20.2		24.8		24.0	29.2	31.1		9865099
MOABA Neutralization Potential	Kg CaCO3/T	37.2		37.6		52.2	77.0	96.8		9865098

RDL = Reportable Detection Limit
N/A = Not Applicable
ND = Not detected
(1) Sample excceds calibration range.
(2) Detection limit raised due to high moisture.

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

PARTICLE SIZE DISTRIBUTION ANALYSIS (SLURRY)

BV Labs ID		XT9970	XT9971	XT9972	XT9973	XT9974	
Sampling Date		2020/05/14 10:45	2020/05/14 11:00	2020/05/14 13:15	2020/05/14 13:30	2020/05/14 12:30	
COC Number		24539	24539	24539	24539	24539	
	UNITS	**R5a-A-Pond**	**R5a-B-Pond**	**R5a-C-Pond**	**R5a-D-Pond**	**L5-WP**	**QC Batch**
Physical Properties							
Fizz Rating	N/A	SLIGHT	SLIGHT	SLIGHT	SLIGHT	SLIGHT	9865100

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

PHYSICAL TESTING (SLURRY)

BV Labs ID		XT9970	XT9971	XT9972	XT9973	XT9974		
Sampling Date		2020/05/14 10:45	2020/05/14 11:00	2020/05/14 13:15	2020/05/14 13:30	2020/05/14 12:30		
COC Number		24539	24539	24539	24539	24539		
	UNITS	**R5a-A-Pond**	**R5a-B-Pond**	**R5a-C-Pond**	**R5a-D-Pond**	**L5-WP**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	38	65	30	49	44	0.30	9857585
RDL = Reportable Detection Limit								

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Your P.O. #: 34974
Sampler Initials: LB

SEMIVOLATILE ORGANICS BY GC-MS (SLURRY)

BV Labs ID		XT9970		XT9971		XT9972	XT9973	XT9974		
Sampling Date		2020/05/14 10:45		2020/05/14 11:00		2020/05/14 13:15	2020/05/14 13:30	2020/05/14 12:30		
COC Number		24539		24539		24539	24539	24539		
	UNITS	R5a-A-Pond	RDL	R5a-B-Pond	RDL	R5a-C-Pond	R5a-D-Pond	L5-WP	RDL	QC Batch
Polycyclic Aromatics										
Acenaphthene	mg/kg	0.012	0.0050	ND (1)	0.014	0.011	0.012	0.017	0.0050	9857798
Acenaphthylene	mg/kg	ND	0.0050	ND (1)	0.014	ND	ND	ND	0.0050	9857798
Acridine	mg/kg	ND	0.050	ND (1)	0.14	ND	ND	ND	0.050	9857798
Anthracene	mg/kg	ND	0.0040	ND (1)	0.011	ND	ND	ND	0.0040	9857798
Benzo(a)anthracene	mg/kg	0.019	0.010	ND (1)	0.027	0.013	0.016	0.018	0.010	9857798
Benzo(b&j)fluoranthene	mg/kg	0.052	0.010	0.047 (1)	0.027	0.037	0.046	0.047	0.010	9857798
Benzo(k)fluoranthene	mg/kg	ND	0.010	ND (1)	0.027	ND	ND	ND	0.010	9857798
Benzo(g,h,i)perylene	mg/kg	0.11	0.020	0.082 (1)	0.054	0.065	0.076	0.075	0.020	9857798
Benzo(a)pyrene	mg/kg	0.027	0.010	ND (1)	0.027	0.017	0.020	0.021	0.010	9857798
Chrysene	mg/kg	0.036	0.010	0.034 (1)	0.027	0.026	0.033	0.035	0.010	9857798
Dibenz(a,h)anthracene	mg/kg	ND	0.020	ND (1)	0.054	ND	ND	ND	0.020	9857798
Fluoranthene	mg/kg	0.033	0.010	0.030 (1)	0.027	0.024	0.027	0.034	0.010	9857798
Fluorene	mg/kg	0.027	0.010	0.045 (1)	0.027	0.030	0.035	0.044	0.010	9857798
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.020	ND (1)	0.054	ND	ND	ND	0.020	9857798
1-Methylnaphthalene	mg/kg	0.23	0.010	0.26 (1)	0.027	0.16	0.19	0.19	0.010	9857798
2-Methylnaphthalene	mg/kg	0.30	0.010	0.39 (1)	0.027	0.24	0.28	0.30	0.010	9857798
Naphthalene	mg/kg	0.17	0.010	0.24 (1)	0.027	0.13	0.17	0.19	0.010	9857798
Phenanthrene	mg/kg	0.17	0.010	0.16 (1)	0.027	0.13	0.14	0.21	0.010	9857798
Pyrene	mg/kg	0.064	0.010	0.051 (1)	0.027	0.044	0.049	0.064	0.010	9857798
Quinoline	mg/kg	ND	0.020	ND (1)	0.054	ND	ND	ND	0.020	9857798
Low Molecular Weight PAH`s	mg/kg	0.67	0.050	0.83	0.14	0.54	0.64	0.76	0.050	9857059
High Molecular Weight PAH`s	mg/kg	0.34	0.020	0.24	0.054	0.23	0.27	0.29	0.020	9857059
Total PAH	mg/kg	1.0	0.050	1.1	0.14	0.77	0.91	1.1	0.050	9857059
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	88		76		91	93	100		9857798
D8-ACENAPHTHYLENE (sur.)	%	86		72		89	91	97		9857798
D8-NAPHTHALENE (sur.)	%	86		71		89	90	97		9857798
D9-Acridine (sur.)	%	56		35 (2)		60	54	67		9857798
TERPHENYL-D14 (sur.)	%	105		100		109	113	124		9857798

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

ELEMENTS BY ATOMIC SPECTROSCOPY (SLURRY)

BV Labs ID		XT9970	XT9971	XT9972	XT9973		XT9974		
Sampling Date		2020/05/14 10:45	2020/05/14 11:00	2020/05/14 13:15	2020/05/14 13:30		2020/05/14 12:30		
COC Number		24539	24539	24539	24539		24539		
	UNITS	R5a-A-Pond	R5a-B-Pond	R5a-C-Pond	R5a-D-Pond	RDL	L5-WP	RDL	QC Batch
Elements									
Leachable Antimony (Sb)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Leachable Arsenic (As)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Barium (Ba)	mg/L	2.6	1.9	ND	ND	1.0	1.0	1.0	9862286
Leachable Beryllium (Be)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Boron (B)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Leachable Cadmium (Cd)	mg/L	ND	ND	ND	ND	0.10	ND	0.10	9862286
Leachable Chromium (Cr)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Cobalt (Co)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Leachable Copper (Cu)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Leachable Iron (Fe)	mg/L	1.1	ND	2.1	1.7	1.0	2.5	1.0	9862286
Leachable Lead (Pb)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Mercury (Hg)	mg/L	ND	ND	ND	ND	0.020	ND	0.020	9862286
Leachable Nickel (Ni)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Selenium (Se)	mg/L	ND	ND	ND	ND	0.10	ND	0.10	9862286
Leachable Silver (Ag)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Thallium (Tl)	mg/L	ND	ND	ND	ND	0.50	ND	0.50	9862286
Leachable Uranium (U)	mg/L	ND	ND	ND	ND	0.20	ND	0.20	9862286
Leachable Vanadium (V)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Leachable Zinc (Zn)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Leachable Zirconium (Zr)	mg/L	ND	ND	ND	ND	1.0	ND	1.0	9862286
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	10500	11900	6500	8980	100	9940	100	9860174
Total Antimony (Sb)	mg/kg	1.22	1.63	0.90	1.13	0.10	1.76	0.10	9860174
Total Arsenic (As)	mg/kg	11.6	13.7	7.79	9.96	0.20	13.4	0.20	9860174
Total Barium (Ba)	mg/kg	565	660	351	472	0.10	619	0.10	9860174
Total Beryllium (Be)	mg/kg	0.75	0.84	0.40	0.60	0.20	0.70	0.20	9860174
Total Bismuth (Bi)	mg/kg	0.23	0.24	0.14	0.18	0.10	0.22	0.10	9860174
Total Cadmium (Cd)	mg/kg	0.579	0.743	0.471	0.580	0.050	0.902	0.050	9860174
Total Calcium (Ca)	mg/kg	16800 (1)	20500 (1)	22700 (1)	28800 (1)	500	33700 (1)	500	9860174
Total Chromium (Cr)	mg/kg	22.4	24.3	24.7	19.8	0.50	22.7	0.50	9860174
Total Cobalt (Co)	mg/kg	11.8	13.4	8.43	10.7	0.10	16.3	0.10	9860174

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

ELEMENTS BY ATOMIC SPECTROSCOPY (SLURRY)

BV Labs ID		XT9970	XT9971	XT9972	XT9973		XT9974		
Sampling Date		2020/05/14 10:45	2020/05/14 11:00	2020/05/14 13:15	2020/05/14 13:30		2020/05/14 12:30		
COC Number		24539	24539	24539	24539		24539		
	UNITS	**R5a-A-Pond**	**R5a-B-Pond**	**R5a-C-Pond**	**R5a-D-Pond**	**RDL**	**L5-WP**	**RDL**	**QC Batch**
Total Copper (Cu)	mg/kg	32.7	38.2	20.6	28.0	0.50	43.4	0.50	9860174
Total Iron (Fe)	mg/kg	32200	35600	21400	28000	100	33100	100	9860174
Total Lead (Pb)	mg/kg	14.0	16.2	8.71	11.3	0.10	15.4	0.10	9860174
Total Lithium (Li)	mg/kg	16.4	18.1	8.56	13.3	0.50	14.8	0.50	9860174
Total Magnesium (Mg)	mg/kg	5450	5790	4460	6230	100	7020	100	9860174
Total Manganese (Mn)	mg/kg	363	519	243	415	0.20	501	0.20	9860174
Total Mercury (Hg)	mg/kg	0.075	0.096	ND	0.065	0.050	0.080	0.050	9860174
Total Molybdenum (Mo)	mg/kg	3.25	4.15	2.27	2.69	0.10	4.17	0.10	9860174
Total Nickel (Ni)	mg/kg	36.8	40.9	30.7	32.7	0.50	50.3	0.50	9860174
Total Phosphorus (P)	mg/kg	879	972	666	829	10	892	10	9860174
Total Potassium (K)	mg/kg	1910	2200	1130	1670	100	1770	100	9860174
Total Selenium (Se)	mg/kg	1.04	1.25	0.88	1.17	0.50	1.27	0.50	9860174
Total Silver (Ag)	mg/kg	0.235	0.271	0.158	0.209	0.050	0.266	0.050	9860174
Total Sodium (Na)	mg/kg	251	619	1690	1960	100	1020	100	9860174
Total Strontium (Sr)	mg/kg	74.4	82.8	72.8	77.6	0.10	124 (1)	0.50	9860174
Total Thallium (Tl)	mg/kg	0.132	0.284	0.116	0.157	0.050	0.198	0.050	9860174
Total Tin (Sn)	mg/kg	0.71	0.85	0.45	0.66	0.10	2.34	0.10	9860174
Total Titanium (Ti)	mg/kg	22.1	22.6	50.3	31.2	1.0	44.6	1.0	9860174
Total Uranium (U)	mg/kg	1.32	1.62	0.909	1.19	0.050	1.50	0.050	9860174
Total Vanadium (V)	mg/kg	35.6	43.1	25.8	33.4	1.0	37.8	1.0	9860174
Total Zinc (Zn)	mg/kg	120	129	78.4	102	1.0	192	1.0	9860174
Total Zirconium (Zr)	mg/kg	2.92	3.58	2.40	2.90	0.50	4.59	0.50	9860174

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

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Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

BTEX BY GC-MS (SLURRY)

BV Labs ID		XT9970		XT9971		XT9972		XT9973		
Sampling Date		2020/05/14 10:45		2020/05/14 11:00		2020/05/14 13:15		2020/05/14 13:30		
COC Number		24539		24539		24539		24539		
	UNITS	R5a-A-Pond	RDL	R5a-B-Pond	RDL	R5a-C-Pond	RDL	R5a-D-Pond	RDL	QC Batch
Volatiles										
Xylenes (Total)	mg/kg	0.29	0.057	0.68	0.24	ND	0.11	0.14	0.13	9857060
VH C6-C10	mg/kg	ND	8.6	ND	37	ND	8.6	ND	8.6	9857060
VPH (VH6 to 10 - BTEX)	mg/kg	ND	8.6	ND	37	ND	8.6	ND	8.6	9857060
Field Preserved Volatiles										
Methyl-tert-butylether (MTBE)	mg/kg	ND	0.10	ND (1)	0.43	ND (2)	0.20	ND (2)	0.23	9860165
Benzene	mg/kg	0.034	0.0050	0.11 (1)	0.021	0.024 (2)	0.010	0.037 (2)	0.011	9860165
Toluene	mg/kg	0.15	0.050	0.38 (1)	0.21	0.10 (2)	0.10	0.17 (2)	0.11	9860165
Ethylbenzene	mg/kg	0.078	0.010	0.23 (1)	0.043	0.045 (2)	0.020	0.064 (2)	0.023	9860165
m & p-Xylene	mg/kg	0.17	0.040	0.41 (1)	0.17	0.098 (2)	0.081	0.14 (2)	0.090	9860165
o-Xylene	mg/kg	0.12	0.040	0.27 (1)	0.17	ND (2)	0.081	ND (2)	0.090	9860165
Styrene	mg/kg	ND	0.030	ND (1)	0.13	ND (2)	0.061	ND (2)	0.068	9860165
Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	92		98		91		98		9860165
4-Bromofluorobenzene (sur.)	%	95		96		99		98		9860165
D10-o-Xylene (sur.)	%	101		102		92		102		9860165
D4-1,2-Dichloroethane (sur.)	%	83		92		86		87		9860165

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains >= 50% moisture. Detection limits raised based on sample weight used for analysis.
(2) Detection limits raised based on sample weight used for analysis.

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LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

BTEX BY GC-MS (SLURRY)

BV Labs ID		XT9974		
Sampling Date		2020/05/14 12:30		
COC Number		24539		
	UNITS	**L5-WP**	**RDL**	**QC Batch**
Volatiles				
Xylenes (Total)	mg/kg	0.095	0.057	9857060
VH C6-C10	mg/kg	9.0	8.6	9857060
VPH (VH6 to 10 - BTEX)	mg/kg	ND	8.6	9857060
Field Preserved Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	ND	0.10	9860165
Benzene	mg/kg	0.032	0.0050	9860165
Toluene	mg/kg	0.16	0.050	9860165
Ethylbenzene	mg/kg	0.068	0.010	9860165
m & p-Xylene	mg/kg	ND	0.040	9860165
o-Xylene	mg/kg	0.095	0.040	9860165
Styrene	mg/kg	0.31	0.030	9860165
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	89		9860165
4-Bromofluorobenzene (sur.)	%	101		9860165
D10-o-Xylene (sur.)	%	100		9860165
D4-1,2-Dichloroethane (sur.)	%	94		9860165

RDL = Reportable Detection Limit
ND = Not detected

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

TOTAL PETROLEUM HYDROCARBONS (SLURRY)

BV Labs ID		XT9970		XT9971		XT9972	XT9973	XT9974		
Sampling Date		2020/05/14 10:45		2020/05/14 11:00		2020/05/14 13:15	2020/05/14 13:30	2020/05/14 12:30		
COC Number		24539		24539		24539	24539	24539		
	UNITS	**R5a-A-Pond**	**RDL**	**R5a-B-Pond**	**RDL**	**R5a-C-Pond**	**R5a-D-Pond**	**L5-WP**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon										
EPH (C10-C19)	mg/kg	ND	100	ND (1)	290	ND	ND	120	100	9857772
EPH (C19-C32)	mg/kg	150	100	ND (1)	290	ND	230	240	100	9857772
LEPH (C10-C19 less PAH)	mg/kg	ND	100	ND	290	ND	ND	110	100	9857062
HEPH (C19-C32 less PAH)	mg/kg	150	100	ND	290	ND	230	240	100	9857062
Surrogate Recovery (%)										
O-TERPHENYL (sur.)	%	97		89		99	100	100		9857772

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	11.3°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9857391	RAE	QC Standard	HCSO4 Sulphur (S)	2020/06/08		0.32	%	N/A
9857391	RAE	Spiked Blank	HCSO4 Sulphur (S)	2020/06/08		0.32	%	N/A
9857391	RAE	Method Blank	HCSO4 Sulphur (S)	2020/06/08	ND, RDL=0.01		wt%	
9857391	RAE	RPD [XT9970-01]	HCSO4 Sulphur (S)	2020/06/08	0		%	20
9857391	RAE	RPD	HCSO4 Sulphur (S)	2020/06/08	0		%	20
9857585	RV5	Method Blank	Moisture	2020/05/22	ND, RDL=0.30		%	
9857585	RV5	RPD	Moisture	2020/05/22	2.8		%	20
9857772	LSH	Matrix Spike [XT9970-01]	O-TERPHENYL (sur.)	2020/05/22		100	%	60 - 140
			EPH (C10-C19)	2020/05/22		90	%	60 - 130
			EPH (C19-C32)	2020/05/22		89	%	60 - 130
9857772	LSH	Spiked Blank	O-TERPHENYL (sur.)	2020/05/22		98	%	60 - 140
			EPH (C10-C19)	2020/05/22		88	%	70 - 130
			EPH (C19-C32)	2020/05/22		89	%	70 - 130
9857772	LSH	Method Blank	O-TERPHENYL (sur.)	2020/05/22		98	%	60 - 140
			EPH (C10-C19)	2020/05/22	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2020/05/22	ND, RDL=100		mg/kg	
9857772	LSH	RPD [XT9970-01]	EPH (C10-C19)	2020/05/22	NC		%	50
			EPH (C19-C32)	2020/05/22	3.5		%	50
9857798	NK3	Matrix Spike [XT9970-01]	D10-ANTHRACENE (sur.)	2020/05/22		88	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		86	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		85	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		61	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		104	%	50 - 140
			Acenaphthene	2020/05/22		89	%	50 - 140
			Acenaphthylene	2020/05/22		85	%	50 - 140
			Acridine	2020/05/22		61	%	50 - 140
			Anthracene	2020/05/22		63	%	50 - 140
			Benzo(a)anthracene	2020/05/22		90	%	50 - 140
			Benzo(b&j)fluoranthene	2020/05/22		77	%	50 - 140
			Benzo(k)fluoranthene	2020/05/22		76	%	50 - 140
			Benzo(g,h,i)perylene	2020/05/22		61	%	50 - 140
			Benzo(a)pyrene	2020/05/22		77	%	50 - 140
			Chrysene	2020/05/22		92	%	50 - 140
			Dibenz(a,h)anthracene	2020/05/22		80	%	50 - 140
			Fluoranthene	2020/05/22		86	%	50 - 140
			Fluorene	2020/05/22		86	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2020/05/22		72	%	50 - 140
			1-Methylnaphthalene	2020/05/22		83	%	50 - 140
			2-Methylnaphthalene	2020/05/22		83	%	50 - 140
			Naphthalene	2020/05/22		87	%	50 - 140
			Phenanthrene	2020/05/22		87	%	50 - 140
			Pyrene	2020/05/22		84	%	50 - 140
			Quinoline	2020/05/22		103	%	50 - 140
9857798	NK3	Spiked Blank	D10-ANTHRACENE (sur.)	2020/05/22		94	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		97	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		96	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		71	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		116	%	50 - 140
			Acenaphthene	2020/05/22		95	%	50 - 140
			Acenaphthylene	2020/05/22		93	%	50 - 140

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acridine	2020/05/22		71	%	50 - 140
			Anthracene	2020/05/22		67	%	50 - 140
			Benzo(a)anthracene	2020/05/22		108	%	50 - 140
			Benzo(b&j)fluoranthene	2020/05/22		91	%	50 - 140
			Benzo(k)fluoranthene	2020/05/22		97	%	50 - 140
			Benzo(g,h,i)perylene	2020/05/22		67	%	50 - 140
			Benzo(a)pyrene	2020/05/22		88	%	50 - 140
			Chrysene	2020/05/22		110	%	50 - 140
			Dibenz(a,h)anthracene	2020/05/22		71	%	50 - 140
			Fluoranthene	2020/05/22		94	%	50 - 140
			Fluorene	2020/05/22		94	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2020/05/22		90	%	50 - 140
			1-Methylnaphthalene	2020/05/22		93	%	50 - 140
			2-Methylnaphthalene	2020/05/22		91	%	50 - 140
			Naphthalene	2020/05/22		97	%	50 - 140
			Phenanthrene	2020/05/22		94	%	50 - 140
			Pyrene	2020/05/22		92	%	50 - 140
			Quinoline	2020/05/22		107	%	50 - 140
9857798	NK3	Method Blank	D10-ANTHRACENE (sur.)	2020/05/22		94	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		94	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		92	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		66	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		122	%	50 - 140
			Acenaphthene	2020/05/22	ND, RDL=0.0050		mg/kg	
			Acenaphthylene	2020/05/22	ND, RDL=0.0050		mg/kg	
			Acridine	2020/05/22	ND, RDL=0.050		mg/kg	
			Anthracene	2020/05/22	ND, RDL=0.0040		mg/kg	
			Benzo(a)anthracene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(b&j)fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(k)fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(g,h,i)perylene	2020/05/22	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Chrysene	2020/05/22	ND, RDL=0.010		mg/kg	
			Dibenz(a,h)anthracene	2020/05/22	ND, RDL=0.020		mg/kg	
			Fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Fluorene	2020/05/22	ND, RDL=0.010		mg/kg	
			Indeno(1,2,3-cd)pyrene	2020/05/22	ND, RDL=0.020		mg/kg	
			1-Methylnaphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			2-Methylnaphthalene	2020/05/22	ND, RDL=0.010		mg/kg	

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			Naphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			Phenanthrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Pyrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Quinoline	2020/05/22	ND, RDL=0.020		mg/kg	
9857798	NK3	RPD [XT9970-01]	Acenaphthene	2020/05/22	16		%	50
			Acenaphthylene	2020/05/22	NC		%	50
			Acridine	2020/05/22	NC		%	50
			Anthracene	2020/05/22	NC		%	50
			Benzo(a)anthracene	2020/05/22	8.2		%	50
			Benzo(b&j)fluoranthene	2020/05/22	13		%	50
			Benzo(k)fluoranthene	2020/05/22	3.1		%	50
			Benzo(g,h,i)perylene	2020/05/22	12		%	50
			Benzo(a)pyrene	2020/05/22	14		%	50
			Chrysene	2020/05/22	21		%	50
			Dibenz(a,h)anthracene	2020/05/22	NC		%	50
			Fluoranthene	2020/05/22	9.8		%	50
			Fluorene	2020/05/22	10		%	50
			Indeno(1,2,3-cd)pyrene	2020/05/22	2.4		%	50
			1-Methylnaphthalene	2020/05/22	12		%	50
			2-Methylnaphthalene	2020/05/22	12		%	50
			Naphthalene	2020/05/22	15		%	50
			Phenanthrene	2020/05/22	12		%	50
			Pyrene	2020/05/22	8.5		%	50
			Quinoline	2020/05/22	NC		%	50
9859031	KKC	QC Standard	Soluble (2:1) pH	2020/05/25		101	%	98 - 102
9859031	KKC	Spiked Blank	Soluble (2:1) pH	2020/05/25		100	%	97 - 103
9859031	KKC	RPD	Soluble (2:1) pH	2020/05/25	0.12		%	20
9860165	GP4	Matrix Spike	1,4-Difluorobenzene (sur.)	2020/05/25		92	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		97	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		107	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		84	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25		80	%	50 - 140
			Benzene	2020/05/25		86	%	50 - 140
			Toluene	2020/05/25		93	%	50 - 140
			Ethylbenzene	2020/05/25		89	%	50 - 140
			m & p-Xylene	2020/05/25		91	%	50 - 140
			o-Xylene	2020/05/25		93	%	50 - 140
			Styrene	2020/05/25		98	%	50 - 140
9860165	GP4	Spiked Blank	1,4-Difluorobenzene (sur.)	2020/05/25		99	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		98	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		97	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		92	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25		80	%	60 - 130
			Benzene	2020/05/25		97	%	60 - 130
			Toluene	2020/05/25		97	%	60 - 130
			Ethylbenzene	2020/05/25		92	%	60 - 130
			m & p-Xylene	2020/05/25		94	%	60 - 130
			o-Xylene	2020/05/25		95	%	60 - 130
			Styrene	2020/05/25		95	%	60 - 130
9860165	GP4	Method Blank	1,4-Difluorobenzene (sur.)	2020/05/25		98	%	60 - 140

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			4-Bromofluorobenzene (sur.)	2020/05/25		96	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		95	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		88	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25	ND, RDL=0.10		mg/kg	
			Benzene	2020/05/25	ND, RDL=0.0050		mg/kg	
			Toluene	2020/05/25	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2020/05/25	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2020/05/25	ND, RDL=0.040		mg/kg	
			o-Xylene	2020/05/25	ND, RDL=0.040		mg/kg	
			Styrene	2020/05/25	ND, RDL=0.030		mg/kg	
9860165	GP4	RPD	Methyl-tert-butylether (MTBE)	2020/05/25	NC		%	50
			Benzene	2020/05/25	1.6		%	50
			Toluene	2020/05/25	5.4		%	50
			Ethylbenzene	2020/05/25	3.7		%	50
			m & p-Xylene	2020/05/25	0.49		%	50
			o-Xylene	2020/05/25	4.1		%	50
			Styrene	2020/05/25	0.15		%	50
9860174	ANE	Matrix Spike	Total Aluminum (Al)	2020/05/26		NC	%	75 - 125
			Total Antimony (Sb)	2020/05/26		111	%	75 - 125
			Total Arsenic (As)	2020/05/26		99	%	75 - 125
			Total Barium (Ba)	2020/05/26		NC	%	75 - 125
			Total Beryllium (Be)	2020/05/26		100	%	75 - 125
			Total Bismuth (Bi)	2020/05/26		93	%	75 - 125
			Total Cadmium (Cd)	2020/05/26		100	%	75 - 125
			Total Calcium (Ca)	2020/05/26		NC	%	75 - 125
			Total Chromium (Cr)	2020/05/26		122	%	75 - 125
			Total Cobalt (Co)	2020/05/26		93	%	75 - 125
			Total Copper (Cu)	2020/05/26		NC	%	75 - 125
			Total Iron (Fe)	2020/05/26		NC	%	75 - 125
			Total Lead (Pb)	2020/05/26		101	%	75 - 125
			Total Lithium (Li)	2020/05/26		104	%	75 - 125
			Total Magnesium (Mg)	2020/05/26		NC	%	75 - 125
			Total Manganese (Mn)	2020/05/26		NC	%	75 - 125
			Total Mercury (Hg)	2020/05/26		94	%	75 - 125
			Total Molybdenum (Mo)	2020/05/26		NC	%	75 - 125
			Total Nickel (Ni)	2020/05/26		NC	%	75 - 125
			Total Phosphorus (P)	2020/05/26		NC	%	75 - 125
			Total Potassium (K)	2020/05/26		NC	%	75 - 125
			Total Selenium (Se)	2020/05/26		107	%	75 - 125
			Total Silver (Ag)	2020/05/26		97	%	75 - 125
			Total Sodium (Na)	2020/05/26		NC	%	75 - 125
			Total Strontium (Sr)	2020/05/26		NC	%	75 - 125
			Total Thallium (Tl)	2020/05/26		90	%	75 - 125
			Total Tin (Sn)	2020/05/26		105	%	75 - 125
			Total Titanium (Ti)	2020/05/26		90	%	75 - 125
			Total Uranium (U)	2020/05/26		96	%	75 - 125
			Total Vanadium (V)	2020/05/26		NC	%	75 - 125

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			Total Zinc (Zn)	2020/05/26		NC	%	75 - 125
			Total Zirconium (Zr)	2020/05/26		NC	%	75 - 125
9860174	ANE	QC Standard	Total Aluminum (Al)	2020/05/26		83	%	70 - 130
			Total Arsenic (As)	2020/05/26		111	%	70 - 130
			Total Barium (Ba)	2020/05/26		102	%	70 - 130
			Total Beryllium (Be)	2020/05/26		95	%	70 - 130
			Total Cadmium (Cd)	2020/05/26		97	%	70 - 130
			Total Calcium (Ca)	2020/05/26		101	%	70 - 130
			Total Chromium (Cr)	2020/05/26		88	%	70 - 130
			Total Cobalt (Co)	2020/05/26		92	%	70 - 130
			Total Copper (Cu)	2020/05/26		104	%	70 - 130
			Total Iron (Fe)	2020/05/26		109	%	70 - 130
			Total Lead (Pb)	2020/05/26		111	%	70 - 130
			Total Lithium (Li)	2020/05/26		83	%	70 - 130
			Total Magnesium (Mg)	2020/05/26		93	%	70 - 130
			Total Manganese (Mn)	2020/05/26		96	%	70 - 130
			Total Mercury (Hg)	2020/05/26		109	%	70 - 130
			Total Molybdenum (Mo)	2020/05/26		105	%	70 - 130
			Total Nickel (Ni)	2020/05/26		103	%	70 - 130
			Total Phosphorus (P)	2020/05/26		98	%	70 - 130
			Total Potassium (K)	2020/05/26		75	%	70 - 130
			Total Silver (Ag)	2020/05/26		128	%	70 - 130
			Total Sodium (Na)	2020/05/26		81	%	70 - 130
			Total Strontium (Sr)	2020/05/26		99	%	70 - 130
			Total Thallium (Tl)	2020/05/26		98	%	70 - 130
			Total Tin (Sn)	2020/05/26		105	%	70 - 130
			Total Uranium (U)	2020/05/26		100	%	70 - 130
			Total Vanadium (V)	2020/05/26		96	%	70 - 130
			Total Zinc (Zn)	2020/05/26		104	%	70 - 130
9860174	ANE	Spiked Blank	Total Aluminum (Al)	2020/05/26		105	%	75 - 125
			Total Antimony (Sb)	2020/05/26		128 (1)	%	75 - 125
			Total Arsenic (As)	2020/05/26		98	%	75 - 125
			Total Barium (Ba)	2020/05/26		99	%	75 - 125
			Total Beryllium (Be)	2020/05/26		96	%	75 - 125
			Total Bismuth (Bi)	2020/05/26		96	%	75 - 125
			Total Cadmium (Cd)	2020/05/26		97	%	75 - 125
			Total Calcium (Ca)	2020/05/26		107	%	75 - 125
			Total Chromium (Cr)	2020/05/26		97	%	75 - 125
			Total Cobalt (Co)	2020/05/26		95	%	75 - 125
			Total Copper (Cu)	2020/05/26		97	%	75 - 125
			Total Iron (Fe)	2020/05/26		106	%	75 - 125
			Total Lead (Pb)	2020/05/26		100	%	75 - 125
			Total Lithium (Li)	2020/05/26		95	%	75 - 125
			Total Magnesium (Mg)	2020/05/26		98	%	75 - 125
			Total Manganese (Mn)	2020/05/26		96	%	75 - 125
			Total Mercury (Hg)	2020/05/26		92	%	75 - 125
			Total Molybdenum (Mo)	2020/05/26		97	%	75 - 125
			Total Nickel (Ni)	2020/05/26		96	%	75 - 125
			Total Phosphorus (P)	2020/05/26		113	%	75 - 125
			Total Potassium (K)	2020/05/26		105	%	75 - 125
			Total Selenium (Se)	2020/05/26		106	%	75 - 125
			Total Silver (Ag)	2020/05/26		96	%	75 - 125
			Total Sodium (Na)	2020/05/26		109	%	75 - 125
			Total Strontium (Sr)	2020/05/26		99	%	75 - 125

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Thallium (Tl)	2020/05/26		101	%	75 - 125
			Total Tin (Sn)	2020/05/26		95	%	75 - 125
			Total Titanium (Ti)	2020/05/26		101	%	75 - 125
			Total Uranium (U)	2020/05/26		100	%	75 - 125
			Total Vanadium (V)	2020/05/26		97	%	75 - 125
			Total Zinc (Zn)	2020/05/26		102	%	75 - 125
			Total Zirconium (Zr)	2020/05/26		103	%	75 - 125
9860174	ANE	Method Blank	Total Aluminum (Al)	2020/05/26	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Cadmium (Cd)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2020/05/26	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Cobalt (Co)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2020/05/26	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2020/05/26	ND, RDL=100		mg/kg	
			Total Manganese (Mn)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Molybdenum (Mo)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2020/05/26	ND, RDL=10		mg/kg	
			Total Potassium (K)	2020/05/26	ND, RDL=100		mg/kg	
			Total Selenium (Se)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2020/05/26	ND, RDL=100		mg/kg	

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Strontium (Sr)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Tin (Sn)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Uranium (U)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2020/05/26	ND, RDL=0.50		mg/kg	
9860174	ANE	RPD	Total Aluminum (Al)	2020/05/26	2.2		%	40
			Total Antimony (Sb)	2020/05/26	1.6		%	30
			Total Arsenic (As)	2020/05/26	1.2		%	30
			Total Barium (Ba)	2020/05/26	1.6		%	40
			Total Beryllium (Be)	2020/05/26	3.0		%	30
			Total Bismuth (Bi)	2020/05/26	2.0		%	30
			Total Cadmium (Cd)	2020/05/26	0.96		%	30
			Total Calcium (Ca)	2020/05/26	3.5		%	30
			Total Chromium (Cr)	2020/05/26	3.2		%	30
			Total Cobalt (Co)	2020/05/26	1.6		%	30
			Total Copper (Cu)	2020/05/26	0.16		%	30
			Total Iron (Fe)	2020/05/26	1.2		%	30
			Total Lead (Pb)	2020/05/26	0.19		%	40
			Total Lithium (Li)	2020/05/26	5.1		%	30
			Total Magnesium (Mg)	2020/05/26	0.91		%	30
			Total Manganese (Mn)	2020/05/26	2.1		%	30
			Total Mercury (Hg)	2020/05/26	2.4		%	40
			Total Molybdenum (Mo)	2020/05/26	19		%	40
			Total Nickel (Ni)	2020/05/26	0.48		%	30
			Total Phosphorus (P)	2020/05/26	0.81		%	30
			Total Potassium (K)	2020/05/26	0.16		%	40
			Total Selenium (Se)	2020/05/26	1.7		%	30
			Total Silver (Ag)	2020/05/26	3.5		%	40
			Total Sodium (Na)	2020/05/26	1.2		%	40
			Total Strontium (Sr)	2020/05/26	3.5		%	40
			Total Thallium (Tl)	2020/05/26	5.5		%	30
			Total Tin (Sn)	2020/05/26	4.0		%	40
			Total Titanium (Ti)	2020/05/26	13		%	40
			Total Uranium (U)	2020/05/26	7.7		%	30
			Total Vanadium (V)	2020/05/26	2.1		%	30
			Total Zinc (Zn)	2020/05/26	0.28		%	30
			Total Zirconium (Zr)	2020/05/26	4.7		%	40
9861170	MPE	Matrix Spike	Total Oil and grease	2020/05/26		98	%	65 - 135
9861170	MPE	Spiked Blank	Total Oil and grease	2020/05/26		98	%	65 - 135
9861170	MPE	Method Blank	Total Oil and grease	2020/05/26	ND, RDL=100		ug/g	
9861170	MPE	RPD	Total Oil and grease	2020/05/26	NC (2)		%	30
9862034	JAX	Spiked Blank	Leachable Initial pH of Sample	2020/05/27		100	%	97 - 103

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable pH after HCl	2020/05/27		100	%	97 - 103
			Leachable Final pH of Leachate	2020/05/27		99	%	97 - 103
9862034	JAX	RPD	Leachable Initial pH of Sample	2020/05/27	1.4		%	N/A
			Leachable pH after HCl	2020/05/27	NC (3)		%	N/A
			Leachable Final pH of Leachate	2020/05/27	0.38		%	N/A
9862158	RHO	QC Standard	Paste pH	2020/05/26		8.1	%	N/A
9862158	RHO	RPD	Paste pH	2020/05/26	1.6		%	N/A
			Paste pH	2020/05/26	0.35		%	N/A
9862158	RHO	RPD [XT9970-01]	Paste pH	2020/05/26	0.98		%	N/A
9862159	RHO	RPD [XT9970-01]	Rinse pH	2020/05/26	0.37		%	N/A
9862159	RHO	RPD	Rinse pH	2020/05/26	0.48		%	N/A
			Rinse pH	2020/05/26	0.71		%	N/A
9862286	ANE	Matrix Spike	Leachable Antimony (Sb)	2020/05/27		100	%	75 - 125
			Leachable Arsenic (As)	2020/05/27		95	%	75 - 125
			Leachable Barium (Ba)	2020/05/27		NC	%	75 - 125
			Leachable Beryllium (Be)	2020/05/27		98	%	75 - 125
			Leachable Boron (B)	2020/05/27		85	%	75 - 125
			Leachable Cadmium (Cd)	2020/05/27		96	%	75 - 125
			Leachable Chromium (Cr)	2020/05/27		94	%	75 - 125
			Leachable Cobalt (Co)	2020/05/27		93	%	75 - 125
			Leachable Copper (Cu)	2020/05/27		91	%	75 - 125
			Leachable Iron (Fe)	2020/05/27		NC	%	75 - 125
			Leachable Lead (Pb)	2020/05/27		95	%	75 - 125
			Leachable Mercury (Hg)	2020/05/27		88	%	75 - 125
			Leachable Nickel (Ni)	2020/05/27		92	%	75 - 125
			Leachable Selenium (Se)	2020/05/27		97	%	75 - 125
			Leachable Silver (Ag)	2020/05/27		96	%	75 - 125
			Leachable Thallium (Tl)	2020/05/27		95	%	75 - 125
			Leachable Uranium (U)	2020/05/27		98	%	75 - 125
			Leachable Vanadium (V)	2020/05/27		96	%	75 - 125
			Leachable Zinc (Zn)	2020/05/27		91	%	75 - 125
			Leachable Zirconium (Zr)	2020/05/27		104	%	75 - 125
9862286	ANE	Spiked Blank	Leachable Antimony (Sb)	2020/05/27		99	%	80 - 120
			Leachable Arsenic (As)	2020/05/27		90	%	80 - 120
			Leachable Barium (Ba)	2020/05/27		105	%	80 - 120
			Leachable Beryllium (Be)	2020/05/27		96	%	80 - 120
			Leachable Boron (B)	2020/05/27		95	%	80 - 120
			Leachable Cadmium (Cd)	2020/05/27		96	%	80 - 120
			Leachable Chromium (Cr)	2020/05/27		93	%	80 - 120
			Leachable Cobalt (Co)	2020/05/27		92	%	80 - 120
			Leachable Copper (Cu)	2020/05/27		92	%	80 - 120
			Leachable Iron (Fe)	2020/05/27		88	%	80 - 120
			Leachable Lead (Pb)	2020/05/27		96	%	80 - 120
			Leachable Mercury (Hg)	2020/05/27		89	%	80 - 120
			Leachable Nickel (Ni)	2020/05/27		92	%	80 - 120
			Leachable Selenium (Se)	2020/05/27		96	%	80 - 120
			Leachable Silver (Ag)	2020/05/27		96	%	80 - 120
			Leachable Thallium (Tl)	2020/05/27		95	%	80 - 120
			Leachable Uranium (U)	2020/05/27		96	%	80 - 120
			Leachable Vanadium (V)	2020/05/27		92	%	80 - 120
			Leachable Zinc (Zn)	2020/05/27		95	%	80 - 120
			Leachable Zirconium (Zr)	2020/05/27		101	%	80 - 120
9862286	ANE	Method Blank	Leachable Antimony (Sb)	2020/05/27	ND, RDL=1.0		mg/L	

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BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Arsenic (As)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Barium (Ba)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Beryllium (Be)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Boron (B)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Cadmium (Cd)	2020/05/27	ND, RDL=0.10		mg/L	
			Leachable Chromium (Cr)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Cobalt (Co)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Copper (Cu)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Iron (Fe)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Lead (Pb)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Mercury (Hg)	2020/05/27	ND, RDL=0.020		mg/L	
			Leachable Nickel (Ni)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Selenium (Se)	2020/05/27	ND, RDL=0.10		mg/L	
			Leachable Silver (Ag)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Thallium (Tl)	2020/05/27	ND, RDL=0.50		mg/L	
			Leachable Uranium (U)	2020/05/27	ND, RDL=0.20		mg/L	
			Leachable Vanadium (V)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Zinc (Zn)	2020/05/27	ND, RDL=1.0		mg/L	
			Leachable Zirconium (Zr)	2020/05/27	ND, RDL=1.0		mg/L	
9862286	ANE	RPD	Leachable Antimony (Sb)	2020/05/27	NC		%	35
			Leachable Arsenic (As)	2020/05/27	NC		%	35
			Leachable Barium (Ba)	2020/05/27	0.10		%	35
			Leachable Beryllium (Be)	2020/05/27	NC		%	35
			Leachable Boron (B)	2020/05/27	NC		%	35
			Leachable Cadmium (Cd)	2020/05/27	NC		%	35
			Leachable Chromium (Cr)	2020/05/27	NC		%	35
			Leachable Cobalt (Co)	2020/05/27	NC		%	35
			Leachable Copper (Cu)	2020/05/27	NC		%	35
			Leachable Iron (Fe)	2020/05/27	6.9		%	35
			Leachable Lead (Pb)	2020/05/27	NC		%	35
			Leachable Mercury (Hg)	2020/05/27	NC		%	35
			Leachable Nickel (Ni)	2020/05/27	NC		%	35
			Leachable Selenium (Se)	2020/05/27	NC		%	35
			Leachable Silver (Ag)	2020/05/27	NC		%	35
			Leachable Thallium (Tl)	2020/05/27	NC		%	35
			Leachable Uranium (U)	2020/05/27	NC		%	35

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Your P.O. #: 34974
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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Vanadium (V)	2020/05/27	NC		%	35
			Leachable Zinc (Zn)	2020/05/27	NC		%	35
			Leachable Zirconium (Zr)	2020/05/27	NC		%	35
9865098	RHO	QC Standard	MOABA Neutralization Potential	2020/05/28		61	%	N/A
9865098	RHO	Method Blank	MOABA Neutralization Potential	2020/05/28	0.00		Kg CaCO3/T	
9865098	RHO	RPD	MOABA Neutralization Potential	2020/05/28	8.0		%	N/A
			MOABA Neutralization Potential	2020/05/28	0.51		%	N/A
9865098	RHO	RPD [XT9970-01]	MOABA Neutralization Potential	2020/05/28	3.6		%	N/A
9865100	RHO	RPD	Fizz Rating	2020/05/27	NC		%	N/A
			Fizz Rating	2020/05/27	NC		%	N/A
9865100	RHO	RPD [XT9970-01]	Fizz Rating	2020/05/27	NC		%	N/A
9873531	BB3	Matrix Spike	HCl Extracted Sulphate (SO4)	2020/06/04		NC	%	80 - 120
9873531	BB3	QC Standard	HCl Extracted Sulphate (SO4)	2020/06/04		111	%	80 - 120
9873531	BB3	Spiked Blank	HCl Extracted Sulphate (SO4)	2020/06/04		113	%	80 - 120
9873531	BB3	Method Blank	HCl Extracted Sulphate (SO4)	2020/06/04	ND, RDL=0.50		mg/L	
9873531	BB3	RPD	HCl Extracted Sulphate (SO4)	2020/06/04	3.4		%	20
			HCl Extracted Sulphate (SO4)	2020/06/04	3.7		%	20
9873531	BB3	RPD [XT9970-01]	HCl Extracted Sulphate (SO4)	2020/06/04	3.0		%	20
9877320	BT2	QC Standard	Total Carbon	2020/06/05		1.0	%	N/A
			Total Sulphur (S)	2020/06/05		2.8	%	N/A
9877320	BT2	Spiked Blank	Total Carbon	2020/06/05		0.19	%	N/A
			Total Sulphur (S)	2020/06/05		0.17	%	N/A
9877320	BT2	Method Blank	Total Carbon	2020/06/05	ND, RDL=0.02		wt%	
			Total Sulphur (S)	2020/06/05	ND, RDL=0.02		wt%	
9877320	BT2	RPD [XT9974-01]	Total Carbon	2020/06/05	NC		%	N/A
			Total Sulphur (S)	2020/06/05	0		%	N/A

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) High moisture content

(3) Sample excceds calibration range.

Bureau Veritas Laboratories Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

BV Labs Job #: C033148
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

Dennis Ngondu, B.Sc., P.Chem., QP, Supervisor, Organics

Luba Shymushovska, B.Sc., QP, Senior Analyst, Organics

Harry (Peng) Liang, Senior Analyst

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs 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

643

W24539

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 BV Labs eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples.

First Sample: R5a-A-Pond
Last Sample: L5-WP
Sample Count: 5

Relinquished By				Received By			
Lukas Bennete		Date	2020/05/15			Date	2020/05/15
		Time (24 HR)	12:00			Time (24 HR)	13:00
		Date		SARA BISCHOFF		Date	2020/05/16
		Time (24 HR)				Time (24 HR)	06:00
		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.bvlabs.com

Submission Triage Information

Sampled By: LB

# of Coolers/Pkgs: 1

Rush ☐ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LAB USE ONLY ***

Received At: FSJ

Comments:

Labeled By

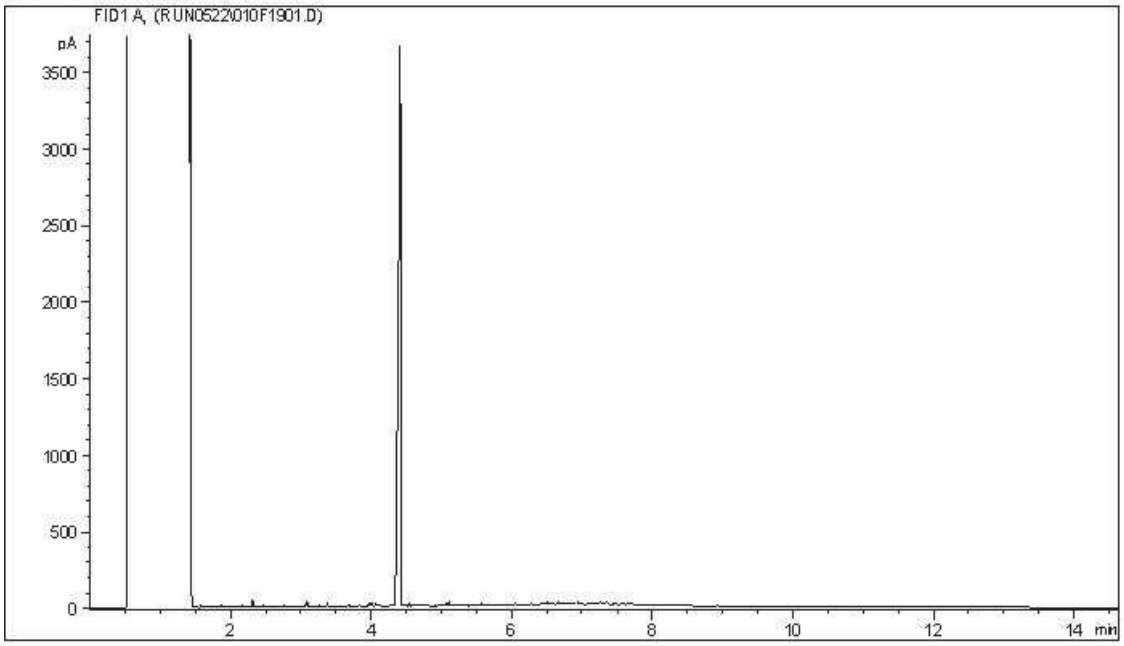
Verified By

15-May-20 13:00
Debbie Nordbruget
C033148
SBZ INS-0085

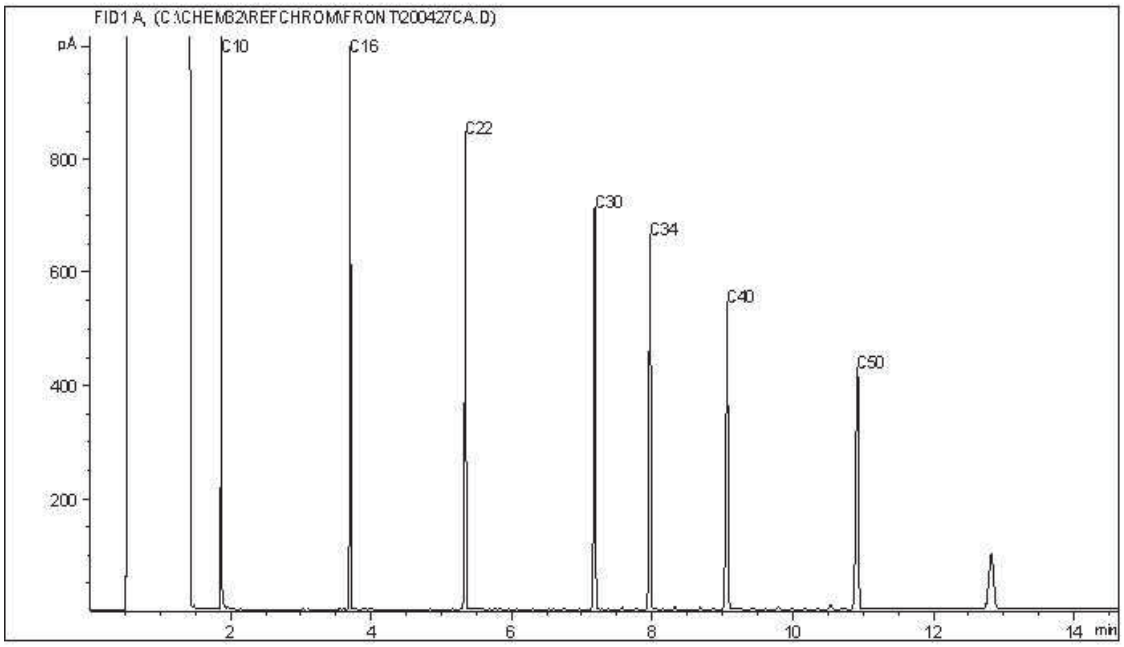
Custody Seal		Cooling	Temperature °C		
Present (Y/N)	Intact (Y/N)	Cooling Media (Y/N)	1	2	3
NO		Yes	12	11	11
Y	Y	Y	0	2	2

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



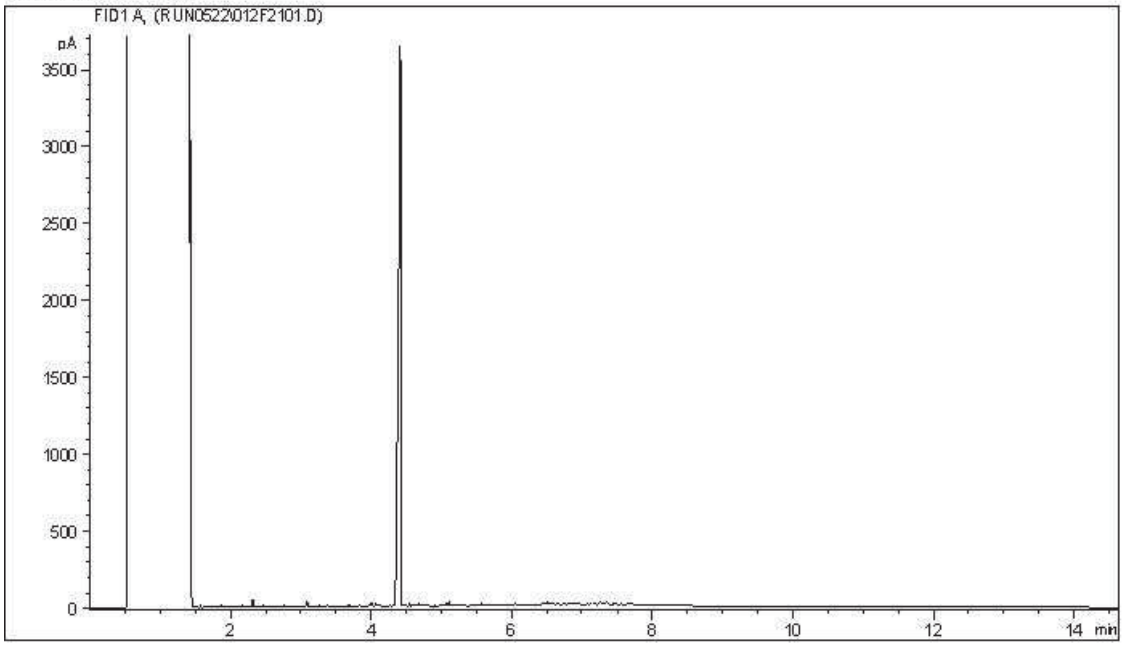
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

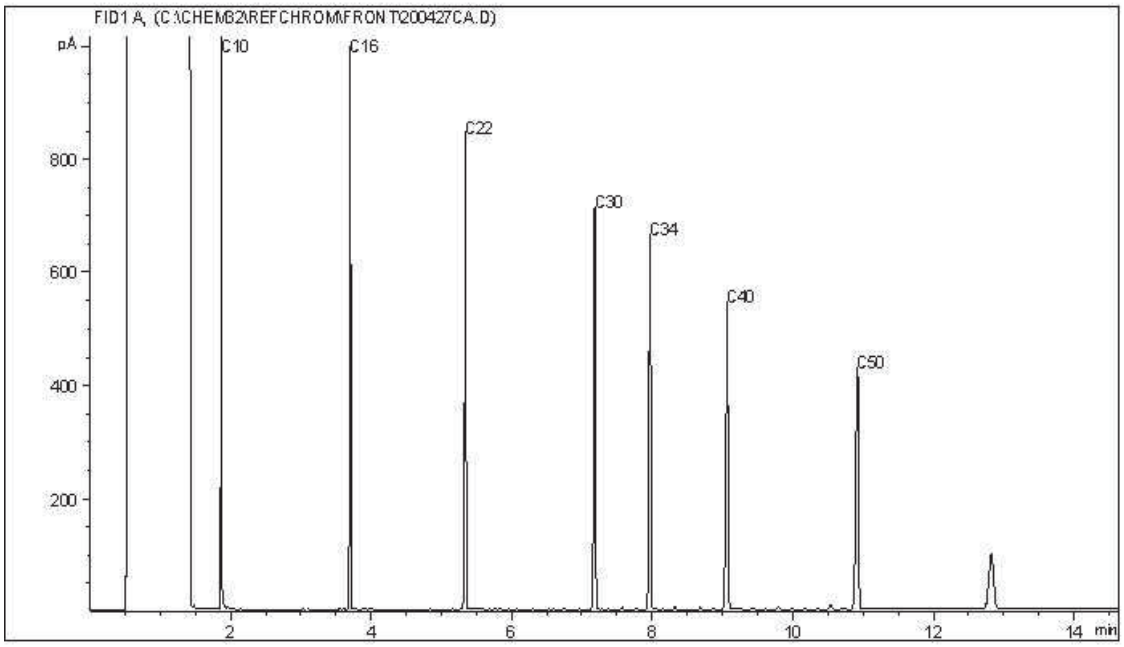
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

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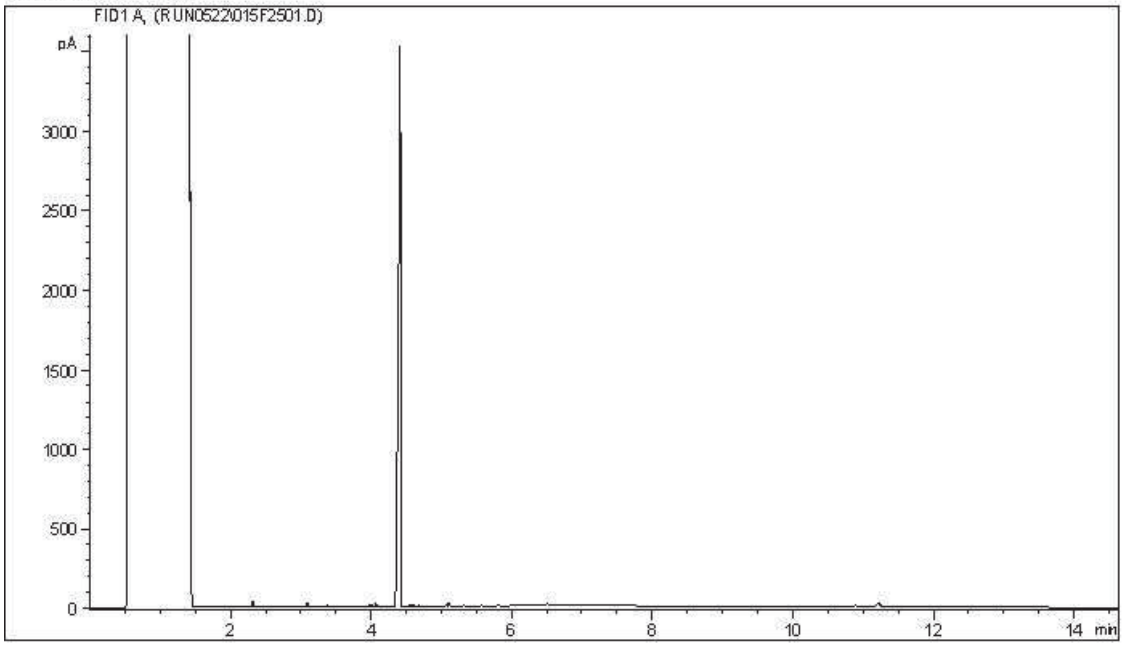
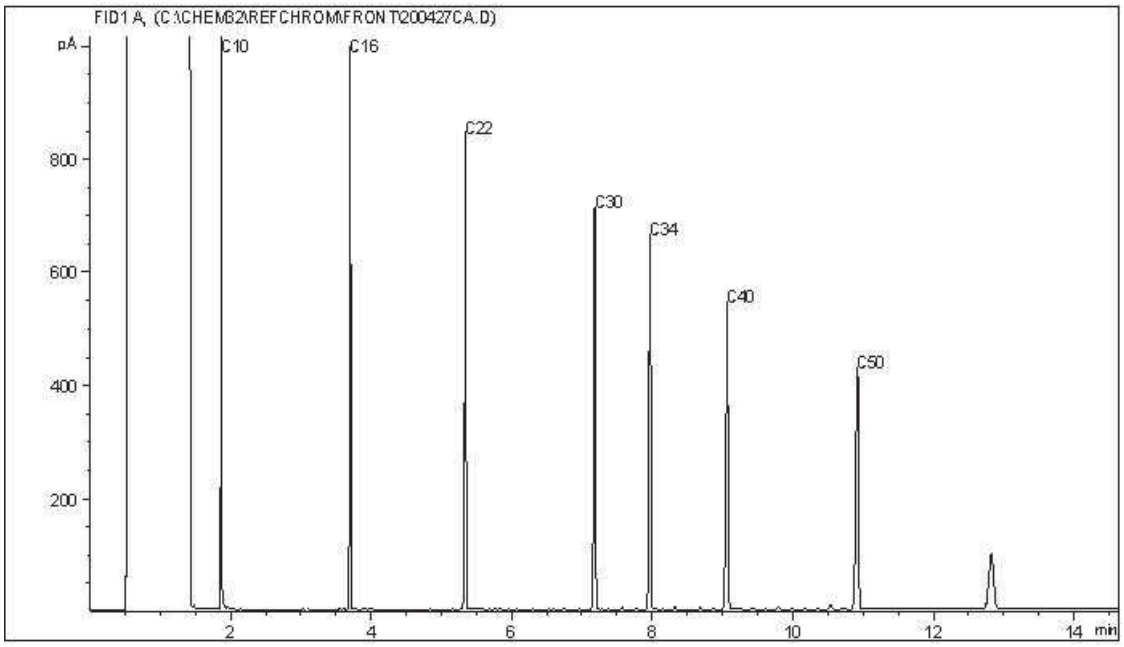
BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
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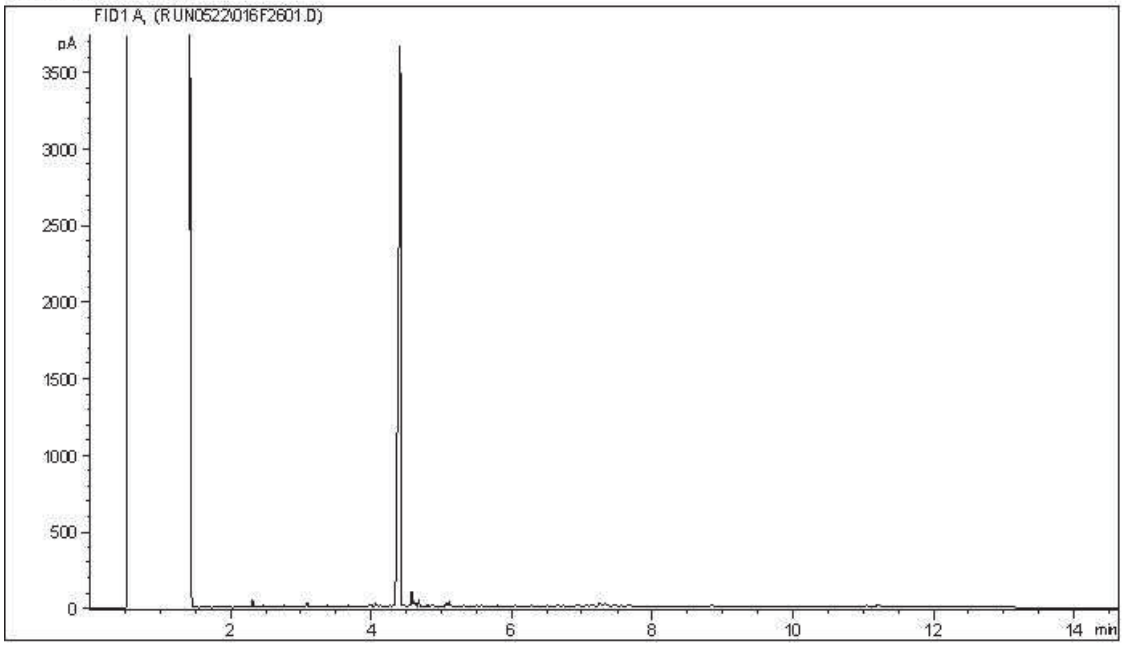
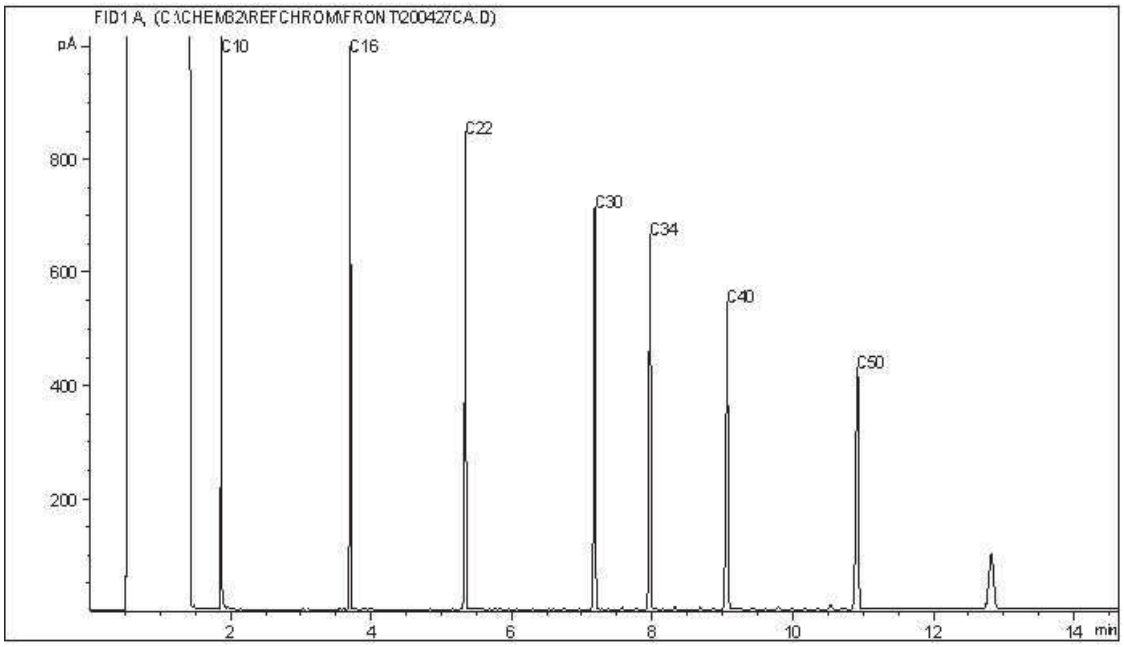
BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



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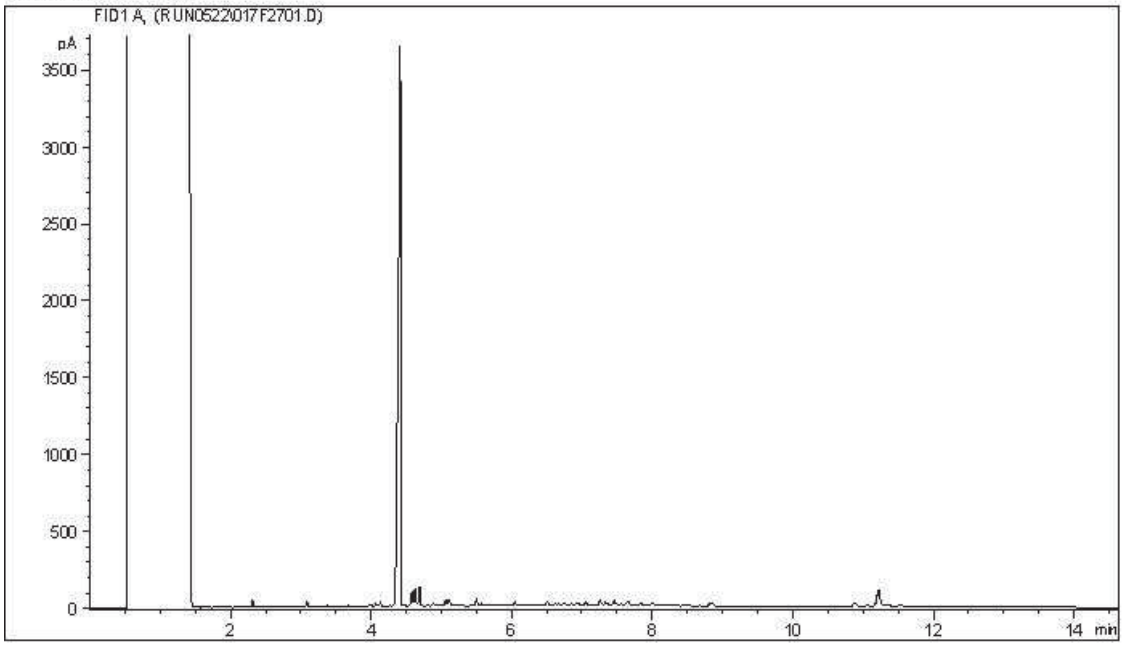
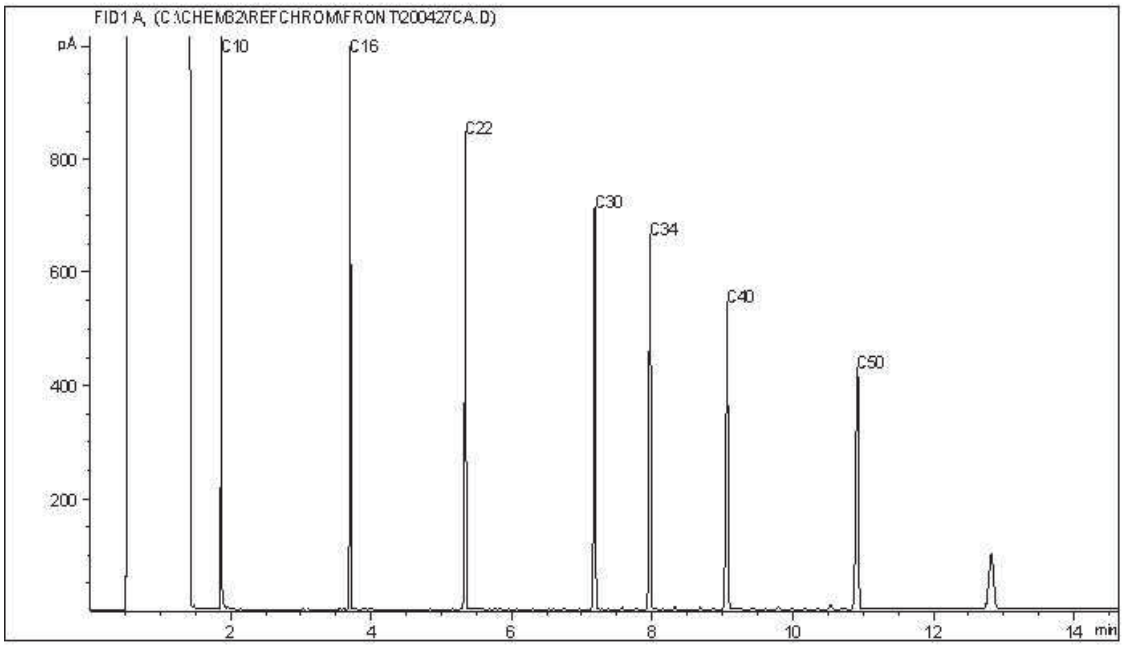
BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



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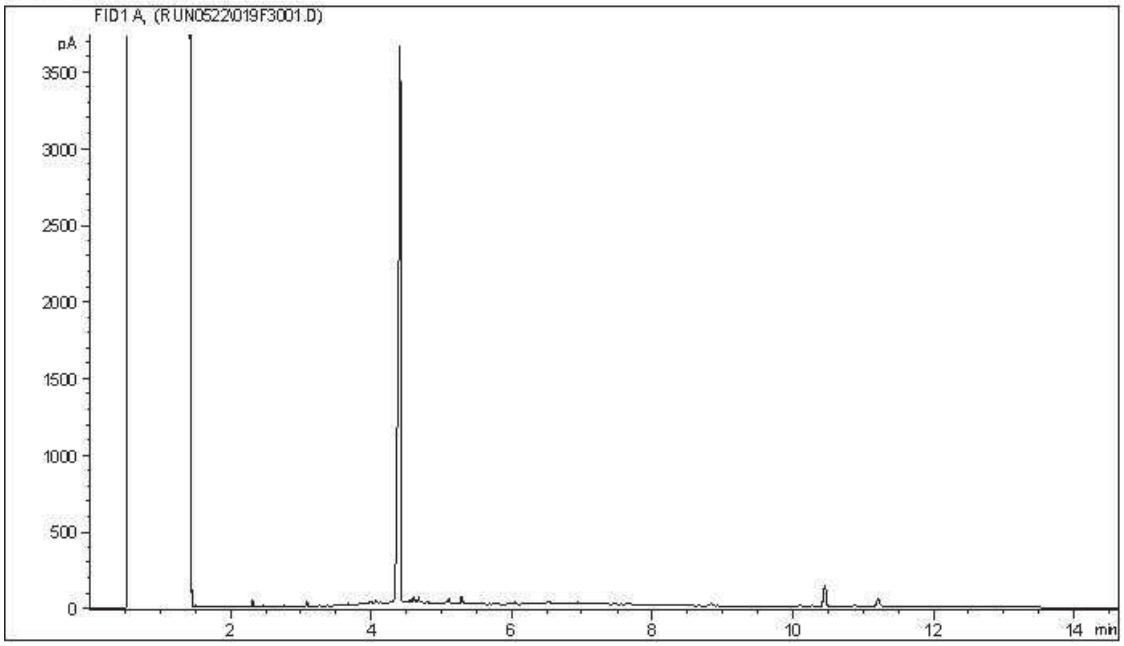
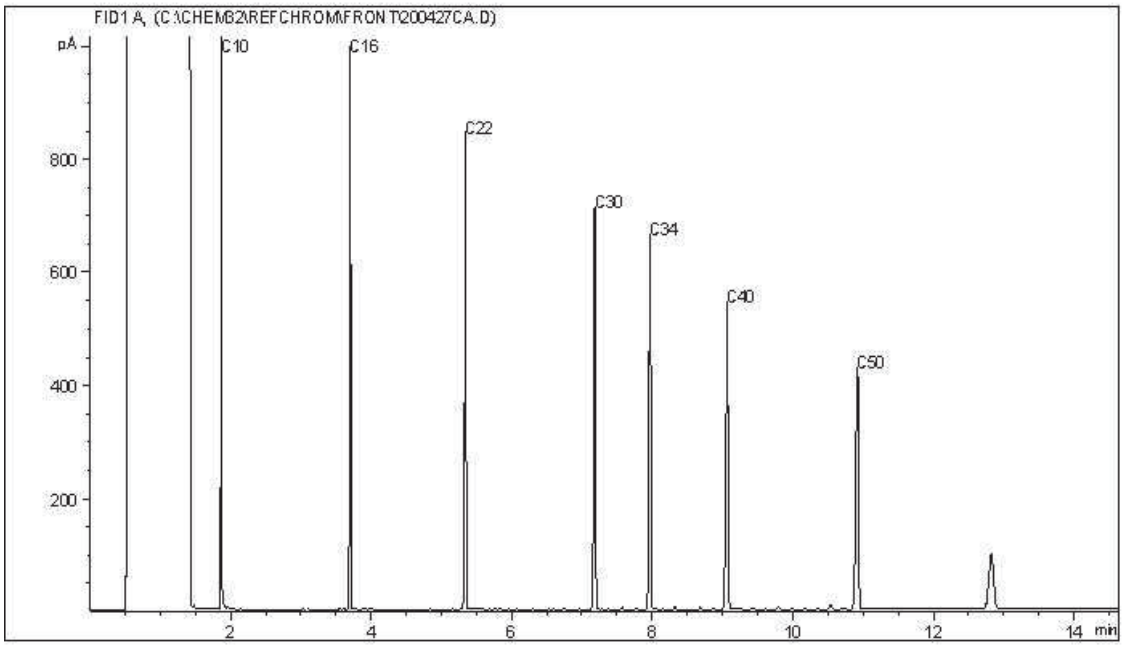
BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



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Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your P.O. #: 34974
Your C.O.C. #: 24573

Attention: Kael Hanak

LORAX ENVIRONMENTAL SERVICES LTD.
2289 BURRARD STREET
VANCOUVER, BC
CANADA V6J 3H9

Report Date: 2020/06/08
Report #: R2887453
Version: 6 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C033744
Received: 2020/05/19, 09:29

Sample Matrix: Sludge
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acid Gen. Potential S-S by Diff. - ARD	3	N/A	2020/06/05	BBY WI-00033	Auto Calc
BC Hydrocarbons in Soil by GC/FID (1)	3	2020/05/21	2020/05/22	CAL SOP-00239	BCMOE EPH S 12/16
EPH less PAH in Soil By GC/FID (1)	3	N/A	2020/05/24		Auto Calc
Fizz Rating - ARD	3	2020/05/28	2020/05/27	BBY0SOP-00020 / BBY0SOP-00023	MEND 2008 1.16.1 b
Elements by ICPMS (total) (1)	3	2020/05/25	2020/05/26	CAL SOP-00265	EPA 6020 m
ICPMS Metals on TCLP Leachate (1, 2)	1	2020/05/21	2020/05/22	AB SOP-00043	EPA 6020b R2 m
ICPMS Metals on TCLP Leachate (1, 2)	2	2020/05/21	2020/05/23	AB SOP-00043	EPA 6020b R2 m
Moisture (1)	3	N/A	2020/05/22	AB SOP-00002	CCME PHC-CWS m
Net Neut. Potential (MABA-MPA S-S diff)	3	N/A	2020/06/05	BBY WI-00033	Auto Calc
Modified ABA Neut. Potential - ARD	3	2020/05/28	2020/05/28	BBY0SOP-00020	MEND 2008 1.16.1b
Modified ABA Neut. Potential - PREP	3	2020/05/28	2020/05/28	BBY0SOP-00020	MEND 2008 1.16.1b
Neut. Potential Ratio - ARD	3	N/A	2020/06/08	BBY WI-00033	Auto Calc
PAH in Soil by GC/MS (1)	3	2020/05/21	2020/05/22	AB SOP-00003 AB SOP-00036	EPA 3540C/8270E m
Total LMW, HMW, Total PAH Calc (1)	3	N/A	2020/05/24		Auto Calc
TCLP pH Measurements (1)	3	2020/05/21	2020/05/22	AB SOP-00006	SM 23 4500 H+B m
pH (2:1 DI Water Extract) (1)	3	2020/05/25	2020/05/25	AB SOP-00033 / AB SOP-00006	SM 23 4500 H+B m
Paste pH - ARD	3	2020/05/26	2020/05/26	BBY0SOP-00016	MEND 2009 1.20.1 m
Rinse pH - ARD	3	N/A	2020/05/26	BBY0SOP-00012	MEND 2009 1.20.1 m
Sulphate on HCL Extracts from ARD	3	N/A	2020/06/04	BBY6SOP-00017	SM 23 4500-SO42- E m
HCl Extractable Sulphate Sulphur - ARD	3	N/A	2020/06/08	BBY ARD-00009	ASTM D2492-02 m
Sulphide Sulphur (Calc) - ARD	3	N/A	2020/06/05	BBY WI-00033	Auto Calc
Total Carbon & Total Sulphur by LECO	3	N/A	2020/06/04		
Total Oil and Grease	3	2020/05/26	2020/05/26	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX (1)	3	2020/05/21	2020/05/25		Auto Calc
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID (1)	3	N/A	2020/05/25	CAL SOP-00240	BC MELP VH 2014

Remarks:

Bureau Veritas Laboratories are accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by BV Labs are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

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Your P.O. #: 34974
Your C.O.C. #: 24573

Attention: Kael Hanak

LORAX ENVIRONMENTAL SERVICES LTD.
2289 BURRARD STREET
VANCOUVER, BC
CANADA V6J 3H9

Report Date: 2020/06/08
Report #: R2887453
Version: 6 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C033744
Received: 2020/05/19, 09:29

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 dilution methods.
Results relate to samples tested. When sampling is not conducted by BV Labs, results relate to the supplied samples tested.
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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 BV Labs Calgary Environmental
(2) Samples were extracted as per EPA 1311 unless otherwise noted in the report.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bvlabs.com
Phone# (250)385-6112
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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

RESULTS OF CHEMICAL ANALYSES OF SLUDGE

BV Labs ID		XU2703		XU2704		XU2705		
Sampling Date		2020/05/16 14:00		2020/05/17 14:30		2020/05/17 15:00		
COC Number		24573		24573		24573		
	UNITS	Pre-Treatment Pond	RDL	R5B-SP	RDL	L5-EP	RDL	QC Batch
Calculated Parameters								
HCSO4 Sulphur (S)	wt%	0.08	0.01	0.02	0.01	0.05	0.01	9857391
S2 Sulphur (S)	wt%	0.20	0.02	0.05	0.02	0.12	0.02	9857392
S-S Acid Generation Potential	Kg CaCO3/T	6.3	0.6	1.6	0.6	3.8	0.6	9857384
S-S Net Neut. Potential Modified ABA	Kg CaCO3/T	131		62.7		80.0		9857385
Neutralization Potential Ratio	N/A	21.8	0.1	40.2	0.1	22.1	0.1	9857387
Misc. Inorganics								
Leachable Initial pH of Sample	pH	8.73	N/A	8.50	N/A	8.52	N/A	9857753
Leachable pH after HCl	pH	2.29	N/A	2.47	N/A	2.16	N/A	9857753
Leachable Final pH of Leachate	pH	6.31	N/A	5.78	N/A	5.79	N/A	9857753
Anions								
HCl Extracted Sulphate (SO4)	mg/L	24.0	0.50	6.15	0.50	15.5	0.50	9873531
OIL & GREASE								
Total Oil and grease	ug/g	ND (1)	300	ND (1)	240	ND	100	9861170
Physical Properties								
Paste pH	pH Units	8.49	N/A	8.31	N/A	8.01	N/A	9862158
Rinse pH	pH Units	8.27	N/A	8.10	N/A	7.93	N/A	9862159
Soluble (2:1) pH	pH	8.27	N/A	7.97	N/A	7.94	N/A	9859031
Total Carbon	wt%	4.86	0.02	1.55	0.02	2.73	0.02	9873897
MOABA Final pH	N/A	1.71		1.57		1.73		9865099
Total Sulphur (S)	wt%	0.28	0.02	0.07	0.02	0.17	0.02	9873897
MOABA HCl (N)	N/A	0.100		0.100		0.100		9865099
MOABA HCl (mL)	N/A	90.0		50.0		60.0		9865099
MOABA NaOH (N)	N/A	0.100		0.100		0.100		9865099
MOABA NaOH (mL)	N/A	35.3		24.4		26.3		9865099
MOABA Neutralization Potential	Kg CaCO3/T	137		64.3		83.8		9865098

RDL = Reportable Detection Limit
N/A = Not Applicable
ND = Not detected
(1) Detection limit raised due to high moisture.

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

PARTICLE SIZE DISTRIBUTION ANALYSIS (SLUDGE)

BV Labs ID		XU2703	XU2704	XU2705	
Sampling Date		2020/05/16 14:00	2020/05/17 14:30	2020/05/17 15:00	
COC Number		24573	24573	24573	
	UNITS	**Pre-Treatment Pond**	**R5B-SP**	**L5-EP**	**QC Batch**
Physical Properties					
Fizz Rating	N/A	MODERATE	SLIGHT	SLIGHT	9865100

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

PHYSICAL TESTING (SLUDGE)

BV Labs ID		XU2703	XU2704	XU2705		
Sampling Date		2020/05/16 14:00	2020/05/17 14:30	2020/05/17 15:00		
COC Number		24573	24573	24573		
	UNITS	**Pre-Treatment Pond**	**R5B-SP**	**L5-EP**	**RDL**	**QC Batch**
Physical Properties						
Moisture	%	65	58	46	0.30	9857585
RDL = Reportable Detection Limit						

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

SEMIVOLATILE ORGANICS BY GC-MS (SLUDGE)

BV Labs ID		XU2703		XU2704		XU2705		
Sampling Date		2020/05/16 14:00		2020/05/17 14:30		2020/05/17 15:00		
COC Number		24573		24573		24573		
	UNITS	**Pre-Treatment Pond**	**RDL**	**R5B-SP**	**RDL**	**L5-EP**	**RDL**	**QC Batch**
Polycyclic Aromatics								
Acenaphthene	mg/kg	ND (1)	0.014	ND (1)	0.011	ND	0.0050	9857798
Acenaphthylene	mg/kg	ND (1)	0.014	ND (1)	0.011	ND	0.0050	9857798
Acridine	mg/kg	ND (1)	0.14	ND (1)	0.11	ND	0.050	9857798
Anthracene	mg/kg	ND (1)	0.011	ND (1)	0.0088	ND	0.0040	9857798
Benzo(a)anthracene	mg/kg	ND (1)	0.027	ND (1)	0.022	ND	0.010	9857798
Benzo(b&j)fluoranthene	mg/kg	0.056 (1)	0.027	0.027 (1)	0.022	0.038	0.010	9857798
Benzo(k)fluoranthene	mg/kg	ND (1)	0.027	ND (1)	0.022	ND	0.010	9857798
Benzo(g,h,i)perylene	mg/kg	0.094 (1)	0.054	ND (1)	0.044	0.045	0.020	9857798
Benzo(a)pyrene	mg/kg	ND (1)	0.027	ND (1)	0.022	ND	0.010	9857798
Chrysene	mg/kg	ND (1)	0.027	ND (1)	0.022	0.024	0.010	9857798
Dibenz(a,h)anthracene	mg/kg	ND (1)	0.054	ND (1)	0.044	ND	0.020	9857798
Fluoranthene	mg/kg	0.040 (1)	0.027	ND (1)	0.022	0.018	0.010	9857798
Fluorene	mg/kg	0.074 (1)	0.027	ND (1)	0.022	ND	0.010	9857798
Indeno(1,2,3-cd)pyrene	mg/kg	ND (1)	0.054	ND (1)	0.044	ND	0.020	9857798
1-Methylnaphthalene	mg/kg	0.39 (1)	0.027	0.057 (1)	0.022	0.053	0.010	9857798
2-Methylnaphthalene	mg/kg	0.60 (1)	0.027	0.078 (1)	0.022	0.066	0.010	9857798
Naphthalene	mg/kg	0.41 (1)	0.027	0.043 (1)	0.022	0.034	0.010	9857798
Phenanthrene	mg/kg	0.25 (1)	0.027	0.061 (1)	0.022	0.065	0.010	9857798
Pyrene	mg/kg	0.077 (1)	0.027	0.026 (1)	0.022	0.035	0.010	9857798
Quinoline	mg/kg	ND (1)	0.054	ND (1)	0.044	ND	0.020	9857798
Low Molecular Weight PAH`s	mg/kg	1.3	0.14	0.18	0.11	0.16	0.050	9857298
High Molecular Weight PAH`s	mg/kg	0.27	0.054	0.053	0.044	0.16	0.020	9857298
Total PAH	mg/kg	1.6	0.14	0.24	0.11	0.32	0.050	9857298
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	100		88		88		9857798
D8-ACENAPHTHYLENE (sur.)	%	99		89		88		9857798
D8-NAPHTHALENE (sur.)	%	100		88		87		9857798
D9-Acridine (sur.)	%	65		58		57		9857798
TERPHENYL-D14 (sur.)	%	125		111		115		9857798

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

ELEMENTS BY ATOMIC SPECTROSCOPY (SLUDGE)

BV Labs ID		XU2703	XU2704		XU2705		
Sampling Date		2020/05/16 14:00	2020/05/17 14:30		2020/05/17 15:00		
COC Number		24573	24573		24573		
	UNITS	Pre-Treatment Pond	R5B-SP	RDL	L5-EP	RDL	QC Batch
Elements							
Leachable Antimony (Sb)	mg/L	ND	ND	1.0	ND	1.0	9858857
Leachable Arsenic (As)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Barium (Ba)	mg/L	1.6	1.6	1.0	2.0	1.0	9858857
Leachable Beryllium (Be)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Boron (B)	mg/L	ND	ND	1.0	ND	1.0	9858857
Leachable Cadmium (Cd)	mg/L	ND	ND	0.10	ND	0.10	9858857
Leachable Chromium (Cr)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Cobalt (Co)	mg/L	ND	ND	1.0	ND	1.0	9858857
Leachable Copper (Cu)	mg/L	ND	ND	1.0	ND	1.0	9858857
Leachable Iron (Fe)	mg/L	2.3	1.6	1.0	1.6	1.0	9858857
Leachable Lead (Pb)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Mercury (Hg)	mg/L	ND	ND	0.020	ND	0.020	9858857
Leachable Nickel (Ni)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Selenium (Se)	mg/L	ND	ND	0.10	ND	0.10	9858857
Leachable Silver (Ag)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Thallium (Tl)	mg/L	ND	ND	0.50	ND	0.50	9858857
Leachable Uranium (U)	mg/L	ND	ND	0.20	ND	0.20	9858857
Leachable Vanadium (V)	mg/L	ND	ND	1.0	ND	1.0	9858857
Leachable Zinc (Zn)	mg/L	ND	ND	1.0	ND	1.0	9858857
Leachable Zirconium (Zr)	mg/L	ND	ND	1.0	ND	1.0	9858857
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	10300	8470	100	11800	100	9860174
Total Antimony (Sb)	mg/kg	1.28	1.51	0.10	1.63	0.10	9860174
Total Arsenic (As)	mg/kg	11.5	12.1	0.20	12.5	0.20	9860174
Total Barium (Ba)	mg/kg	751	467	0.10	457	0.10	9860174
Total Beryllium (Be)	mg/kg	0.88	0.82	0.20	0.74	0.20	9860174
Total Bismuth (Bi)	mg/kg	0.21	0.17	0.10	0.25	0.10	9860174
Total Boron (B)	mg/kg	11.6	7.0	1.0	6.2	1.0	9860174
Total Cadmium (Cd)	mg/kg	1.15	1.20	0.050	1.23	0.050	9860174
Total Calcium (Ca)	mg/kg	51700 (1)	53300 (1)	1000	31200 (1)	500	9860174
Total Chromium (Cr)	mg/kg	24.8	43.2	0.50	28.0	0.50	9860174

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

ELEMENTS BY ATOMIC SPECTROSCOPY (SLUDGE)

BV Labs ID		XU2703	XU2704		XU2705		
Sampling Date		2020/05/16 14:00	2020/05/17 14:30		2020/05/17 15:00		
COC Number		24573	24573		24573		
	UNITS	Pre-Treatment Pond	R5B-SP	RDL	L5-EP	RDL	QC Batch
Total Cobalt (Co)	mg/kg	22.2	20.3	0.10	13.9	0.10	9860174
Total Copper (Cu)	mg/kg	43.5	36.2	0.50	42.4	0.50	9860174
Total Iron (Fe)	mg/kg	29200	36500	100	38800	100	9860174
Total Lead (Pb)	mg/kg	12.7	11.8	0.10	15.9	0.10	9860174
Total Lithium (Li)	mg/kg	18.0	14.7	0.50	16.7	0.50	9860174
Total Magnesium (Mg)	mg/kg	5460	6480	100	8720	100	9860174
Total Manganese (Mn)	mg/kg	563	559	0.20	592	0.20	9860174
Total Mercury (Hg)	mg/kg	0.064	0.069	0.050	0.089	0.050	9860174
Total Molybdenum (Mo)	mg/kg	4.59	4.01	0.10	3.59	0.10	9860174
Total Nickel (Ni)	mg/kg	67.6	72.9	0.50	47.4	0.50	9860174
Total Phosphorus (P)	mg/kg	873	1250	10	924	10	9860174
Total Potassium (K)	mg/kg	1950	1310	100	1590	100	9860174
Total Selenium (Se)	mg/kg	1.41	1.63	0.50	1.46	0.50	9860174
Total Silver (Ag)	mg/kg	0.215	0.197	0.050	0.315	0.050	9860174
Total Sodium (Na)	mg/kg	1160	492	100	197	100	9860174
Total Strontium (Sr)	mg/kg	173 (1)	105 (1)	1.0	99.1	0.10	9860174
Total Thallium (Tl)	mg/kg	0.115	0.197	0.050	0.214	0.050	9860174
Total Tin (Sn)	mg/kg	2.31	0.90	0.10	0.60	0.10	9860174
Total Titanium (Ti)	mg/kg	24.0	41.7	1.0	60.9	1.0	9860174
Total Tungsten (W)	mg/kg	ND (2)	ND	0.50	ND	0.50	9860174
Total Uranium (U)	mg/kg	1.76	1.50	0.050	1.62	0.050	9860174
Total Vanadium (V)	mg/kg	35.6	36.4	1.0	46.1	1.0	9860174
Total Zinc (Zn)	mg/kg	284	227	1.0	150	1.0	9860174
Total Zirconium (Zr)	mg/kg	3.74	2.69	0.50	4.50	0.50	9860174

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.
(2) Matrix Spike exceeds acceptance limits - Probable matrix interference.

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
Your P.O. #: 34974
Sampler Initials: LB

BTEX BY GC-MS (SLUDGE)

BV Labs ID		XU2703		XU2704		XU2705		
Sampling Date		2020/05/16 14:00		2020/05/17 14:30		2020/05/17 15:00		
COC Number		24573		24573		24573		
	UNITS	Pre-Treatment Pond	RDL	R5B-SP	RDL	L5-EP	RDL	QC Batch
Volatiles								
Xylenes (Total)	mg/kg	0.39	0.21	ND	0.18	ND	0.057	9857060
VH C6-C10	mg/kg	ND	32	ND	28	ND	8.6	9857060
VPH (VH6 to 10 - BTEX)	mg/kg	ND	32	ND	28	ND	8.6	9857060
Field Preserved Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	ND (1)	0.37	ND (1)	0.32	ND	0.10	9860165
Benzene	mg/kg	0.068 (1)	0.019	ND (1)	0.016	ND	0.0050	9860165
Toluene	mg/kg	0.26 (1)	0.19	ND (1)	0.16	ND	0.050	9860165
Ethylbenzene	mg/kg	0.13 (1)	0.037	ND (1)	0.032	ND	0.010	9860165
m & p-Xylene	mg/kg	0.22 (1)	0.15	ND (1)	0.13	ND	0.040	9860165
o-Xylene	mg/kg	0.17 (1)	0.15	ND (1)	0.13	ND	0.040	9860165
Styrene	mg/kg	0.11 (1)	0.11	ND (1)	0.097	ND	0.030	9860165
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	92		96		92		9860165
4-Bromofluorobenzene (sur.)	%	100		99		96		9860165
D10-o-Xylene (sur.)	%	98		101		108		9860165
D4-1,2-Dichloroethane (sur.)	%	85		85		83		9860165

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains >= 50% moisture. Detection limits raised based on sample weight used for analysis.

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BV Labs Job #: C033744
Report Date: 2020/06/08

LORAX ENVIRONMENTAL SERVICES LTD.
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TOTAL PETROLEUM HYDROCARBONS (SLUDGE)

BV Labs ID		XU2703		XU2704		XU2705		
Sampling Date		2020/05/16 14:00		2020/05/17 14:30		2020/05/17 15:00		
COC Number		24573		24573		24573		
	UNITS	**Pre-Treatment Pond**	**RDL**	**R5B-SP**	**RDL**	**L5-EP**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
EPH (C10-C19)	mg/kg	ND (1)	290	ND (1)	240	ND	100	9857772
EPH (C19-C32)	mg/kg	ND (1)	290	ND (1)	240	ND	100	9857772
LEPH (C10-C19 less PAH)	mg/kg	ND	290	ND	240	ND	100	9857297
HEPH (C19-C32 less PAH)	mg/kg	ND	290	ND	240	ND	100	9857297
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	100		100		100		9857772

RDL = Reportable Detection Limit
ND = Not detected
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	10.7°C

Results relate only to the items tested.

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Your P.O. #: 34974
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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9857391	RAE	QC Standard	HCSO4 Sulphur (S)	2020/06/08		0.32	%	N/A
9857391	RAE	Spiked Blank	HCSO4 Sulphur (S)	2020/06/08		0.32	%	N/A
9857391	RAE	Method Blank	HCSO4 Sulphur (S)	2020/06/08	ND, RDL=0.01		wt%	
9857391	RAE	RPD	HCSO4 Sulphur (S)	2020/06/08	0		%	20
9857391	RAE	RPD [XU2703-01]	HCSO4 Sulphur (S)	2020/06/08	0		%	20
9857585	RV5	Method Blank	Moisture	2020/05/22	ND, RDL=0.30		%	
9857585	RV5	RPD	Moisture	2020/05/22	2.8		%	20
9857753	JAX	Spiked Blank	Leachable Initial pH of Sample	2020/05/22		100	%	97 - 103
			Leachable pH after HCl	2020/05/22		100	%	97 - 103
			Leachable Final pH of Leachate	2020/05/22		99	%	97 - 103
9857753	JAX	RPD	Leachable Initial pH of Sample	2020/05/22	2.0		%	N/A
			Leachable pH after HCl	2020/05/22	0.59		%	N/A
			Leachable Final pH of Leachate	2020/05/22	2.0		%	N/A
9857772	LSH	Matrix Spike	O-TERPHENYL (sur.)	2020/05/22		100	%	60 - 140
			EPH (C10-C19)	2020/05/22		90	%	60 - 130
			EPH (C19-C32)	2020/05/22		89	%	60 - 130
9857772	LSH	Spiked Blank	O-TERPHENYL (sur.)	2020/05/22		98	%	60 - 140
			EPH (C10-C19)	2020/05/22		88	%	70 - 130
			EPH (C19-C32)	2020/05/22		89	%	70 - 130
9857772	LSH	Method Blank	O-TERPHENYL (sur.)	2020/05/22		98	%	60 - 140
			EPH (C10-C19)	2020/05/22	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2020/05/22	ND, RDL=100		mg/kg	
9857772	LSH	RPD	EPH (C10-C19)	2020/05/22	NC		%	50
			EPH (C19-C32)	2020/05/22	3.5		%	50
9857798	NK3	Matrix Spike	D10-ANTHRACENE (sur.)	2020/05/22		88	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		86	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		85	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		61	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		104	%	50 - 140
			Acenaphthene	2020/05/22		89	%	50 - 140
			Acenaphthylene	2020/05/22		85	%	50 - 140
			Acridine	2020/05/22		61	%	50 - 140
			Anthracene	2020/05/22		63	%	50 - 140
			Benzo(a)anthracene	2020/05/22		90	%	50 - 140
			Benzo(b&j)fluoranthene	2020/05/22		77	%	50 - 140
			Benzo(k)fluoranthene	2020/05/22		76	%	50 - 140
			Benzo(g,h,i)perylene	2020/05/22		61	%	50 - 140
			Benzo(a)pyrene	2020/05/22		77	%	50 - 140
			Chrysene	2020/05/22		92	%	50 - 140
			Dibenz(a,h)anthracene	2020/05/22		80	%	50 - 140
			Fluoranthene	2020/05/22		86	%	50 - 140
			Fluorene	2020/05/22		86	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2020/05/22		72	%	50 - 140
			1-Methylnaphthalene	2020/05/22		83	%	50 - 140
			2-Methylnaphthalene	2020/05/22		83	%	50 - 140
			Naphthalene	2020/05/22		87	%	50 - 140
			Phenanthrene	2020/05/22		87	%	50 - 140
			Pyrene	2020/05/22		84	%	50 - 140
			Quinoline	2020/05/22		103	%	50 - 140
9857798	NK3	Spiked Blank	D10-ANTHRACENE (sur.)	2020/05/22		94	%	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
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		97	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		96	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		71	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		116	%	50 - 140
			Acenaphthene	2020/05/22		95	%	50 - 140
			Acenaphthylene	2020/05/22		93	%	50 - 140
			Acridine	2020/05/22		71	%	50 - 140
			Anthracene	2020/05/22		67	%	50 - 140
			Benzo(a)anthracene	2020/05/22		108	%	50 - 140
			Benzo(b&j)fluoranthene	2020/05/22		91	%	50 - 140
			Benzo(k)fluoranthene	2020/05/22		97	%	50 - 140
			Benzo(g,h,i)perylene	2020/05/22		67	%	50 - 140
			Benzo(a)pyrene	2020/05/22		88	%	50 - 140
			Chrysene	2020/05/22		110	%	50 - 140
			Dibenz(a,h)anthracene	2020/05/22		71	%	50 - 140
			Fluoranthene	2020/05/22		94	%	50 - 140
			Fluorene	2020/05/22		94	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2020/05/22		90	%	50 - 140
			1-Methylnaphthalene	2020/05/22		93	%	50 - 140
			2-Methylnaphthalene	2020/05/22		91	%	50 - 140
			Naphthalene	2020/05/22		97	%	50 - 140
			Phenanthrene	2020/05/22		94	%	50 - 140
			Pyrene	2020/05/22		92	%	50 - 140
			Quinoline	2020/05/22		107	%	50 - 140
9857798	NK3	Method Blank	D10-ANTHRACENE (sur.)	2020/05/22		94	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2020/05/22		94	%	50 - 140
			D8-NAPHTHALENE (sur.)	2020/05/22		92	%	50 - 140
			D9-Acridine (sur.)	2020/05/22		66	%	50 - 140
			TERPHENYL-D14 (sur.)	2020/05/22		122	%	50 - 140
			Acenaphthene	2020/05/22	ND, RDL=0.0050		mg/kg	
			Acenaphthylene	2020/05/22	ND, RDL=0.0050		mg/kg	
			Acridine	2020/05/22	ND, RDL=0.050		mg/kg	
			Anthracene	2020/05/22	ND, RDL=0.0040		mg/kg	
			Benzo(a)anthracene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(b&j)fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(k)fluoranthene	2020/05/22	ND, RDL=0.010		mg/kg	
			Benzo(g,h,i)perylene	2020/05/22	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Chrysene	2020/05/22	ND, RDL=0.010		mg/kg	
			Dibenz(a,h)anthracene	2020/05/22	ND, RDL=0.020		mg/kg	
			Fluoranthene	2020/05/22	ND, RDL=0.010		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
			Fluorene	2020/05/22	ND, RDL=0.010		mg/kg	
			Indeno(1,2,3-cd)pyrene	2020/05/22	ND, RDL=0.020		mg/kg	
			1-Methylnaphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			2-Methylnaphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			Naphthalene	2020/05/22	ND, RDL=0.010		mg/kg	
			Phenanthrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Pyrene	2020/05/22	ND, RDL=0.010		mg/kg	
			Quinoline	2020/05/22	ND, RDL=0.020		mg/kg	
9857798	NK3	RPD	Acenaphthene	2020/05/22	16		%	50
			Acenaphthylene	2020/05/22	NC		%	50
			Acridine	2020/05/22	NC		%	50
			Anthracene	2020/05/22	NC		%	50
			Benzo(a)anthracene	2020/05/22	8.2		%	50
			Benzo(b&j)fluoranthene	2020/05/22	13		%	50
			Benzo(k)fluoranthene	2020/05/22	3.1		%	50
			Benzo(g,h,i)perylene	2020/05/22	12		%	50
			Benzo(a)pyrene	2020/05/22	14		%	50
			Chrysene	2020/05/22	21		%	50
			Dibenz(a,h)anthracene	2020/05/22	NC		%	50
			Fluoranthene	2020/05/22	9.8		%	50
			Fluorene	2020/05/22	10		%	50
			Indeno(1,2,3-cd)pyrene	2020/05/22	2.4		%	50
			1-Methylnaphthalene	2020/05/22	12		%	50
			2-Methylnaphthalene	2020/05/22	12		%	50
			Naphthalene	2020/05/22	15		%	50
			Phenanthrene	2020/05/22	12		%	50
			Pyrene	2020/05/22	8.5		%	50
			Quinoline	2020/05/22	NC		%	50
9858857	ANE	Matrix Spike	Leachable Antimony (Sb)	2020/05/22		130 (1)	%	75 - 125
			Leachable Arsenic (As)	2020/05/22		114	%	75 - 125
			Leachable Barium (Ba)	2020/05/22		98	%	75 - 125
			Leachable Beryllium (Be)	2020/05/22		83	%	75 - 125
			Leachable Boron (B)	2020/05/22		68 (1)	%	75 - 125
			Leachable Cadmium (Cd)	2020/05/22		101	%	75 - 125
			Leachable Chromium (Cr)	2020/05/22		111	%	75 - 125
			Leachable Cobalt (Co)	2020/05/22		108	%	75 - 125
			Leachable Copper (Cu)	2020/05/22		108	%	75 - 125
			Leachable Iron (Fe)	2020/05/22		90	%	75 - 125
			Leachable Lead (Pb)	2020/05/22		100	%	75 - 125
			Leachable Mercury (Hg)	2020/05/22		97	%	75 - 125
			Leachable Nickel (Ni)	2020/05/22		108	%	75 - 125
			Leachable Selenium (Se)	2020/05/22		107	%	75 - 125
			Leachable Silver (Ag)	2020/05/22		101	%	75 - 125
			Leachable Thallium (Tl)	2020/05/22		98	%	75 - 125
			Leachable Uranium (U)	2020/05/22		103	%	75 - 125
			Leachable Vanadium (V)	2020/05/22		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
			Leachable Zinc (Zn)	2020/05/22		108	%	75 - 125
			Leachable Zirconium (Zr)	2020/05/22		105	%	75 - 125
9858857	ANE	Spiked Blank	Leachable Antimony (Sb)	2020/05/22		129 (1)	%	80 - 120
			Leachable Arsenic (As)	2020/05/22		108	%	80 - 120
			Leachable Barium (Ba)	2020/05/22		112	%	80 - 120
			Leachable Beryllium (Be)	2020/05/22		84	%	80 - 120
			Leachable Boron (B)	2020/05/22		73 (1)	%	80 - 120
			Leachable Cadmium (Cd)	2020/05/22		102	%	80 - 120
			Leachable Chromium (Cr)	2020/05/22		104	%	80 - 120
			Leachable Cobalt (Co)	2020/05/22		103	%	80 - 120
			Leachable Copper (Cu)	2020/05/22		103	%	80 - 120
			Leachable Iron (Fe)	2020/05/22		100	%	80 - 120
			Leachable Lead (Pb)	2020/05/22		100	%	80 - 120
			Leachable Mercury (Hg)	2020/05/22		95	%	80 - 120
			Leachable Nickel (Ni)	2020/05/22		102	%	80 - 120
			Leachable Selenium (Se)	2020/05/22		107	%	80 - 120
			Leachable Silver (Ag)	2020/05/22		102	%	80 - 120
			Leachable Thallium (Tl)	2020/05/22		99	%	80 - 120
			Leachable Uranium (U)	2020/05/22		104	%	80 - 120
			Leachable Vanadium (V)	2020/05/22		110	%	80 - 120
			Leachable Zinc (Zn)	2020/05/22		106	%	80 - 120
			Leachable Zirconium (Zr)	2020/05/22		105	%	80 - 120
9858857	ANE	Method Blank	Leachable Antimony (Sb)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Arsenic (As)	2020/05/22	ND, RDL=0.50		mg/L	
			Leachable Barium (Ba)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Beryllium (Be)	2020/05/22	ND, RDL=0.50		mg/L	
			Leachable Boron (B)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Cadmium (Cd)	2020/05/22	ND, RDL=0.10		mg/L	
			Leachable Chromium (Cr)	2020/05/22	ND, RDL=0.50		mg/L	
			Leachable Cobalt (Co)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Copper (Cu)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Iron (Fe)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Lead (Pb)	2020/05/22	ND, RDL=0.50		mg/L	
			Leachable Mercury (Hg)	2020/05/22	ND, RDL=0.020		mg/L	
			Leachable Nickel (Ni)	2020/05/22	ND, RDL=0.50		mg/L	
			Leachable Selenium (Se)	2020/05/22	ND, RDL=0.10		mg/L	
			Leachable Silver (Ag)	2020/05/22	ND, RDL=0.50		mg/L	
			Leachable Thallium (Tl)	2020/05/22	ND, RDL=0.50		mg/L	

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable Uranium (U)	2020/05/22	ND, RDL=0.20		mg/L	
			Leachable Vanadium (V)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Zinc (Zn)	2020/05/22	ND, RDL=1.0		mg/L	
			Leachable Zirconium (Zr)	2020/05/22	ND, RDL=1.0		mg/L	
9858857	ANE	RPD	Leachable Antimony (Sb)	2020/05/22	NC		%	35
			Leachable Arsenic (As)	2020/05/22	NC		%	35
			Leachable Barium (Ba)	2020/05/22	NC		%	35
			Leachable Beryllium (Be)	2020/05/22	NC		%	35
			Leachable Boron (B)	2020/05/22	NC		%	35
			Leachable Cadmium (Cd)	2020/05/22	NC		%	35
			Leachable Chromium (Cr)	2020/05/22	NC		%	35
			Leachable Cobalt (Co)	2020/05/22	NC		%	35
			Leachable Copper (Cu)	2020/05/22	NC		%	35
			Leachable Iron (Fe)	2020/05/22	118 (1)		%	35
			Leachable Lead (Pb)	2020/05/22	NC		%	35
			Leachable Mercury (Hg)	2020/05/22	NC		%	35
			Leachable Nickel (Ni)	2020/05/22	NC		%	35
			Leachable Selenium (Se)	2020/05/22	NC		%	35
			Leachable Silver (Ag)	2020/05/22	NC		%	35
			Leachable Thallium (Tl)	2020/05/22	NC		%	35
			Leachable Uranium (U)	2020/05/22	NC		%	35
			Leachable Vanadium (V)	2020/05/22	NC		%	35
			Leachable Zinc (Zn)	2020/05/22	NC		%	35
			Leachable Zirconium (Zr)	2020/05/22	NC		%	35
9859031	KKC	QC Standard	Soluble (2:1) pH	2020/05/25		101	%	98 - 102
9859031	KKC	Spiked Blank	Soluble (2:1) pH	2020/05/25		100	%	97 - 103
9859031	KKC	RPD [XU2703-01]	Soluble (2:1) pH	2020/05/25	0.12		%	20
9860165	GP4	Matrix Spike [XU2703-02]	1,4-Difluorobenzene (sur.)	2020/05/25		92	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		97	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		107	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		84	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25		80	%	50 - 140
			Benzene	2020/05/25		86	%	50 - 140
			Toluene	2020/05/25		93	%	50 - 140
			Ethylbenzene	2020/05/25		89	%	50 - 140
			m & p-Xylene	2020/05/25		91	%	50 - 140
			o-Xylene	2020/05/25		93	%	50 - 140
			Styrene	2020/05/25		98	%	50 - 140
9860165	GP4	Spiked Blank	1,4-Difluorobenzene (sur.)	2020/05/25		99	%	60 - 140
			4-Bromofluorobenzene (sur.)	2020/05/25		98	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		97	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		92	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25		80	%	60 - 130
			Benzene	2020/05/25		97	%	60 - 130
			Toluene	2020/05/25		97	%	60 - 130
			Ethylbenzene	2020/05/25		92	%	60 - 130
			m & p-Xylene	2020/05/25		94	%	60 - 130
			o-Xylene	2020/05/25		95	%	60 - 130
			Styrene	2020/05/25		95	%	60 - 130
9860165	GP4	Method Blank	1,4-Difluorobenzene (sur.)	2020/05/25		98	%	60 - 140

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			4-Bromofluorobenzene (sur.)	2020/05/25		96	%	60 - 140
			D10-o-Xylene (sur.)	2020/05/25		95	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2020/05/25		88	%	60 - 140
			Methyl-tert-butylether (MTBE)	2020/05/25	ND, RDL=0.10		mg/kg	
			Benzene	2020/05/25	ND, RDL=0.0050		mg/kg	
			Toluene	2020/05/25	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2020/05/25	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2020/05/25	ND, RDL=0.040		mg/kg	
			o-Xylene	2020/05/25	ND, RDL=0.040		mg/kg	
			Styrene	2020/05/25	ND, RDL=0.030		mg/kg	
9860165	GP4	RPD [XU2703-02]	Methyl-tert-butylether (MTBE)	2020/05/25	NC		%	50
			Benzene	2020/05/25	1.6		%	50
			Toluene	2020/05/25	5.4		%	50
			Ethylbenzene	2020/05/25	3.7		%	50
			m & p-Xylene	2020/05/25	0.49		%	50
			o-Xylene	2020/05/25	4.1		%	50
			Styrene	2020/05/25	0.15		%	50
9860174	ANE	Matrix Spike [XU2703-01]	Total Aluminum (Al)	2020/05/26		NC	%	75 - 125
			Total Antimony (Sb)	2020/05/26		111	%	75 - 125
			Total Arsenic (As)	2020/05/26		99	%	75 - 125
			Total Barium (Ba)	2020/05/26		NC	%	75 - 125
			Total Beryllium (Be)	2020/05/26		100	%	75 - 125
			Total Bismuth (Bi)	2020/05/26		93	%	75 - 125
			Total Boron (B)	2020/05/26		120	%	75 - 125
			Total Cadmium (Cd)	2020/05/26		100	%	75 - 125
			Total Calcium (Ca)	2020/05/26		NC	%	75 - 125
			Total Chromium (Cr)	2020/05/26		122	%	75 - 125
			Total Cobalt (Co)	2020/05/26		93	%	75 - 125
			Total Copper (Cu)	2020/05/26		NC	%	75 - 125
			Total Iron (Fe)	2020/05/26		NC	%	75 - 125
			Total Lead (Pb)	2020/05/26		101	%	75 - 125
			Total Lithium (Li)	2020/05/26		104	%	75 - 125
			Total Magnesium (Mg)	2020/05/26		NC	%	75 - 125
			Total Manganese (Mn)	2020/05/26		NC	%	75 - 125
			Total Mercury (Hg)	2020/05/26		94	%	75 - 125
			Total Molybdenum (Mo)	2020/05/26		NC	%	75 - 125
			Total Nickel (Ni)	2020/05/26		NC	%	75 - 125
			Total Phosphorus (P)	2020/05/26		NC	%	75 - 125
			Total Potassium (K)	2020/05/26		NC	%	75 - 125
			Total Selenium (Se)	2020/05/26		107	%	75 - 125
			Total Silver (Ag)	2020/05/26		97	%	75 - 125
			Total Sodium (Na)	2020/05/26		NC	%	75 - 125
			Total Strontium (Sr)	2020/05/26		NC	%	75 - 125
			Total Thallium (Tl)	2020/05/26		90	%	75 - 125
			Total Tin (Sn)	2020/05/26		105	%	75 - 125
			Total Titanium (Ti)	2020/05/26		90	%	75 - 125
			Total Tungsten (W)	2020/05/26		53 (1)	%	75 - 125

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Your P.O. #: 34974
Sampler Initials: LB

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Uranium (U)	2020/05/26		96	%	75 - 125
			Total Vanadium (V)	2020/05/26		NC	%	75 - 125
			Total Zinc (Zn)	2020/05/26		NC	%	75 - 125
			Total Zirconium (Zr)	2020/05/26		NC	%	75 - 125
9860174	ANE	QC Standard	Total Aluminum (Al)	2020/05/26		83	%	70 - 130
			Total Arsenic (As)	2020/05/26		111	%	70 - 130
			Total Barium (Ba)	2020/05/26		102	%	70 - 130
			Total Beryllium (Be)	2020/05/26		95	%	70 - 130
			Total Cadmium (Cd)	2020/05/26		97	%	70 - 130
			Total Calcium (Ca)	2020/05/26		101	%	70 - 130
			Total Chromium (Cr)	2020/05/26		88	%	70 - 130
			Total Cobalt (Co)	2020/05/26		92	%	70 - 130
			Total Copper (Cu)	2020/05/26		104	%	70 - 130
			Total Iron (Fe)	2020/05/26		109	%	70 - 130
			Total Lead (Pb)	2020/05/26		111	%	70 - 130
			Total Lithium (Li)	2020/05/26		83	%	70 - 130
			Total Magnesium (Mg)	2020/05/26		93	%	70 - 130
			Total Manganese (Mn)	2020/05/26		96	%	70 - 130
			Total Mercury (Hg)	2020/05/26		109	%	70 - 130
			Total Molybdenum (Mo)	2020/05/26		105	%	70 - 130
			Total Nickel (Ni)	2020/05/26		103	%	70 - 130
			Total Phosphorus (P)	2020/05/26		98	%	70 - 130
			Total Potassium (K)	2020/05/26		75	%	70 - 130
			Total Silver (Ag)	2020/05/26		128	%	70 - 130
			Total Sodium (Na)	2020/05/26		81	%	70 - 130
			Total Strontium (Sr)	2020/05/26		99	%	70 - 130
			Total Thallium (Tl)	2020/05/26		98	%	70 - 130
			Total Tin (Sn)	2020/05/26		105	%	70 - 130
			Total Uranium (U)	2020/05/26		100	%	70 - 130
			Total Vanadium (V)	2020/05/26		96	%	70 - 130
			Total Zinc (Zn)	2020/05/26		104	%	70 - 130
9860174	ANE	Spiked Blank	Total Aluminum (Al)	2020/05/26		105	%	75 - 125
			Total Antimony (Sb)	2020/05/26		128 (1)	%	75 - 125
			Total Arsenic (As)	2020/05/26		98	%	75 - 125
			Total Barium (Ba)	2020/05/26		99	%	75 - 125
			Total Beryllium (Be)	2020/05/26		96	%	75 - 125
			Total Bismuth (Bi)	2020/05/26		96	%	75 - 125
			Total Boron (B)	2020/05/26		94	%	75 - 125
			Total Cadmium (Cd)	2020/05/26		97	%	75 - 125
			Total Calcium (Ca)	2020/05/26		107	%	75 - 125
			Total Chromium (Cr)	2020/05/26		97	%	75 - 125
			Total Cobalt (Co)	2020/05/26		95	%	75 - 125
			Total Copper (Cu)	2020/05/26		97	%	75 - 125
			Total Iron (Fe)	2020/05/26		106	%	75 - 125
			Total Lead (Pb)	2020/05/26		100	%	75 - 125
			Total Lithium (Li)	2020/05/26		95	%	75 - 125
			Total Magnesium (Mg)	2020/05/26		98	%	75 - 125
			Total Manganese (Mn)	2020/05/26		96	%	75 - 125
			Total Mercury (Hg)	2020/05/26		92	%	75 - 125
			Total Molybdenum (Mo)	2020/05/26		97	%	75 - 125
			Total Nickel (Ni)	2020/05/26		96	%	75 - 125
			Total Phosphorus (P)	2020/05/26		113	%	75 - 125
			Total Potassium (K)	2020/05/26		105	%	75 - 125
			Total Selenium (Se)	2020/05/26		106	%	75 - 125

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Your P.O. #: 34974
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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Silver (Ag)	2020/05/26		96	%	75 - 125
			Total Sodium (Na)	2020/05/26		109	%	75 - 125
			Total Strontium (Sr)	2020/05/26		99	%	75 - 125
			Total Thallium (Tl)	2020/05/26		101	%	75 - 125
			Total Tin (Sn)	2020/05/26		95	%	75 - 125
			Total Titanium (Ti)	2020/05/26		101	%	75 - 125
			Total Tungsten (W)	2020/05/26		94	%	75 - 125
			Total Uranium (U)	2020/05/26		100	%	75 - 125
			Total Vanadium (V)	2020/05/26		97	%	75 - 125
			Total Zinc (Zn)	2020/05/26		102	%	75 - 125
			Total Zirconium (Zr)	2020/05/26		103	%	75 - 125
9860174	ANE	Method Blank	Total Aluminum (Al)	2020/05/26	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Boron (B)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Cadmium (Cd)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2020/05/26	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Cobalt (Co)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2020/05/26	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2020/05/26	ND, RDL=100		mg/kg	
			Total Manganese (Mn)	2020/05/26	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Molybdenum (Mo)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2020/05/26	ND, RDL=10		mg/kg	
			Total Potassium (K)	2020/05/26	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 Selenium (Se)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2020/05/26	ND, RDL=100		mg/kg	
			Total Strontium (Sr)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Tin (Sn)	2020/05/26	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Tungsten (W)	2020/05/26	ND, RDL=0.50		mg/kg	
			Total Uranium (U)	2020/05/26	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2020/05/26	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2020/05/26	ND, RDL=0.50		mg/kg	
9860174	ANE	RPD [XU2703-01]	Total Aluminum (Al)	2020/05/26	2.2		%	40
			Total Antimony (Sb)	2020/05/26	1.6		%	30
			Total Arsenic (As)	2020/05/26	1.2		%	30
			Total Barium (Ba)	2020/05/26	1.6		%	40
			Total Beryllium (Be)	2020/05/26	3.0		%	30
			Total Bismuth (Bi)	2020/05/26	2.0		%	30
			Total Boron (B)	2020/05/26	4.3		%	30
			Total Cadmium (Cd)	2020/05/26	0.96		%	30
			Total Calcium (Ca)	2020/05/26	3.5		%	30
			Total Chromium (Cr)	2020/05/26	3.2		%	30
			Total Cobalt (Co)	2020/05/26	1.6		%	30
			Total Copper (Cu)	2020/05/26	0.16		%	30
			Total Iron (Fe)	2020/05/26	1.2		%	30
			Total Lead (Pb)	2020/05/26	0.19		%	40
			Total Lithium (Li)	2020/05/26	5.1		%	30
			Total Magnesium (Mg)	2020/05/26	0.91		%	30
			Total Manganese (Mn)	2020/05/26	2.1		%	30
			Total Mercury (Hg)	2020/05/26	2.4		%	40
			Total Molybdenum (Mo)	2020/05/26	19		%	40
			Total Nickel (Ni)	2020/05/26	0.48		%	30
			Total Phosphorus (P)	2020/05/26	0.81		%	30
			Total Potassium (K)	2020/05/26	0.16		%	40
			Total Selenium (Se)	2020/05/26	1.7		%	30
			Total Silver (Ag)	2020/05/26	3.5		%	40
			Total Sodium (Na)	2020/05/26	1.2		%	40
			Total Strontium (Sr)	2020/05/26	3.5		%	40
			Total Thallium (Tl)	2020/05/26	5.5		%	30
			Total Tin (Sn)	2020/05/26	4.0		%	40
			Total Titanium (Ti)	2020/05/26	13		%	40
			Total Tungsten (W)	2020/05/26	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
			Total Uranium (U)	2020/05/26	7.7		%	30
			Total Vanadium (V)	2020/05/26	2.1		%	30
			Total Zinc (Zn)	2020/05/26	0.28		%	30
			Total Zirconium (Zr)	2020/05/26	4.7		%	40
9861170	MPE	Matrix Spike	Total Oil and grease	2020/05/26		98	%	65 - 135
9861170	MPE	Spiked Blank	Total Oil and grease	2020/05/26		98	%	65 - 135
9861170	MPE	Method Blank	Total Oil and grease	2020/05/26	ND, RDL=100		ug/g	
9861170	MPE	RPD	Total Oil and grease	2020/05/26	NC (2)		%	30
9862158	RHO	QC Standard	Paste pH	2020/05/26		8.1	%	N/A
9862158	RHO	RPD	Paste pH	2020/05/26	1.6		%	N/A
			Paste pH	2020/05/26	0.98		%	N/A
9862158	RHO	RPD [XU2703-01]	Paste pH	2020/05/26	0.35		%	N/A
9862159	RHO	RPD	Rinse pH	2020/05/26	0.37		%	N/A
			Rinse pH	2020/05/26	0.71		%	N/A
9862159	RHO	RPD [XU2703-01]	Rinse pH	2020/05/26	0.48		%	N/A
9865098	RHO	QC Standard	MOABA Neutralization Potential	2020/05/28		61	%	N/A
9865098	RHO	Method Blank	MOABA Neutralization Potential	2020/05/28	0.00		Kg CaCO3/T	
9865098	RHO	RPD	MOABA Neutralization Potential	2020/05/28	8.0		%	N/A
			MOABA Neutralization Potential	2020/05/28	3.6		%	N/A
9865098	RHO	RPD [XU2703-01]	MOABA Neutralization Potential	2020/05/28	0.51		%	N/A
9865100	RHO	RPD	Fizz Rating	2020/05/27	NC		%	N/A
			Fizz Rating	2020/05/27	NC		%	N/A
9865100	RHO	RPD [XU2703-01]	Fizz Rating	2020/05/27	NC		%	N/A
9873531	BB3	Matrix Spike [XU2703-01]	HCl Extracted Sulphate (SO4)	2020/06/04		NC	%	80 - 120
9873531	BB3	QC Standard	HCl Extracted Sulphate (SO4)	2020/06/04		111	%	80 - 120
9873531	BB3	Spiked Blank	HCl Extracted Sulphate (SO4)	2020/06/04		113	%	80 - 120
9873531	BB3	Method Blank	HCl Extracted Sulphate (SO4)	2020/06/04	ND, RDL=0.50		mg/L	
9873531	BB3	RPD	HCl Extracted Sulphate (SO4)	2020/06/04	3.4		%	20
			HCl Extracted Sulphate (SO4)	2020/06/04	3.0		%	20
9873531	BB3	RPD [XU2703-01]	HCl Extracted Sulphate (SO4)	2020/06/04	3.7		%	20
9873897	BT2	QC Standard	Total Carbon	2020/06/04		1.0	%	N/A
			Total Sulphur (S)	2020/06/04		2.3	%	N/A
9873897	BT2	Spiked Blank	Total Carbon	2020/06/04		0.19	%	N/A
			Total Sulphur (S)	2020/06/04		0.17	%	N/A
9873897	BT2	Method Blank	Total Carbon	2020/06/04	ND, RDL=0.02		wt%	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Sulphur (S)	2020/06/04	ND, RDL=0.02		wt%	

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) High moisture content

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Sampler Initials: LB

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

Dennis Ngondu, B.Sc., P.Chem., QP, Supervisor, Organics

Luba Shymushovska, B.Sc., QP, Senior Analyst, Organics

Harry (Peng) Liang, Senior Analyst

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs 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

716

W24573-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 BV Labs eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples.

First Sample: Pre-Treatment Pond
Last Sample: L5-SP
Sample Count: 3

Relinquished By				Received By			
Luke		Date	2020/05/19			Date	2020/05/19
		Time (24 HR)	1530			Time (24 HR)	09:29
		Date		Jessica Lee		Date	20200520
		Time (24 HR)				Time (24 HR)	06:00
		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.bvlabs.com

Submission Triage Information

Sampled By: HB

# of Coolers/Pkgs: 1

Rush ☒ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LAB USE ONLY ***

Received At: FSJ

Labeled By: JKy

Verified By: MA

Comments:

1 Bag melted ice

19-May-20 09:29

Debbie Nordbruget

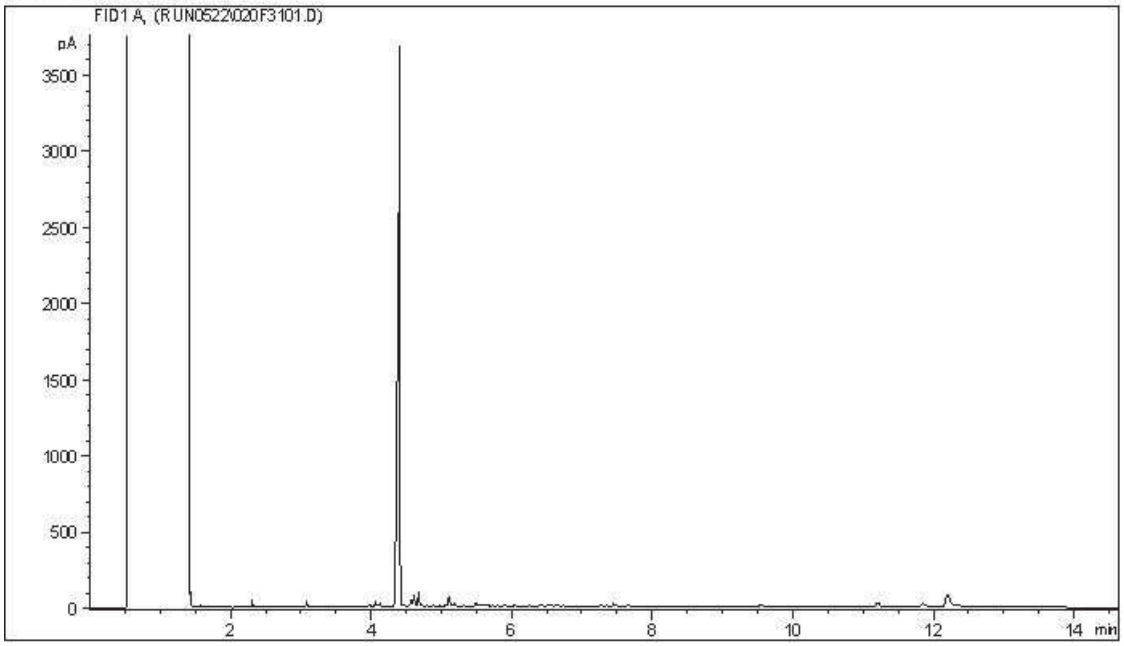
C033744

JK4 INS-0153

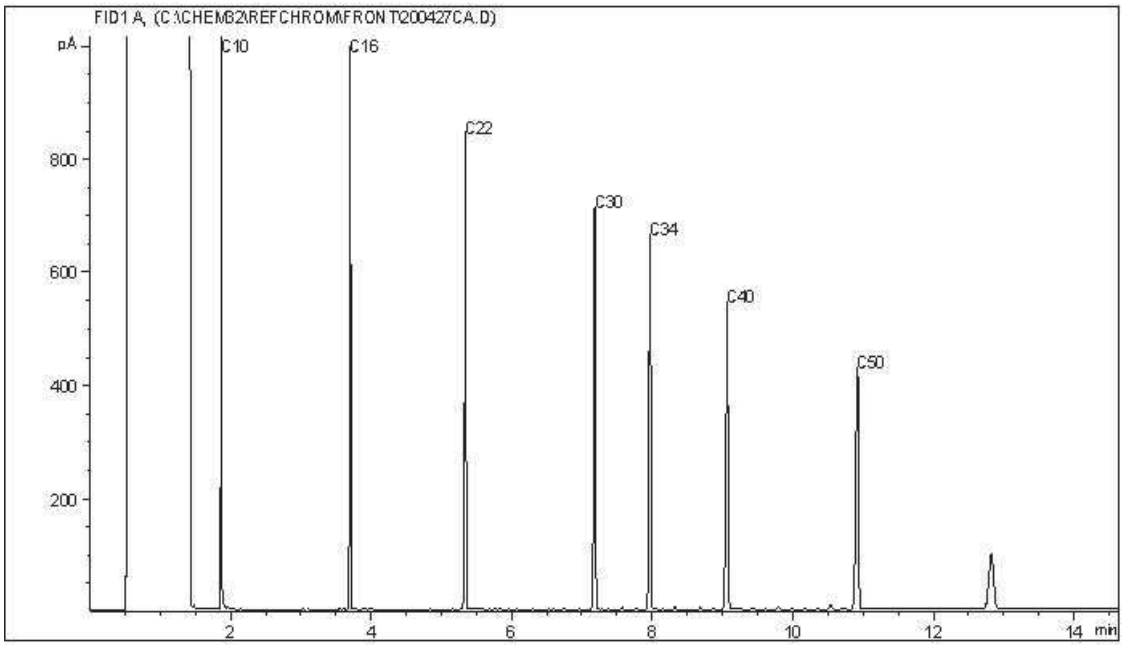
Custody Seal		Cooling	Temperature °C		
Present (Y/N)	Intact (Y/N)	Cooling Media (Y/N)	1	2	3
NO		yes	11	13	8
Y	N	Y	2	1	3

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



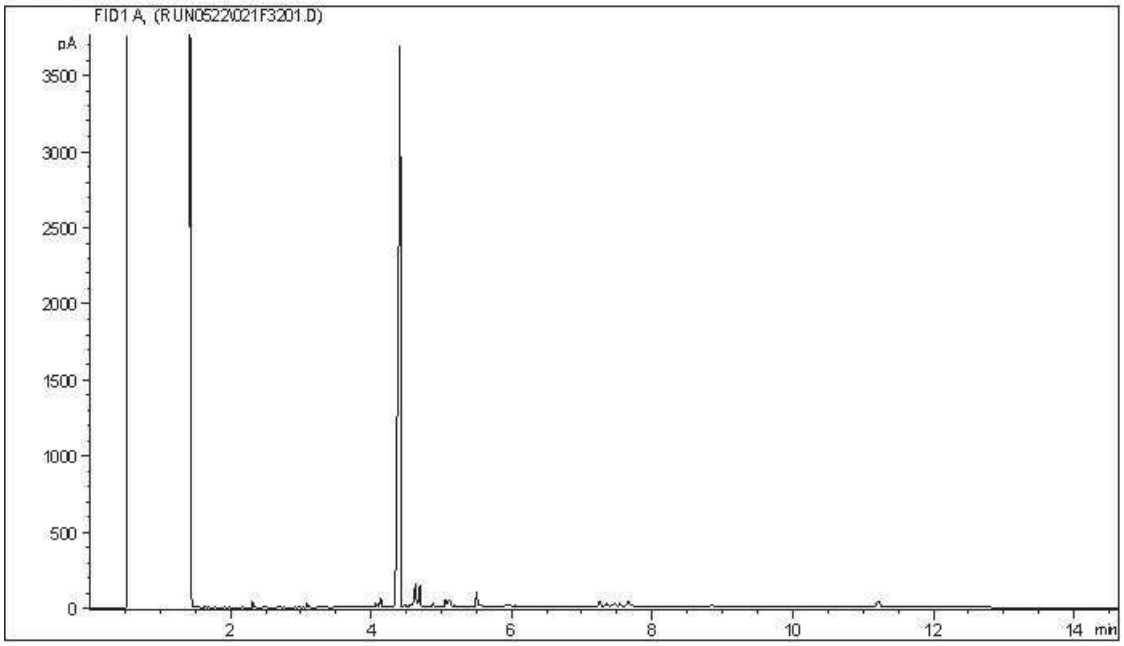
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

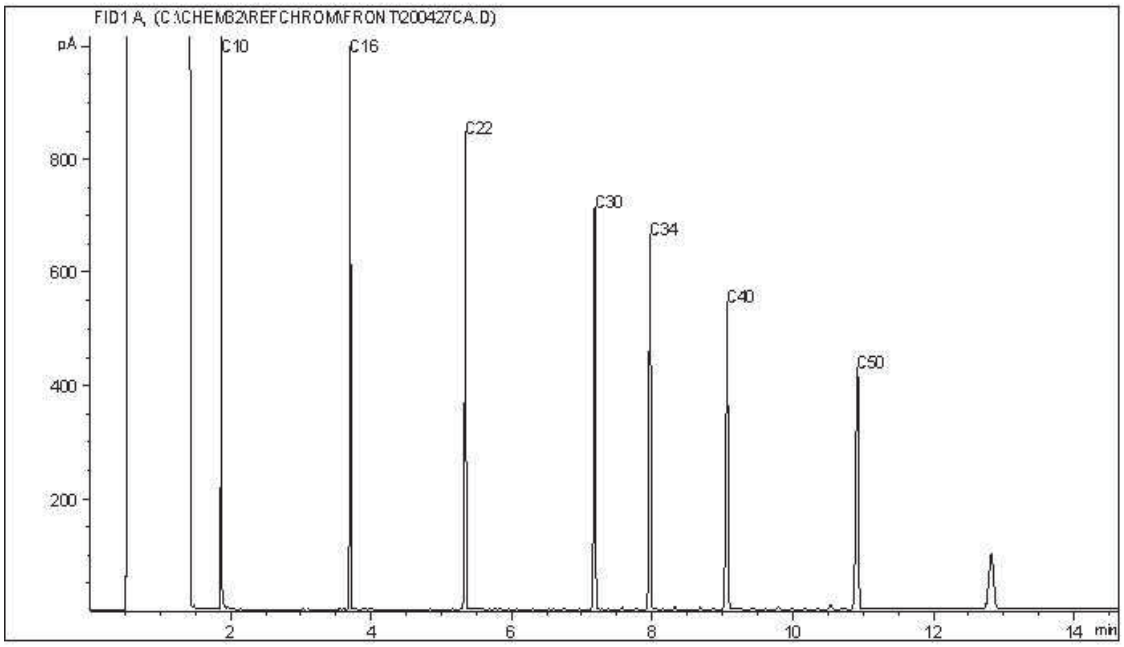
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



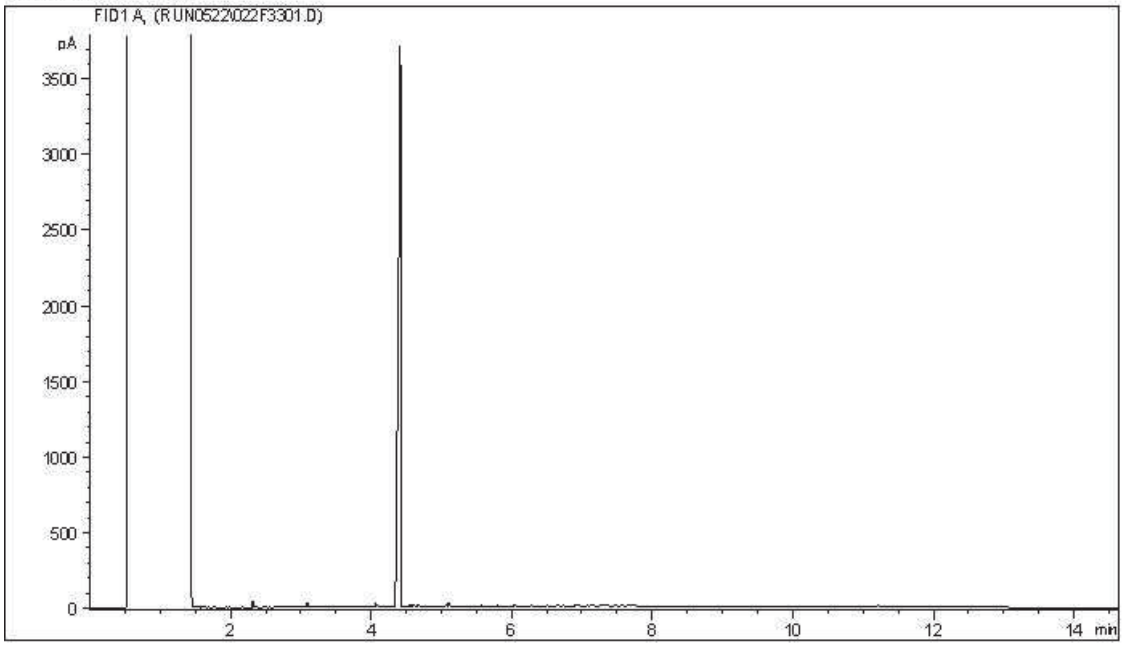
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

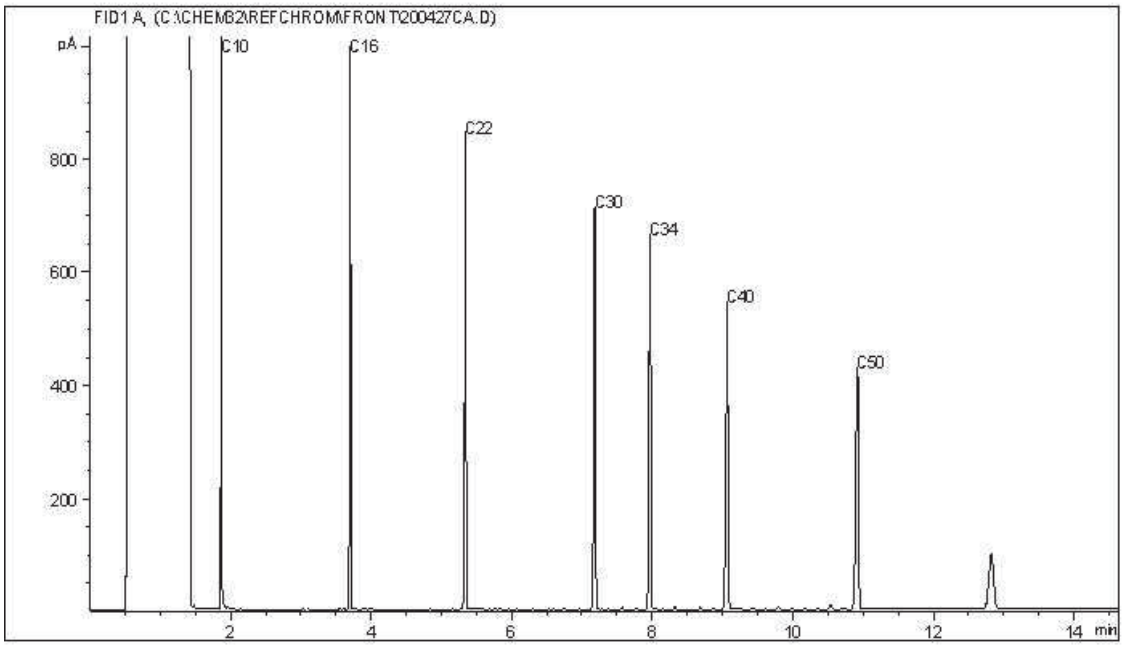
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC7



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.

Your P.O. #: 21663
Your Project #: SCD-18-01
Site Location: SITE C
PO # 21663
Project# SCD-18-01
Your C.O.C. #: 624000-01-01

Attention: Robert Taylor

Ensero Solutions - Fort St John
Site C Dam
Peace River E.
BC
Canada

Report Date: 2020/11/03
Report #: R2950964
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C079637
Received: 2020/10/28, 10:00

Sample Matrix: Soil
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BC Hydrocarbons in Soil by GC/FID (1)	1	2020/10/30	2020/10/30	CAL SOP-00239	BCMOE EPH S 12/16
EPH less PAH in Soil By GC/FID (1)	1	N/A	2020/11/02		Auto Calc
Elements by ICPMS (total)	1	2020/11/03	2020/11/03	BBY7SOP-00004 / BBY7SOP-00001	EPA 6020b R2 m
ICPMS Metals on TCLP Leachate (1, 2)	1	2020/10/31	2020/10/31	AB SOP-00043	EPA 6020b R2 m
Moisture (1)	1	N/A	2020/10/30	AB SOP-00002	CCME PHC-CWS m
PAH in Soil by GC/MS (1)	1	2020/10/30	2020/10/31	AB SOP-00003 AB SOP-00036	EPA 3540C/8270E m
Total LMW, HMW, Total PAH Calc (1)	1	N/A	2020/10/31		Auto Calc
TCLP pH Measurements (1)	1	2020/10/30	2020/10/31	AB SOP-00006	SM 23 4500 H+B m
pH (2:1 DI Water Extract)	1	2020/11/03	2020/11/03	BBY6SOP-00028	BCMOE BCLM Mar2005 m
Total Carbon, Nitrogen & Sulphur in Soil (1)	1	N/A	2020/11/01	CAL SOP-00243	LECO 203-821-498 m
Total Oil and Grease	1	2020/11/03	2020/11/03	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX (1)	1	2020/10/30	2020/11/02		Auto Calc
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID (1)	1	2020/10/30	2020/10/31	CAL SOP-00240	BC MELP VH 2014

Remarks:

Bureau Veritas Laboratories are accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by BV Labs 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 BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 dilution methods.

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Your P.O. #: 21663
Your Project #: SCD-18-01
Site Location: SITE C
PO # 21663
Project# SCD-18-01
Your C.O.C. #: 624000-01-01

Attention: Robert Taylor

Ensero Solutions - Fort St John
Site C Dam
Peace River E.
BC
Canada

Report Date: 2020/11/03
Report #: R2950964
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C079637
Received: 2020/10/28, 10:00

Results relate to samples tested. When sampling is not conducted by BV Labs, 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 BV Labs Calgary Environmental

(2) Samples were extracted as per EPA 1311 unless otherwise noted in the report.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Solutions, Western Canada Customer Experience Team
Email: customersolutionswest@bvlabs.com
Phone# (604) 734 7276

==========

BV Labs 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 Laboratories Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

BV Labs Job #: C079637
Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

BC LEPH/HEPH PETROLEUM HYDROCARBONS (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	38	0.30	A073080
Polycyclic Aromatics				
Acenaphthene	mg/kg	<0.0050	0.0050	A072790
Acenaphthylene	mg/kg	<0.0050	0.0050	A072790
Anthracene	mg/kg	<0.0040	0.0040	A072790
Benzo(a)anthracene	mg/kg	<0.010	0.010	A072790
Benzo(b&j)fluoranthene	mg/kg	<0.010	0.010	A072790
Benzo(k)fluoranthene	mg/kg	<0.010	0.010	A072790
Benzo(g,h,i)perylene	mg/kg	<0.020	0.020	A072790
Benzo(a)pyrene	mg/kg	<0.010	0.010	A072790
Chrysene	mg/kg	<0.010	0.010	A072790
Dibenz(a,h)anthracene	mg/kg	<0.020	0.020	A072790
Fluoranthene	mg/kg	<0.010	0.010	A072790
Fluorene	mg/kg	<0.010	0.010	A072790
Indeno(1,2,3-cd)pyrene	mg/kg	<0.020	0.020	A072790
1-Methylnaphthalene	mg/kg	<0.010	0.010	A072790
2-Methylnaphthalene	mg/kg	<0.010	0.010	A072790
Naphthalene	mg/kg	<0.010	0.010	A072790
Phenanthrene	mg/kg	<0.010	0.010	A072790
Pyrene	mg/kg	<0.010	0.010	A072790
Low Molecular Weight PAH`s	mg/kg	<0.050	0.050	A072021
High Molecular Weight PAH`s	mg/kg	<0.020	0.020	A072021
Total PAH	mg/kg	<0.050	0.050	A072021
Ext. Pet. Hydrocarbon				
EPH (C10-C19)	mg/kg	<100	100	A072595
EPH (C19-C32)	mg/kg	<100	100	A072595
LEPH (C10-C19 less PAH)	mg/kg	<100	100	A072020
HEPH (C19-C32 less PAH)	mg/kg	<100	100	A072020
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	88		A072595
D10-ANTHRACENE (sur.)	%	99		A072790
RDL = Reportable Detection Limit				

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Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

BC LEPH/HEPH PETROLEUM HYDROCARBONS (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
D8-ACENAPHTHYLENE (sur.)	%	100		A072790
D8-NAPHTHALENE (sur.)	%	95		A072790
D9-Acridine (sur.)	%	71		A072790
TERPHENYL-D14 (sur.)	%	91		A072790
RDL = Reportable Detection Limit				

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Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

BC BTEX/VPH IN SOIL (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
Volatiles				
Xylenes (Total)	mg/kg	<0.057	0.057	A072022
VH C6-C10	mg/kg	<8.6	8.6	A072022
Methyl-tert-butylether (MTBE)	mg/kg	<0.10	0.10	A073109
VPH (VH6 to 10 - BTEX)	mg/kg	<8.6	8.6	A072022
Benzene	mg/kg	<0.0050	0.0050	A073109
Toluene	mg/kg	<0.050	0.050	A073109
Ethylbenzene	mg/kg	<0.010	0.010	A073109
m & p-Xylene	mg/kg	<0.040	0.040	A073109
o-Xylene	mg/kg	<0.040	0.040	A073109
Styrene	mg/kg	<0.030	0.030	A073109
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	95		A073109
4-Bromofluorobenzene (sur.)	%	95		A073109
D10-o-Xylene (sur.)	%	108		A073109
D4-1,2-Dichloroethane (sur.)	%	108		A073109
RDL = Reportable Detection Limit				

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BV Labs Job #: C079637
Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

RESULTS OF CHEMICAL ANALYSES OF SOIL

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
Misc. Inorganics				
Leachable Initial pH of Sample	pH	11.1	N/A	A073099
Leachable pH after HCl	pH	5.70	N/A	A073099
Leachable Final pH of Leachate	pH	5.84	N/A	A073099
OIL & GREASE				
Total Oil and grease	ug/g	<100	100	A075714

RDL = Reportable Detection Limit
N/A = Not Applicable

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Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
Elements				
Leachable Antimony (Sb)	mg/L	<1.0	1.0	A073634
Leachable Arsenic (As)	mg/L	<0.50	0.50	A073634
Leachable Barium (Ba)	mg/L	1.1	1.0	A073634
Leachable Beryllium (Be)	mg/L	<0.50	0.50	A073634
Leachable Boron (B)	mg/L	<1.0	1.0	A073634
Leachable Cadmium (Cd)	mg/L	<0.10	0.10	A073634
Leachable Chromium (Cr)	mg/L	<0.50	0.50	A073634
Leachable Cobalt (Co)	mg/L	<1.0	1.0	A073634
Leachable Copper (Cu)	mg/L	<1.0	1.0	A073634
Leachable Iron (Fe)	mg/L	12	1.0	A073634
Leachable Lead (Pb)	mg/L	<0.50	0.50	A073634
Leachable Mercury (Hg)	mg/L	<0.020	0.020	A073634
Leachable Nickel (Ni)	mg/L	0.88	0.50	A073634
Leachable Selenium (Se)	mg/L	<0.10	0.10	A073634
Leachable Silver (Ag)	mg/L	<0.50	0.50	A073634
Leachable Thallium (Tl)	mg/L	<0.50	0.50	A073634
Leachable Uranium (U)	mg/L	<0.20	0.20	A073634
Leachable Vanadium (V)	mg/L	<1.0	1.0	A073634
Leachable Zinc (Zn)	mg/L	<1.0	1.0	A073634
Leachable Zirconium (Zr)	mg/L	<1.0	1.0	A073634
RDL = Reportable Detection Limit				

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BV Labs Job #: C079637
Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

MISCELLANEOUS (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
Misc. Inorganics				
Total Carbon	%	10	0.05	A074219
Total Sulphur (S)	%	0.25	0.06	A074219
RDL = Reportable Detection Limit				

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BV Labs Job #: C079637
Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

CSR/CCME METALS IN SOIL WITH HG (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	REACTOR 1	RDL	QC Batch
Physical Properties				
Soluble (2:1) pH	pH	11.2	N/A	A075700
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	1460	100	A075651
Total Antimony (Sb)	mg/kg	0.14	0.10	A075651
Total Arsenic (As)	mg/kg	1.71	0.20	A075651
Total Barium (Ba)	mg/kg	192	0.10	A075651
Total Beryllium (Be)	mg/kg	<0.20	0.20	A075651
Total Bismuth (Bi)	mg/kg	<0.10	0.10	A075651
Total Boron (B)	mg/kg	8.4	1.0	A075651
Total Cadmium (Cd)	mg/kg	0.576	0.050	A075651
Total Calcium (Ca)	mg/kg	383000 (1)	1000	A075651
Total Chromium (Cr)	mg/kg	1.74	0.50	A075651
Total Cobalt (Co)	mg/kg	13.3	0.10	A075651
Total Copper (Cu)	mg/kg	2.96	0.50	A075651
Total Iron (Fe)	mg/kg	1570	100	A075651
Total Lead (Pb)	mg/kg	0.80	0.10	A075651
Total Lithium (Li)	mg/kg	5.22	0.50	A075651
Total Magnesium (Mg)	mg/kg	9150	100	A075651
Total Manganese (Mn)	mg/kg	443	0.20	A075651
Total Mercury (Hg)	mg/kg	<0.050	0.050	A075651
Total Molybdenum (Mo)	mg/kg	0.17	0.10	A075651
Total Nickel (Ni)	mg/kg	59.5	0.50	A075651
Total Phosphorus (P)	mg/kg	57	10	A075651
Total Potassium (K)	mg/kg	282	100	A075651
Total Selenium (Se)	mg/kg	<0.50	0.50	A075651
Total Silver (Ag)	mg/kg	<0.050	0.050	A075651
Total Sodium (Na)	mg/kg	1230	100	A075651
Total Strontium (Sr)	mg/kg	1020	0.10	A075651

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) RDL raised due to concentration over linear range, sample dilution required.

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Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

CSR/CCME METALS IN SOIL WITH HG (SOIL)

BV Labs ID		YT3310		
Sampling Date		2020/10/27 16:15		
COC Number		624000-01-01		
	UNITS	**REACTOR 1**	**RDL**	**QC Batch**
Total Thallium (Tl)	mg/kg	<0.050	0.050	A075651
Total Tin (Sn)	mg/kg	0.19	0.10	A075651
Total Titanium (Ti)	mg/kg	24.7	1.0	A075651
Total Tungsten (W)	mg/kg	<0.50	0.50	A075651
Total Uranium (U)	mg/kg	4.19	0.050	A075651
Total Vanadium (V)	mg/kg	5.3	1.0	A075651
Total Zinc (Zn)	mg/kg	42.2	1.0	A075651
Total Zirconium (Zr)	mg/kg	0.82	0.50	A075651
RDL = Reportable Detection Limit				

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BV Labs Job #: C079637
Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

TEST SUMMARY

BV Labs ID: YT3310
Sample ID: REACTOR 1
Matrix: Soil

Collected: 2020/10/27
Shipped: 2020/10/28
Received: 2020/10/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
BC Hydrocarbons in Soil by GC/FID	GC/FID	A072595	2020/10/30	2020/10/30	Vian Pereira
EPH less PAH in Soil By GC/FID	GC/FID	A072020	N/A	2020/11/02	Automated Statchk
Elements by ICPMS (total)	ICPM/MS	A075651	2020/11/03	2020/11/03	Valentina Balada
ICPMS Metals on TCLP Leachate	ICPM	A073634	2020/10/31	2020/10/31	Paula Calzada
Moisture	BAL	A073080	N/A	2020/10/30	Eric Tse
PAH in Soil by GC/MS	GC/MS	A072790	2020/10/30	2020/10/31	Nora Kazemian
Total LMW, HMW, Total PAH Calc	GC/MSD	A072021	N/A	2020/10/31	Automated Statchk
TCLP pH Measurements	PHEL	A073099	2020/10/30	2020/10/31	Jason Bao
pH (2:1 DI Water Extract)	PH/PH	A075700	2020/11/03	2020/11/03	Chamila Jayasinghe
Total Carbon, Nitrogen & Sulphur in Soil	LECO	A074219	N/A	2020/11/01	Harry (Peng) Liang
Total Oil and Grease	BAL/BAL	A075714	2020/11/03	2020/11/03	Marifel Pascual
Volatile HC-BTEX	CALC/MS	A072022	2020/11/02	2020/11/02	Automated Statchk
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID	HSGC/MS	A073109	2020/10/30	2020/10/31	Qiliang (Alex) Wu

BV Labs ID: YT3310 Dup
Sample ID: REACTOR 1
Matrix: Soil

Collected: 2020/10/27
Shipped: 2020/10/28
Received: 2020/10/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
BC Hydrocarbons in Soil by GC/FID	GC/FID	A072595	2020/10/30	2020/10/30	Vian Pereira
ICPMS Metals on TCLP Leachate	ICPM	A073634	2020/10/31	2020/10/31	Paula Calzada
PAH in Soil by GC/MS	GC/MS	A072790	2020/10/30	2020/10/31	Nora Kazemian
Total Carbon, Nitrogen & Sulphur in Soil	LECO	A074219	N/A	2020/11/01	Harry (Peng) Liang
Total Oil and Grease	BAL/BAL	A075714	2020/11/03	2020/11/03	Marifel Pascual
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID	HSGC/MS	A073109	2020/10/30	2020/10/31	Qiliang (Alex) Wu

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BV Labs Job #: C079637
Report Date: 2020/11/03

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.0°C

Sample YT3310 [REACTOR 1] : Sample(s) received was not in compliance with BC CSR sampling requirements for VOC, BTEX and VPH in soil. on Volatiles Batch: A073109

Results relate only to the items tested.

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BV Labs Job #: C079637
Report Date: 2020/11/03

QUALITY ASSURANCE REPORT

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A072595	O-TERPHENYL (sur.)	2020/10/30	93	60 - 140	88	60 - 140	89	%				
A072790	D10-ANTHRACENE (sur.)	2020/10/31	105	50 - 140	105	50 - 140	107	%				
A072790	D8-ACENAPHTHYLENE (sur.)	2020/10/31	108	50 - 140	109	50 - 140	109	%				
A072790	D8-NAPHTHALENE (sur.)	2020/10/31	99	50 - 140	96	50 - 140	99	%				
A072790	D9-Acridine (sur.)	2020/10/31	82	50 - 140	83	50 - 140	79	%				
A072790	TERPHENYL-D14 (sur.)	2020/10/31	106	50 - 140	90	50 - 140	99	%				
A073109	1,4-Difluorobenzene (sur.)	2020/10/31	94	60 - 140	92	60 - 140	95	%				
A073109	4-Bromofluorobenzene (sur.)	2020/10/31	100	60 - 140	98	60 - 140	96	%				
A073109	D10-o-Xylene (sur.)	2020/10/31	115	60 - 140	106	60 - 140	97	%				
A073109	D4-1,2-Dichloroethane (sur.)	2020/10/31	88	60 - 140	97	60 - 140	85	%				
A072595	EPH (C10-C19)	2020/10/30	101	60 - 140	90	70 - 130	<100	mg/kg	NC	50		
A072595	EPH (C19-C32)	2020/10/30	109	60 - 140	99	70 - 130	<100	mg/kg	NC	50		
A072790	1-Methylnaphthalene	2020/10/31	104	50 - 140	99	50 - 140	<0.010	mg/kg	NC	50		
A072790	2-Methylnaphthalene	2020/10/31	94	50 - 140	89	50 - 140	<0.010	mg/kg	NC	50		
A072790	Acenaphthene	2020/10/31	92	50 - 140	88	50 - 140	<0.0050	mg/kg	NC	50		
A072790	Acenaphthylene	2020/10/31	96	50 - 140	94	50 - 140	<0.0050	mg/kg	NC	50		
A072790	Anthracene	2020/10/31	95	50 - 140	94	50 - 140	<0.0040	mg/kg	NC	50		
A072790	Benzo(a)anthracene	2020/10/31	93	50 - 140	86	50 - 140	<0.010	mg/kg	NC	50		
A072790	Benzo(a)pyrene	2020/10/31	89	50 - 140	91	50 - 140	<0.010	mg/kg	NC	50		
A072790	Benzo(b&j)fluoranthene	2020/10/31	84	50 - 140	79	50 - 140	<0.010	mg/kg	NC	50		
A072790	Benzo(g,h,i)perylene	2020/10/31	101	50 - 140	95	50 - 140	<0.020	mg/kg	NC	50		
A072790	Benzo(k)fluoranthene	2020/10/31	91	50 - 140	83	50 - 140	<0.010	mg/kg	NC	50		
A072790	Chrysene	2020/10/31	87	50 - 140	75	50 - 140	<0.010	mg/kg	NC	50		
A072790	Dibenz(a,h)anthracene	2020/10/31	110	50 - 140	108	50 - 140	<0.020	mg/kg	NC	50		
A072790	Fluoranthene	2020/10/31	96	50 - 140	95	50 - 140	<0.010	mg/kg	NC	50		
A072790	Fluorene	2020/10/31	98	50 - 140	95	50 - 140	<0.010	mg/kg	NC	50		
A072790	Indeno(1,2,3-cd)pyrene	2020/10/31	106	50 - 140	114	50 - 140	<0.020	mg/kg	NC	50		
A072790	Naphthalene	2020/10/31	92	50 - 140	87	50 - 140	<0.010	mg/kg	NC	50		
A072790	Phenanthrene	2020/10/31	95	50 - 140	93	50 - 140	<0.010	mg/kg	NC	50		
A072790	Pyrene	2020/10/31	95	50 - 140	95	50 - 140	<0.010	mg/kg	NC	50		
A073080	Moisture	2020/10/30					<0.30	%	3.8	20		

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QUALITY ASSURANCE REPORT(CONT'D)

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A073099	Leachable Final pH of Leachate	2020/10/31			100	97 - 103			1.7	N/A		
A073099	Leachable Initial pH of Sample	2020/10/31			100	97 - 103			1.9	N/A		
A073099	Leachable pH after HCl	2020/10/31			100	97 - 103			NC	N/A		
A073109	Benzene	2020/10/31	104	50 - 140	99	60 - 130	<0.0050	mg/kg	NC	50		
A073109	Ethylbenzene	2020/10/31	100	50 - 140	93	60 - 130	<0.010	mg/kg	NC	50		
A073109	m & p-Xylene	2020/10/31	96	50 - 140	90	60 - 130	<0.040	mg/kg	NC	50		
A073109	Methyl-tert-butylether (MTBE)	2020/10/31	106	50 - 140	108	60 - 130	<0.10	mg/kg	NC	50		
A073109	o-Xylene	2020/10/31	98	50 - 140	94	60 - 130	<0.040	mg/kg	NC	50		
A073109	Styrene	2020/10/31	98	50 - 140	85	60 - 130	<0.030	mg/kg	NC	50		
A073109	Toluene	2020/10/31	98	50 - 140	94	60 - 130	<0.050	mg/kg	NC	50		
A073634	Leachable Antimony (Sb)	2020/10/31	106	75 - 125	103	80 - 120	<1.0	mg/L	NC	35		
A073634	Leachable Arsenic (As)	2020/10/31	109	75 - 125	107	80 - 120	<0.50	mg/L	NC	35		
A073634	Leachable Barium (Ba)	2020/10/31	NC	75 - 125	112	80 - 120	<1.0	mg/L	2.0	35		
A073634	Leachable Beryllium (Be)	2020/10/31	108	75 - 125	107	80 - 120	<0.50	mg/L	NC	35		
A073634	Leachable Boron (B)	2020/10/31	124	75 - 125	112	80 - 120	<1.0	mg/L	NC	35		
A073634	Leachable Cadmium (Cd)	2020/10/31	114	75 - 125	108	80 - 120	<0.10	mg/L	NC	35		
A073634	Leachable Chromium (Cr)	2020/10/31	110	75 - 125	107	80 - 120	<0.50	mg/L	NC	35		
A073634	Leachable Cobalt (Co)	2020/10/31	108	75 - 125	105	80 - 120	<1.0	mg/L	NC	35		
A073634	Leachable Copper (Cu)	2020/10/31	107	75 - 125	107	80 - 120	<1.0	mg/L	NC	35		
A073634	Leachable Iron (Fe)	2020/10/31	NC	75 - 125	111	80 - 120	<1.0	mg/L	3.0	35		
A073634	Leachable Lead (Pb)	2020/10/31	111	75 - 125	108	80 - 120	<0.50	mg/L	NC	35		
A073634	Leachable Mercury (Hg)	2020/10/31	118	75 - 125	111	80 - 120	<0.020	mg/L	NC	35		
A073634	Leachable Nickel (Ni)	2020/10/31	106	75 - 125	103	80 - 120	<0.50	mg/L	1.5	35		
A073634	Leachable Selenium (Se)	2020/10/31	111	75 - 125	104	80 - 120	<0.10	mg/L	NC	35		
A073634	Leachable Silver (Ag)	2020/10/31	114	75 - 125	107	80 - 120	<0.50	mg/L	NC	35		
A073634	Leachable Thallium (Tl)	2020/10/31	112	75 - 125	107	80 - 120	<0.50	mg/L	NC	35		
A073634	Leachable Uranium (U)	2020/10/31	110	75 - 125	105	80 - 120	<0.20	mg/L	NC	35		
A073634	Leachable Vanadium (V)	2020/10/31	111	75 - 125	106	80 - 120	<1.0	mg/L	NC	35		
A073634	Leachable Zinc (Zn)	2020/10/31	108	75 - 125	108	80 - 120	<1.0	mg/L	NC	35		
A073634	Leachable Zirconium (Zr)	2020/10/31	111	75 - 125	106	80 - 120	<1.0	mg/L	NC	35		
A074219	Total Carbon	2020/11/01			102	80 - 120	<0.05	%	5.8	30	96	75 - 125

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QUALITY ASSURANCE REPORT(CONT'D)

Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A074219	Total Sulphur (S)	2020/11/01			101	80 - 120	<0.06	%	14	30	101	75 - 125
A075651	Total Aluminum (Al)	2020/11/03	NC	75 - 125	105	75 - 125	<100	mg/kg	2.3	40	104	70 - 130
A075651	Total Antimony (Sb)	2020/11/03	88	75 - 125	106	75 - 125	<0.10	mg/kg	10	30	117	70 - 130
A075651	Total Arsenic (As)	2020/11/03	98	75 - 125	106	75 - 125	<0.20	mg/kg	6.5	30	103	70 - 130
A075651	Total Barium (Ba)	2020/11/03	98	75 - 125	100	75 - 125	<0.10	mg/kg	3.1	40	113	70 - 130
A075651	Total Beryllium (Be)	2020/11/03	94	75 - 125	105	75 - 125	<0.20	mg/kg	0.71	30	118	70 - 130
A075651	Total Bismuth (Bi)	2020/11/03	95	75 - 125	102	75 - 125	<0.10	mg/kg				
A075651	Total Boron (B)	2020/11/03	93	75 - 125	106	75 - 125	<1.0	mg/kg	5.2	30		
A075651	Total Cadmium (Cd)	2020/11/03	98	75 - 125	107	75 - 125	<0.050	mg/kg	3.5	30	112	70 - 130
A075651	Total Calcium (Ca)	2020/11/03	NC	75 - 125	107	75 - 125	<100	mg/kg			109	70 - 130
A075651	Total Chromium (Cr)	2020/11/03	97	75 - 125	109	75 - 125	<0.50	mg/kg	1.3	30	110	70 - 130
A075651	Total Cobalt (Co)	2020/11/03	91	75 - 125	103	75 - 125	<0.10	mg/kg	3.9	30	108	70 - 130
A075651	Total Copper (Cu)	2020/11/03	92	75 - 125	104	75 - 125	<0.50	mg/kg	0.47	30	117	70 - 130
A075651	Total Iron (Fe)	2020/11/03	NC	75 - 125	105	75 - 125	<100	mg/kg	0.54	30	111	70 - 130
A075651	Total Lead (Pb)	2020/11/03	98	75 - 125	103	75 - 125	<0.10	mg/kg	1.3	40	123	70 - 130
A075651	Total Lithium (Li)	2020/11/03	94	75 - 125	99	75 - 125	<0.50	mg/kg	2.1	30	115	70 - 130
A075651	Total Magnesium (Mg)	2020/11/03	NC	75 - 125	111	75 - 125	<100	mg/kg			116	70 - 130
A075651	Total Manganese (Mn)	2020/11/03	NC	75 - 125	106	75 - 125	<0.20	mg/kg	6.9	30	116	70 - 130
A075651	Total Mercury (Hg)	2020/11/03	97	75 - 125	104	75 - 125	<0.050	mg/kg	NC	40	121	70 - 130
A075651	Total Molybdenum (Mo)	2020/11/03	94	75 - 125	102	75 - 125	<0.10	mg/kg	1.9	40	111	70 - 130
A075651	Total Nickel (Ni)	2020/11/03	93	75 - 125	104	75 - 125	<0.50	mg/kg	0.60	30	117	70 - 130
A075651	Total Phosphorus (P)	2020/11/03	94	75 - 125	105	75 - 125	<10	mg/kg			108	70 - 130
A075651	Total Potassium (K)	2020/11/03	112	75 - 125	106	75 - 125	<100	mg/kg			99	70 - 130
A075651	Total Selenium (Se)	2020/11/03	97	75 - 125	107	75 - 125	<0.50	mg/kg	NC	30		
A075651	Total Silver (Ag)	2020/11/03	94	75 - 125	102	75 - 125	<0.050	mg/kg	NC	40	113	70 - 130
A075651	Total Sodium (Na)	2020/11/03	100	75 - 125	109	75 - 125	<100	mg/kg			106	70 - 130
A075651	Total Strontium (Sr)	2020/11/03	102	75 - 125	104	75 - 125	<0.10	mg/kg	3.0	40	118	70 - 130
A075651	Total Thallium (Tl)	2020/11/03	97	75 - 125	105	75 - 125	<0.050	mg/kg	1.2	30	101	70 - 130
A075651	Total Tin (Sn)	2020/11/03	98	75 - 125	106	75 - 125	<0.10	mg/kg	7.5	40	114	70 - 130
A075651	Total Titanium (Ti)	2020/11/03	NC	75 - 125	105	75 - 125	<1.0	mg/kg	0.31	40		
A075651	Total Tungsten (W)	2020/11/03	74 (1)	75 - 125	108	75 - 125	<0.50	mg/kg	NC	40		

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Ensero Solutions - Fort St John
Client Project #: SCD-18-01
Site Location: SITE C
Your P.O. #: 21663
Sampler Initials: GW

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
A075651	Total Uranium (U)	2020/11/03	98	75 - 125	104	75 - 125	<0.050	mg/kg	5.7	30	112	70 - 130
A075651	Total Vanadium (V)	2020/11/03	95	75 - 125	106	75 - 125	<1.0	mg/kg	0.021	30	112	70 - 130
A075651	Total Zinc (Zn)	2020/11/03	93	75 - 125	106	75 - 125	<1.0	mg/kg	0.13	30	115	70 - 130
A075651	Total Zirconium (Zr)	2020/11/03	114	75 - 125	105	75 - 125	<0.50	mg/kg				
A075700	Soluble (2:1) pH	2020/11/03			100	97 - 103			1.7	20		
A075714	Total Oil and grease	2020/11/03	94	65 - 135	97	65 - 135	<100	ug/g	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).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Ensero Solutions - Fort St John
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Your P.O. #: 21663
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

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BV Labs 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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Appendix 3-A: 2020 In Situ Sonde Continuous Measurement Water Quality Data

PEACE RIVER
HYDRO PARTNERS

RSEM-R5B

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	-0.1	-0.1	-0.1	1313	1324	1330	7.91	7.92	7.94	0.32	0.43	0.69
02-Jan	96	-0.1	-0.1	-0.1	1273	1293	1315	7.91	7.93	7.95	0.28	0.42	0.70
03-Jan	96	-0.2	-0.1	-0.1	1230	1283	1523	7.92	7.95	8.01	0.27	0.54	8.92
04-Jan	96	-0.1	-0.1	-0.1	1044	1178	1228	7.95	7.98	8.04	0.32	0.43	0.88
05-Jan	96	-0.1	-0.1	-0.1	1085	1157	1241	7.91	8.00	8.02	0.26	0.75	18.81
06-Jan	96	-0.1	-0.1	-0.1	1170	1211	1294	7.98	8.00	8.02	0.22	0.38	0.65
07-Jan	96	-0.1	-0.1	-0.1	1058	1206	1254	7.96	7.98	7.99	0.26	0.40	2.03
08-Jan	95	-0.1	-0.1	-0.1	0	292	1185	7.94	7.96	7.97	0.26	0.54	0.85
09-Jan	95	-0.1	-0.1	-0.1	12	20	37	7.93	7.96	8.02	0.42	0.68	3.87
10-Jan	96	-0.1	-0.1	-0.1	20	27	36	7.93	7.96	8.04	0.37	2.31	53.93
11-Jan	95	-0.1	-0.1	-0.1	35	41	51	7.94	7.95	7.97	0.23	0.63	4.66
12-Jan	96	-0.4	-0.1	-0.1	24	53	102	7.94	7.96	8.12	0.32	2.26	79.42
13-Jan	96	-0.1	-0.1	-0.1	33	65	121	7.94	7.96	7.97	0.43	0.64	2.50
14-Jan	96	-0.1	-0.1	-0.1	110	135	171	7.89	7.93	7.99	0.44	9.95	463.75
15-Jan	96	-0.1	-0.1	-0.1	124	160	201	7.86	7.88	7.90	0.41	0.72	5.46
16-Jan	96	-0.7	-0.1	-0.1	28	180	286	7.80	7.87	8.35	0.44	32.33	104.19
17-Jan	96	-0.2	-0.1	-0.1	42	78	94	7.50	7.82	7.87	0.71	39.55	267.06
18-Jan	96	-1.0	-0.5	-0.2	0	18	114	7.82	7.87	8.06	0.46	17.97	156.72
19-Jan	96	-1.7	-1.5	-1.0	0	0	0	6.76	7.08	7.92	0.89	1.69	2.33
20-Jan	96	-1.7	-1.6	-1.4	0	0	0	6.26	6.53	6.75	1.82	2.13	2.49
21-Jan	96	-2.5	-0.8	-0.1	0	13	35	6.13	6.93	8.27	1.40	7.25	19.18
22-Jan	93	-0.1	0.1	18.2	0	444	1354	0.00	7.44	7.92	0.32	18.16	34.10
23-Jan	96	-0.1	-0.1	-0.1	1307	1355	1391	7.82	7.84	7.87	0.29	0.57	17.18
24-Jan	96	-0.3	-0.1	-0.1	1	1345	1372	6.94	7.83	7.87	0.16	0.43	0.75
25-Jan	96	-0.1	-0.1	-0.1	1038	1335	1396	7.83	7.84	7.85	0.25	2.47	197.14
26-Jan	96	-0.1	-0.1	-0.1	1284	1359	1383	7.84	7.89	7.95	0.20	0.39	1.40
27-Jan	96	-0.1	-0.1	-0.1	1219	1270	1346	7.94	8.02	8.08	0.39	0.61	1.06
28-Jan	94	-0.1	-0.1	-0.1	1154	1193	1229	8.05	8.07	8.08	0.40	0.84	1.61
29-Jan	94	-0.1	0.0	1.3	1064	1110	1154	7.69	7.99	8.06	0.61	0.98	1.39
30-Jan	96	-0.1	-0.1	0.0	1076	1079	1083	7.89	7.92	7.99	0.47	0.76	1.33
31-Jan	96	-0.1	-0.1	-0.1	1077	1081	1086	7.89	7.91	7.93	0.34	0.58	1.58
01-Feb	96	-0.1	-0.1	-0.1	1085	1088	1090	7.91	7.93	7.95	0.30	0.43	0.70
02-Feb	96	-0.1	-0.1	-0.1	1090	1094	1100	7.90	7.92	7.94	0.22	0.37	0.63
03-Feb	96	-0.1	-0.1	-0.1	1082	1111	1182	7.88	7.90	7.98	0.22	0.31	0.65
04-Feb	96	-0.1	-0.1	-0.1	1121	1146	1173	7.88	7.90	7.93	0.12	0.25	0.44
05-Feb	96	-0.1	-0.1	-0.1	1173	1201	1229	7.88	7.90	7.92	0.16	0.23	0.69
06-Feb	96	-0.1	-0.1	-0.1	1228	1251	1271	7.89	7.90	7.91	0.10	0.21	0.34
07-Feb	96	-0.1	-0.1	-0.1	1271	1293	1342	7.88	7.90	7.93	0.08	0.19	0.38
08-Feb	96	-0.1	-0.1	-0.1	1330	1361	1395	7.86	7.89	7.90	0.15	0.28	1.90
09-Feb	96	-0.1	-0.1	-0.1	1375	1392	1406	7.77	7.80	7.87	0.33	2.01	4.06
10-Feb	96	-0.1	-0.1	-0.1	1209	1377	1387	7.77	7.78	7.79	0.87	1.76	6.07
11-Feb	96	-0.1	-0.1	-0.1	1258	1337	1379	7.76	7.78	7.81	0.40	2.24	4.80
12-Feb	96	-0.1	-0.1	-0.1	1257	1274	1290	7.78	7.81	7.83	0.30	0.50	3.77
13-Feb	96	-0.1	-0.1	-0.1	1282	1300	1313	7.81	7.83	7.85	0.26	0.44	0.67
14-Feb	96	-0.1	-0.1	-0.1	1267	1316	1359	7.81	7.83	7.86	0.27	0.62	2.60
15-Feb	96	-0.1	-0.1	-0.1	1248	1317	1391	7.81	7.83	7.86	0.26	0.73	1.58
16-Feb	96	-0.1	-0.1	-0.1	1246	1296	1405	7.81	7.84	7.95	0.47	1.04	4.12
17-Feb	96	-0.1	-0.1	-0.1	1196	1315	1351	7.82	7.84	7.87	0.57	1.28	6.80
18-Feb	96	-0.1	-0.1	-0.1	1351	1371	1387	7.84	7.88	7.93	1.43	2.43	3.79
19-Feb	95	-0.1	-0.1	-0.1	1386	1395	1408	7.94	7.99	8.04	2.09	2.81	5.63
20-Feb	80	-0.2	-0.1	-0.1	0	1265	1419	7.02	8.03	8.20	0.21	2.03	3.15
21-Feb	66	-0.1	0.0	3.2	1258	1414	1509	8.00	8.04	8.27	0.97	1.44	4.94
22-Feb	95	-0.1	-0.1	-0.1	1340	1358	1375	7.97	8.01	8.05	0.23	0.71	5.81
23-Feb	95	-0.1	-0.1	0.0	1156	1318	1340	7.99	8.01	8.03	0.20	0.38	0.60
24-Feb	95	-0.2	-0.1	0.1	1322	1336	1354	8.02	8.04	8.06	0.23	0.47	0.88
25-Feb	96	-0.1	-0.1	0.1	1307	1331	1352	8.02	8.04	8.05	0.41	0.69	1.41
26-Feb	96	-0.2	-0.1	0.0	1261	1296	1325	7.90	7.98	8.05	0.28	1.09	1.97
27-Feb	96	-0.1	0.0	0.2	1220	1264	1276	7.86	7.91	7.96	0.81	8.08	447.00
28-Feb	96	-0.1	0.0	0.3	1202	1223	1248	7.86	7.90	7.95	0.57	1.11	2.75
29-Feb	95	-0.1	-0.1	0.1	1222	1243	1275	7.91	8.06	8.49	1.14	5.45	14.57
01-Mar	95	-0.1	-0.1	0.1	1266	1282	1296	7.88	7.91	7.95	3.69	5.49	10.03
02-Mar	96	-0.1	0.0	0.1	1285	1290	1298	7.87	7.89	7.91	2.12	3.52	21.83
03-Mar	96	-0.1	0.0	0.2	1225	1285	1300	7.90	7.94	7.98	1.42	3.24	6.26
04-Mar	95	-0.1	0.0	0.2	1279	1289	1301	7.93	7.97	7.99	2.67	3.83	5.69
05-Mar	96	-0.1	-0.1	0.1	1	1283	1305	7.94	7.96	7.98	0.41	4.34	9.28
06-Mar	95	-0.1	-0.1	-0.1	1281	1287	1290	7.91	7.94	7.97	2.71	6.64	266.66

RSEM-R5B

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
07-Mar	96	-0.1	-0.1	-0.1	1282	1288	1292	7.92	7.94	7.99	1.68	3.18	13.28
08-Mar	96	-0.1	-0.1	-0.1	1285	1291	1294	7.96	7.99	8.01	2.24	2.86	7.21
09-Mar	96	-0.1	-0.1	-0.1	1230	1269	1293	7.87	7.95	8.01	1.50	2.81	5.52
10-Mar	95	-0.1	0.0	0.3	605	1044	1230	7.82	7.94	8.13	1.85	93.40	425.55
11-Mar	95	-0.1	0.0	0.3	616	635	644	8.05	8.09	8.12	48.30	111.01	254.43
12-Mar	96	-0.2	-0.1	0.1	643	675	732	7.99	8.08	8.11	42.98	55.74	228.93
13-Mar	96	-0.3	-0.1	0.0	0	149	867	8.02	8.07	8.10	17.03	40.91	328.02
14-Mar	95	-0.2	-0.1	-0.1	3	13	51	8.01	8.04	8.06	12.69	23.54	59.04
15-Mar	95	-0.2	-0.1	-0.1	0	9	15	7.98	8.03	8.04	5.10	12.45	59.65
16-Mar	96	-0.2	-0.1	0.0	6	17	63	8.01	8.05	8.08	1.01	7.12	352.70
17-Mar	95	-0.1	-0.1	0.1	7	434	1108	8.05	8.08	8.14	0.99	5.22	289.50
18-Mar	95	-0.1	-0.1	0.1	1	1097	1128	7.93	8.07	8.09	0.91	1.77	11.33
19-Mar	95	-0.1	-0.1	0.1	681	1073	1112	7.95	7.99	8.05	2.37	9.29	35.58
20-Mar	96	-0.1	0.0	0.1	1034	1043	1052	7.94	7.97	8.00	2.54	6.14	11.98
21-Mar	96	-0.1	0.0	0.2	826	1042	1080	7.95	7.98	8.06	2.32	7.69	24.12
22-Mar	96	-0.1	0.0	0.2	934	974	1004	7.95	7.98	8.01	5.38	14.06	24.59
23-Mar	96	-0.1	0.0	0.1	905	956	991	7.97	7.99	8.01	1.71	5.84	11.64
24-Mar	96	-0.1	0.0	0.1	974	1000	1023	7.97	7.99	8.02	1.24	2.97	5.52
25-Mar	96	-0.1	0.0	0.1	1016	1033	1051	7.95	7.99	8.04	0.49	266.87	9192.60
26-Mar	96	-0.1	0.0	0.2	889	999	1052	8.00	8.10	8.29	0.53	76.89	5786.20
27-Mar	96	-0.1	0.0	0.2	883	901	917	8.11	8.28	8.32	7.43	48.38	1718.60
28-Mar	93	-0.1	-0.1	1.0	847	909	930	8.06	8.28	8.33	5.48	11.17	144.22
29-Mar	96	-0.1	-0.1	-0.1	930	936	943	8.24	8.27	8.31	4.62	7.17	24.29
30-Mar	96	-0.1	-0.1	-0.1	938	945	953	8.24	8.26	8.28	3.48	7.34	86.42
31-Mar	95	-0.1	-0.1	-0.1	950	956	963	8.23	8.26	8.29	2.28	4.36	72.82
01-Apr	96	-0.1	-0.1	-0.1	963	969	975	8.22	8.25	8.28	1.69	2.54	5.33
02-Apr	96	-0.1	-0.1	-0.1	975	981	986	8.22	8.24	8.28	1.19	1.97	3.99
03-Apr	96	-0.1	-0.1	-0.1	986	993	998	8.22	8.24	8.27	0.76	1.37	2.44
04-Apr	96	-0.1	-0.1	-0.1	998	1005	1011	8.21	8.23	8.27	0.45	0.87	2.53
05-Apr	96	-0.1	-0.1	-0.1	1010	1018	1024	8.21	8.23	8.26	0.19	0.87	17.89
06-Apr	96	-0.1	-0.1	-0.1	1019	1028	1034	8.20	8.23	8.26	0.17	0.51	1.05
07-Apr	96	-0.1	-0.1	0.0	1022	1032	1038	8.19	8.21	8.24	0.03	4.84	192.04
08-Apr	96	-0.1	0.1	0.4	784	951	1037	8.19	8.30	8.36	0.00	31.32	147.90
09-Apr	95	-0.1	0.2	0.9	757	776	787	8.17	8.24	8.29	21.86	45.51	88.32
10-Apr	96	-0.3	0.1	0.7	655	677	755	8.08	8.17	8.23	24.10	61.02	129.31
11-Apr	96	-1.2	0.3	3.2	0	225	3621	4.92	7.98	8.43	0.08	1795.00	38582.00
12-Apr	96	-0.1	0.1	1.1	592	656	682	8.03	8.12	8.42	6.54	28.25	272.81
13-Apr	95	0.0	0.2	0.5	560	600	626	8.10	8.14	8.17	3.12	7.44	14.03
14-Apr	95	0.1	0.2	0.5	533	564	596	8.03	8.08	8.12	0.55	7.64	575.86
15-Apr	95	0.1	0.3	1.0	441	508	566	7.99	8.03	8.06	0.11	0.65	1.23
16-Apr	95	0.0	0.5	1.1	160	324	463	7.95	7.99	8.03	0.47	1.58	4.80
17-Apr	96	0.1	0.4	0.9	145	306	760	7.89	8.02	8.17	1.36	3.80	21.19
18-Apr	96	0.0	0.2	0.5	744	775	808	8.15	8.17	8.19	6.38	7.69	9.47
19-Apr	96	0.1	0.4	1.0	717	812	912	8.16	8.21	8.23	3.34	5.76	8.44
20-Apr	96	0.1	2.5	6.1	793	900	1020	8.22	8.25	8.28	2.75	7.43	104.24
21-Apr	95	3.9	5.9	7.5	847	975	1006	8.24	8.27	8.29	7.13	11.99	24.05
22-Apr	95	6.6	8.3	10.1	957	990	1023	8.25	8.28	8.32	4.44	9.16	12.98
23-Apr	95	8.2	9.2	10.2	995	1119	1322	7.97	8.27	8.37	0.29	4.64	9.54
24-Apr	95	8.4	9.9	11.4	1313	1382	1458	8.07	8.14	8.19	0.00	0.25	1.07
25-Apr	96	9.6	10.3	10.7	1459	1514	1562	8.15	8.22	8.28	0.00	0.01	0.43
26-Apr	96	9.0	10.2	11.6	1561	1590	1629	8.15	8.27	8.34	0.00	0.00	0.30
27-Apr	96	9.6	10.5	11.7	1626	1655	1687	8.28	8.35	8.41	0.00	0.06	4.14
28-Apr	95	9.9	10.8	11.5	1678	1704	1723	8.34	8.41	8.47	0.00	0.03	2.02
29-Apr	95	9.9	11.3	12.7	1719	1736	1743	8.42	8.45	8.47	0.00	0.00	0.00
30-Apr	96	11.0	11.5	11.9	1740	1747	1754	8.45	8.49	8.52	0.00	0.28	1.89
01-May	96	10.3	12.2	14.7	1747	1754	1785	8.46	8.50	8.52	0.00	1.29	56.49
02-May	95	11.3	12.7	14.4	1742	1754	1763	8.48	8.55	8.59	0.00	4.36	140.28
03-May	96	11.9	12.9	14.1	1753	1761	1772	8.55	8.59	8.63	0.19	3.41	66.80
04-May	96	12.0	12.5	13.0	1756	1760	1767	8.56	8.60	8.62	0.11	1.40	32.45
05-May	96	11.4	12.8	14.2	1748	1759	1767	7.52	8.36	8.64	0.36	5.42	125.46
06-May	96	11.6	13.5	15.6	1758	1762	1769	7.05	7.32	7.76	1.36	4.82	56.85
07-May	96	12.9	13.3	14.3	1742	1757	1765	6.97	7.06	7.17	1.05	8.52	231.93
08-May	96	12.1	13.9	16.4	1725	1736	1750	7.00	7.07	7.13	0.62	5.69	60.31
09-May	96	12.8	14.0	15.6	1663	1691	1732	7.11	7.49	7.91	0.39	2.95	32.67
10-May	96	11.7	12.3	13.3	1646	1652	1662	7.92	8.13	8.31	0.05	3.21	124.68
11-May	94	10.5	12.3	14.0	1616	1640	1753	8.23	8.37	8.46	0.17	3.88	43.95

RSEM-R5B

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
12-May	96	12.0	14.0	15.9	1605	1639	1754	8.41	8.50	8.54	1.00	2.48	32.66
13-May	96	13.3	15.0	16.9	1574	1620	1675	8.18	8.47	8.60	0.99	4.73	30.65
14-May	95	12.8	13.7	14.6	1611	1624	1628	7.67	7.90	8.19	1.28	2.38	5.17
15-May	96	12.6	13.5	14.4	1611	1618	1625	7.92	8.05	8.18	0.70	1.33	7.05
16-May	95	13.0	14.5	15.9	1586	1609	1637	7.90	8.15	8.28	0.49	1.12	10.77
17-May	95	13.0	14.0	15.2	1573	1589	1604	7.53	7.72	7.97	0.36	0.89	9.70
18-May	95	12.3	12.8	13.2	1566	1571	1575	7.27	7.41	7.52	0.18	1.91	146.29
19-May	96	12.2	13.5	15.0	1555	1567	1581	7.21	7.32	7.38	0.09	0.62	4.97
20-May	92	13.3	14.7	16.1	1530	1558	1588	7.36	7.50	7.65	0.00	0.79	12.54
21-May	96	12.5	13.8	15.1	1496	1510	1531	7.54	7.75	7.97	0.00	0.16	11.96
22-May	95	11.3	11.6	12.5	1472	1485	1497	7.97	8.06	8.15	0.00	0.05	4.54
23-May	96	10.8	13.1	15.6	1456	1471	1502	8.14	8.18	8.24	0.00	0.02	0.81
24-May	96	12.6	14.6	16.7	1457	1463	1468	8.20	8.26	8.30	0.00	0.02	0.82
25-May	96	14.9	16.2	17.5	1456	1464	1472	8.25	8.31	8.35	0.00	0.12	3.63
26-May	96	14.8	15.4	16.4	1458	1462	1465	8.31	8.34	8.37	0.00	0.41	19.50
27-May	96	13.8	15.5	17.1	1454	1459	1463	8.33	8.35	8.37	0.00	0.50	17.16
28-May	96	14.9	16.7	18.6	1450	1457	1460	8.32	8.34	8.36	0.00	0.42	3.84
29-May	96	16.2	17.6	18.8	1448	1453	1457	8.31	8.34	8.35	0.00	0.83	3.91
30-May	96	17.2	18.1	18.8	1440	1444	1449	8.28	8.32	8.34	0.40	1.04	5.26
31-May	96	17.3	18.5	20.0	1422	1431	1440	8.24	8.28	8.30	0.03	1.92	14.71
01-Jun	96	17.2	18.7	20.0	1422	1426	1429	8.23	8.25	8.27	0.46	2.40	15.42
02-Jun	96	17.2	18.4	19.4	1416	1422	1425	8.20	8.24	8.26	0.98	3.65	16.06
03-Jun	96	16.7	17.9	19.3	1412	1417	1420	8.18	8.23	8.25	2.01	5.18	20.89
04-Jun	95	16.4	18.2	19.9	1405	1412	1417	8.18	8.22	8.27	4.00	7.86	25.07
05-Jun	96	16.9	18.6	20.1	1401	1406	1409	8.16	8.22	8.25	6.93	10.42	20.61
06-Jun	96	15.7	16.9	18.6	1364	1385	1402	8.18	8.21	8.23	5.50	12.04	69.55
07-Jun	95	15.0	16.2	17.6	1350	1359	1366	8.14	8.20	8.25	8.72	11.73	15.95
08-Jun	96	15.3	15.8	16.6	1213	1313	1355	8.09	8.18	8.23	8.04	34.36	90.35
09-Jun	95	14.7	17.6	21.1	1210	1243	1267	8.04	8.14	8.19	23.96	46.91	68.53
10-Jun	95	15.9	19.2	22.9	1206	1219	1227	8.16	8.19	8.22	13.76	29.40	79.28
11-Jun	95	18.5	20.5	23.0	1193	1206	1220	8.17	8.23	8.28	6.94	14.30	26.92
12-Jun	96	18.8	20.4	22.3	1173	1194	1210	8.20	8.28	8.32	4.71	8.18	12.05
13-Jun	95	19.3	20.8	22.2	1162	1179	1186	8.25	8.32	8.36	3.33	6.65	17.90
14-Jun	96	15.4	18.0	20.7	842	1068	1173	8.17	8.26	8.35	3.52	56.66	133.96
15-Jun	96	13.5	14.1	15.4	727	751	837	7.91	8.09	8.21	11.60	37.29	86.23
16-Jun	96	13.1	14.7	16.7	748	808	846	7.84	7.87	7.91	3.57	11.50	22.17
17-Jun	96	14.3	16.5	18.9	837	884	923	7.78	7.83	7.89	2.04	3.76	21.84
18-Jun	96	15.6	19.1	22.7	897	957	1014	7.74	7.83	7.92	1.66	2.72	7.97
19-Jun	96	18.1	21.2	24.4	982	1015	1047	7.81	7.91	8.00	1.28	6.29	209.14
20-Jun	96	20.3	21.5	22.6	1033	1051	1070	7.92	8.00	8.07	1.20	1.95	4.29
21-Jun	96	19.8	21.3	22.7	1060	1082	1101	8.00	8.07	8.13	0.81	1.88	8.47
22-Jun	96	19.7	20.6	21.3	1096	1116	1129	8.04	8.12	8.19	1.19	2.14	8.77
23-Jun	96	19.2	20.8	22.6	1126	1143	1151	8.11	8.18	8.26	1.91	4.98	51.56
24-Jun	95	19.2	21.7	24.4	1148	1158	1167	8.20	8.25	8.29	2.29	4.44	34.86
25-Jun	95	19.4	20.2	22.0	1159	1168	1175	8.24	8.29	8.34	2.70	23.75	193.45
26-Jun	96	18.6	20.3	22.2	1174	1179	1183	8.27	8.32	8.37	2.57	5.18	31.26
27-Jun	96	19.0	19.5	20.6	1178	1184	1188	8.28	8.34	8.38	2.19	5.30	29.65
28-Jun	96	18.0	18.9	19.8	1185	1195	1199	8.31	8.36	8.39	4.41	7.21	12.78
29-Jun	96	17.7	19.0	20.8	1198	1208	1212	8.32	8.36	8.40	4.87	8.84	34.34
30-Jun	96	18.1	19.2	20.9	1200	1209	1213	8.33	8.37	8.39	6.01	9.63	44.55
01-Jul	50	17.5	18.3	19.2	1027	1073	1193	8.19	8.22	8.35	5.47	11.52	55.24
02-Jul	38	16.7	18.2	19.6	610	701	773	8.14	8.20	8.25	47.24	79.02	130.03
03-Jul	96	14.9	15.5	16.6	495	574	635	7.96	8.07	8.17	48.93	87.95	190.09
04-Jul	95	14.5	15.6	17.8	477	493	529	7.78	7.89	7.98	38.72	86.51	163.45
05-Jul	96	14.9	17.7	21.2	527	608	694	7.62	7.75	7.92	10.36	21.55	41.55
06-Jul	96	16.6	19.1	22.2	692	766	830	7.72	7.84	8.00	3.59	6.90	12.39
07-Jul	96	17.0	18.5	20.7	813	869	892	7.73	7.87	7.98	0.77	3.37	14.43
08-Jul	96	16.9	18.9	21.4	890	922	940	7.77	7.94	8.08	1.28	2.60	16.20
09-Jul	96	17.7	19.2	21.3	894	911	930	7.96	8.07	8.17	1.21	2.45	6.69
10-Jul	96	17.9	19.6	21.6	858	872	929	8.14	8.19	8.25	1.56	2.66	5.12
11-Jul	96	18.8	19.8	20.7	824	837	859	8.12	8.16	8.23	1.44	2.50	8.99
12-Jul	96	18.3	18.9	19.8	789	808	823	8.07	8.12	8.16	1.87	3.51	10.67
13-Jul	96	17.7	18.8	19.9	770	780	798	8.07	8.11	8.16	2.58	5.44	83.97
14-Jul	96	17.6	19.3	21.4	750	763	773	8.04	8.09	8.14	2.97	4.39	8.40
15-Jul	96	18.5	19.7	21.4	752	759	770	7.97	8.05	8.10	2.02	4.90	25.68
16-Jul	96	19.0	20.3	22.3	747	756	776	7.96	8.03	8.08	1.65	4.67	15.51

RSEM-R5B

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
17-Jul	96	19.5	20.3	21.1	737	746	756	7.95	8.01	8.08	3.05	6.51	60.71
18-Jul	95	19.4	21.0	22.7	717	730	738	7.96	8.03	8.09	3.04	4.82	12.94
19-Jul	96	19.5	20.8	23.3	694	714	726	7.95	8.01	8.07	3.45	23.24	152.49
20-Jul	96	19.7	21.4	23.6	689	704	712	7.93	8.00	8.08	6.56	44.78	1238.60
21-Jul	96	19.6	20.6	22.1	690	701	741	7.91	7.99	8.06	5.82	10.01	38.80
22-Jul	95	19.6	20.9	22.4	680	690	699	7.93	8.03	8.10	4.55	8.75	30.14
23-Jul	96	19.6	20.9	22.7	670	678	685	7.99	8.07	8.15	4.19	18.23	228.93
24-Jul	96	19.7	20.2	21.2	660	668	675	8.01	8.08	8.15	4.14	7.25	115.17
25-Jul	96	18.3	19.8	21.3	652	661	668	8.06	8.14	8.21	3.88	5.34	19.40
26-Jul	96	18.7	20.9	23.7	639	651	659	8.12	8.17	8.24	3.89	5.53	58.19
27-Jul	96	20.1	22.2	24.8	632	648	694	8.03	8.15	8.22	4.21	7.94	34.28
28-Jul	96	20.9	22.2	23.8	632	642	650	8.06	8.14	8.22	3.61	5.53	17.86
29-Jul	96	20.8	22.3	24.3	625	638	685	8.10	8.17	8.25	3.79	6.54	44.17
30-Jul	96	20.9	22.4	23.9	621	632	641	8.13	8.20	8.26	3.66	5.53	31.19
31-Jul	96	21.4	23.2	25.2	613	629	665	8.14	8.21	8.27	3.51	9.11	314.21
01-Aug	96	22.6	24.2	26.4	612	622	641	8.13	8.22	8.49	3.67	5.81	21.11
02-Aug	96	22.6	24.1	25.7	610	618	627	8.14	8.22	8.28	4.25	6.39	37.97
03-Aug	96	22.7	23.6	24.3	607	614	620	8.16	8.24	8.30	3.81	5.16	20.87
04-Aug	96	21.4	22.3	23.1	603	609	613	8.20	8.29	8.36	3.24	4.27	10.30
05-Aug	96	21.2	22.9	24.9	597	605	608	8.23	8.29	8.34	2.94	9.08	183.01
06-Aug	96	21.2	22.0	22.9	595	602	607	8.27	8.33	8.39	2.57	5.15	70.16
07-Aug	95	20.1	21.0	21.8	595	599	604	8.29	8.36	8.42	2.25	2.94	4.52
08-Aug	96	19.0	20.1	20.9	592	596	598	8.31	8.38	8.43	1.97	2.98	9.33
09-Aug	96	17.9	19.1	20.2	591	593	595	8.35	8.39	8.43	2.35	3.00	6.35
10-Aug	96	17.4	18.5	19.4	589	591	593	8.34	8.40	8.43	2.42	3.19	7.93
11-Aug	96	16.8	18.1	19.3	586	590	592	8.34	8.39	8.43	2.51	3.10	7.39
12-Aug	96	16.2	17.7	19.2	586	589	591	8.35	8.40	8.43	2.53	3.21	5.79
13-Aug	96	16.1	17.2	18.1	586	589	590	8.35	8.40	8.44	2.64	3.46	6.34
14-Aug	96	15.8	17.3	19.2	587	590	591	8.35	8.39	8.43	2.82	4.98	36.50
15-Aug	96	16.9	17.6	18.8	589	591	594	8.28	8.36	8.41	3.20	4.50	6.44
16-Aug	95	17.3	19.7	22.6	591	596	602	8.28	8.34	8.39	2.69	5.01	32.50
17-Aug	96	18.9	20.8	23.5	581	597	603	8.29	8.35	8.48	2.27	5.03	23.89
18-Aug	96	19.6	20.8	23.0	595	601	610	8.29	8.34	8.38	3.02	4.66	11.01
19-Aug	96	18.7	20.1	21.6	601	613	662	8.30	8.35	8.40	2.00	5.16	12.17
20-Aug	37	13.4	15.1	19.6	0	127	670	8.01	8.39	8.61	0.00	0.81	5.01
21-Aug	0												
22-Aug	41	16.7	17.6	18.3	536	564	568	8.07	8.15	8.20	124.21	150.76	180.72
23-Aug	96	15.4	17.5	20.2	568	573	578	8.02	8.13	8.22	52.99	108.76	153.01
24-Aug	96	16.0	17.3	19.2	573	575	577	8.03	8.15	8.21	46.20	62.79	77.46
25-Aug	96	15.2	16.9	18.9	575	584	591	8.00	8.13	8.21	25.65	37.46	48.54
26-Aug	95	15.1	16.6	18.2	587	591	595	8.08	8.19	8.27	18.41	23.73	35.31
27-Aug	96	14.8	16.9	19.8	592	597	603	8.18	8.25	8.34	13.55	18.98	34.39
28-Aug	96	15.6	16.4	17.3	594	600	606	8.24	8.30	8.37	12.01	15.44	41.57
29-Aug	96	14.3	15.0	16.1	600	605	608	8.29	8.35	8.40	11.52	13.70	17.49
30-Aug	96	13.0	14.4	16.1	606	609	620	8.35	8.40	8.47	9.44	11.66	14.46
31-Aug	96	13.3	13.8	14.4	606	610	613	8.38	8.44	8.50	8.98	17.09	35.75
01-Sep	96	12.9	14.0	15.1	608	611	612	8.41	8.47	8.53	15.40	34.52	57.08
02-Sep	95	13.0	14.5	16.4	604	610	620	8.45	8.49	8.54	18.88	36.31	82.69
03-Sep	96	13.6	14.8	15.9	598	609	619	8.46	8.51	8.55	11.81	33.90	80.71
04-Sep	96	14.3	15.4	16.7	595	606	619	8.48	8.52	8.58	15.27	31.09	80.26
05-Sep	96	15.1	16.4	18.3	587	598	618	8.49	8.52	8.56	17.49	51.99	156.99
06-Sep	96	15.4	16.0	17.1	586	602	625	8.46	8.52	8.60	15.99	49.22	144.97
07-Sep	96	14.3	15.6	17.6	582	596	603	8.46	8.51	8.57	16.29	28.28	75.05
08-Sep	96	14.6	16.5	19.3	579	593	614	8.47	8.52	8.56	17.17	38.20	96.64
09-Sep	96	15.5	17.4	20.2	578	591	618	8.48	8.53	8.61	20.58	55.54	181.44
10-Sep	96	16.4	17.8	19.7	568	586	611	8.46	8.54	8.59	17.14	84.71	174.97
11-Sep	96	16.2	16.8	17.7	574	583	588	8.48	8.53	8.60	24.46	56.91	167.99
12-Sep	96	14.7	15.3	16.2	582	584	585	8.47	8.53	8.60	18.25	28.59	49.74
13-Sep	96	13.1	13.9	14.8	584	588	592	8.46	8.52	8.58	18.76	25.03	44.52
14-Sep	55	12.0	12.4	13.1	588	590	592	8.45	8.48	8.51	19.38	25.38	59.19

*Based on temperature readings

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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	95	1.1	1.3	1.4	1049	1065	1076	7.58	7.59	7.60	1.82	3.11	4.02
02-Jan	96	0.9	1.3	1.5	1051	1071	1090	7.58	7.60	7.61	1.45	2.90	4.04
03-Jan	88	0.7	1.2	1.5	1067	1077	1088	7.60	7.62	7.64	1.14	3.00	9.23
04-Jan	96	0.6	0.9	1.4	1063	1074	1093	7.59	7.62	7.66	0.79	1.47	3.52
05-Jan	96	0.6	0.7	1.1	1069	1078	1092	7.59	7.61	7.65	0.62	1.12	2.59
06-Jan	96	0.4	1.0	1.4	1080	1091	1101	7.61	7.64	7.68	0.82	2.25	4.24
07-Jan	96	0.5	1.0	1.3	1089	1097	1106	7.61	7.65	7.68	0.93	2.84	4.87
08-Jan	96	0.8	1.1	1.3	1099	1103	1110	7.64	7.66	7.68	2.08	3.30	4.98
09-Jan	96	0.8	1.1	1.3	1097	1101	1106	7.64	7.65	7.67	2.17	2.82	3.73
10-Jan	96	0.4	0.9	1.2	1094	1098	1108	7.65	7.66	7.66	1.95	2.54	3.00
11-Jan	96	0.1	0.3	0.8	1098	1103	1105	7.66	7.66	7.67	0.35	1.19	2.30
12-Jan	96	0.0	0.4	0.9	1095	1101	1105	7.66	7.66	7.67	0.22	0.90	1.53
13-Jan	95	0.1	0.5	0.9	1095	1103	1108	7.66	7.66	7.67	0.41	0.96	1.94
14-Jan	96	0.1	0.3	0.8	1098	1106	1109	7.66	7.66	7.67	0.42	0.84	1.43
15-Jan	96	0.0	0.1	0.2	1109	1110	1113	7.66	7.67	7.67	0.47	0.85	1.05
16-Jan	95	0.0	0.2	0.4	1113	1117	1121	7.66	7.66	7.67	0.43	0.75	0.98
17-Jan	95	0.0	0.2	0.5	1120	1123	1127	7.66	7.66	7.66	0.36	0.65	0.85
18-Jan	95	0.0	0.2	0.3	1127	1130	1135	7.66	7.66	7.66	0.31	0.64	0.80
19-Jan	96	0.0	0.2	0.6	1131	1141	1146	7.65	7.66	7.68	0.39	0.59	0.74
20-Jan	96	0.0	0.4	0.7	1142	1154	1171	7.65	7.67	7.70	0.38	0.69	1.27
21-Jan	96	0.3	0.6	1.0	1035	1137	1211	7.68	7.71	7.75	0.67	1.47	2.56
22-Jan	96	0.2	0.4	0.9	1045	1074	1091	7.69	7.72	7.77	0.32	0.94	2.24
23-Jan	96	-0.1	0.2	0.5	1065	1088	1100	7.70	7.71	7.73	0.17	0.51	0.95
24-Jan	96	0.0	0.3	0.9	1097	1111	1129	7.71	7.72	7.74	0.34	0.78	2.09
25-Jan	96	0.2	0.4	0.9	1102	1118	1136	7.65	7.70	7.72	0.21	0.89	1.95
26-Jan	96	0.0	0.5	1.1	1114	1134	1146	7.63	7.65	7.67	0.07	1.03	2.21
27-Jan	96	0.0	0.4	1.0	1127	1157	1199	7.61	7.63	7.64	0.14	0.74	1.88
28-Jan	96	0.6	0.8	1.0	1187	1191	1197	7.61	7.62	7.62	0.33	0.79	1.20
29-Jan	93	0.4	0.7	1.7	1110	1177	1192	7.60	7.67	7.88	0.00	0.68	1.36
30-Jan	95	0.6	0.8	1.0	1141	1148	1154	7.83	7.85	7.87	0.72	1.41	1.76
31-Jan	96	0.6	0.8	1.0	1135	1143	1151	7.83	7.84	7.84	0.26	1.41	2.07
01-Feb	96	0.5	0.7	1.0	1125	1135	1142	7.81	7.82	7.83	0.34	1.22	1.70
02-Feb	95	0.3	0.7	1.0	1122	1132	1138	7.79	7.81	7.81	0.07	1.37	1.98
03-Feb	96	0.3	0.6	0.9	1127	1130	1132	7.78	7.79	7.79	0.25	1.36	2.43
04-Feb	96	0.3	0.4	0.6	1122	1126	1129	7.76	7.77	7.78	0.05	1.07	2.24
05-Feb	95	0.2	0.3	0.6	1115	1123	1126	7.75	7.76	7.77	0.00	0.82	1.99
06-Feb	96	0.3	0.7	1.0	1105	1120	1131	7.72	7.74	7.75	0.29	1.71	2.52
07-Feb	95	0.3	0.7	1.0	1108	1113	1121	7.72	7.72	7.73	0.40	1.62	2.70
08-Feb	96	0.1	0.3	0.9	1098	1108	1115	7.71	7.71	7.72	0.20	0.92	2.50
09-Feb	96	0.1	0.2	0.2	1104	1109	1115	7.71	7.72	7.74	0.00	0.37	1.01
10-Feb	96	0.0	0.1	0.1	1097	1103	1107	7.70	7.72	7.73	0.07	0.37	0.70
11-Feb	96	0.0	0.1	0.1	1094	1098	1101	7.70	7.71	7.72	0.10	0.32	0.67
12-Feb	96	0.0	0.0	0.0	1092	1095	1099	7.69	7.70	7.71	0.00	0.16	0.32
13-Feb	96	0.0	0.0	0.0	1082	1089	1094	7.69	7.70	7.70	0.00	0.09	0.37
14-Feb	96	0.0	0.0	0.1	1083	1092	1116	7.69	7.70	7.74	0.00	0.07	0.37
15-Feb	96	0.0	0.0	0.0	1095	1097	1102	7.69	7.69	7.70	0.00	0.01	0.18
16-Feb	96	-0.1	0.0	0.0	1100	1107	1111	7.67	7.69	7.69	0.00	0.04	1.32
17-Feb	96	-0.1	0.0	0.0	1111	1117	1119	7.69	7.69	7.69	0.00	0.05	0.21
18-Feb	96	-0.1	0.0	0.0	1117	1118	1119	7.69	7.69	7.69	0.00	0.08	0.15
19-Feb	96	0.0	0.0	0.0	1113	1116	1118	7.68	7.69	7.69	0.00	0.04	0.16
20-Feb	95	0.0	0.0	0.1	1112	1114	1127	7.68	7.68	7.69	0.00	0.02	0.23
21-Feb	95	0.0	0.0	0.0	1113	1118	1133	7.67	7.68	7.69	0.00	0.01	0.10
22-Feb	96	0.0	0.3	0.9	1122	1133	1147	7.68	7.69	7.70	0.00	0.15	0.64
23-Feb	96	0.2	0.4	0.8	991	1136	1141	7.67	7.68	7.69	0.00	0.56	3.99
24-Feb	96	0.1	0.3	0.8	1125	1133	1141	7.66	7.67	7.68	0.00	0.29	1.71
25-Feb	96	0.1	0.2	0.6	1128	1133	1135	7.66	7.67	7.67	0.00	0.37	0.98
26-Feb	95	0.1	0.4	1.0	1127	1135	1143	7.66	7.66	7.68	0.00	0.69	1.99
27-Feb	96	0.3	0.7	1.0	1102	1130	1151	7.67	7.70	7.78	0.74	21.03	140.48
28-Feb	96	0.5	0.6	0.7	1040	1082	1109	7.75	7.77	7.82	15.30	35.81	54.39
29-Feb	96	0.3	0.5	0.6	986	1021	1044	7.81	7.84	7.87	17.72	31.17	41.83
01-Mar	96	0.1	0.2	0.6	967	975	991	7.87	7.89	7.90	5.97	13.40	24.66
02-Mar	96	0.0	0.3	0.7	961	971	984	7.85	7.88	7.91	3.93	15.87	45.92
03-Mar	96	0.4	0.6	0.7	926	946	976	7.90	7.93	7.95	13.96	22.26	43.30

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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-Mar	96	0.4	0.6	0.7	894	911	943	7.93	7.97	7.99	6.12	15.68	26.31
05-Mar	96	0.2	0.3	0.5	879	888	896	7.97	7.99	8.01	2.08	5.61	13.33
06-Mar	96	0.0	0.1	0.2	881	889	895	7.96	7.97	7.98	1.94	3.68	6.95
07-Mar	96	0.0	0.0	0.1	884	891	896	7.96	7.97	7.97	1.68	3.86	6.71
08-Mar	96	-0.1	0.0	0.0	890	894	897	7.93	7.96	7.97	1.43	32.67	876.43
09-Mar	96	-0.1	0.0	0.0	691	842	894	7.84	7.95	8.02	2.58	19.59	114.56
10-Mar	96	0.0	0.3	1.0	684	854	920	7.91	7.97	8.10	1.77	41.72	144.54
11-Mar	96	0.5	0.7	0.7	623	823	895	8.03	8.07	8.12	26.86	40.09	106.41
12-Mar	95	0.1	0.3	0.7	725	794	849	7.97	8.06	8.10	2.83	17.19	146.15
13-Mar	96	0.0	0.1	0.2	736	789	807	8.01	8.04	8.07	3.12	8.48	30.95
14-Mar	96	0.0	0.0	0.1	579	805	827	8.01	8.04	8.07	1.86	12.92	685.23
15-Mar	96	0.0	0.0	0.3	804	831	848	8.02	8.05	8.08	2.34	3.99	11.36
16-Mar	96	0.0	0.1	0.5	834	841	850	8.04	8.06	8.08	1.76	6.95	128.97
17-Mar	95	0.1	0.3	0.7	597	845	867	8.02	8.06	8.11	3.71	10.94	58.18
18-Mar	95	0.1	0.4	0.7	551	869	899	8.01	8.04	8.08	2.31	8.25	13.93
19-Mar	96	0.0	0.1	0.6	851	867	896	8.00	8.04	8.10	1.95	4.15	11.68
20-Mar	96	0.0	0.1	0.6	351	811	911	8.00	8.05	8.10	1.28	20.91	144.93
21-Mar	96	0.0	0.3	1.1	322	565	925	7.64	7.94	8.09	10.77	79.93	647.71
22-Mar	95	0.1	0.5	1.0	637	813	917	7.93	7.95	7.99	6.71	15.47	30.39
23-Mar	97	0.1	0.2	0.8	731	795	906	7.95	8.00	8.05	2.05	5.55	13.37
24-Mar	96	0.0	0.1	0.3	637	694	730	7.94	8.04	8.09	1.70	5.54	9.76
25-Mar	96	0.0	0.1	0.3	652	694	734	7.92	8.03	8.12	2.60	10.78	337.40
26-Mar	96	0.1	0.7	1.9	648	738	893	7.89	7.94	8.03	3.67	330.32	1700.20
27-Mar	96	0.2	0.5	1.4	603	677	870	7.97	8.09	8.12	7.98	14.95	25.75
28-Mar	96	0.0	0.1	0.2	578	594	634	7.87	8.00	8.10	3.62	10.05	197.02
29-Mar	96	0.0	0.0	0.0	580	598	615	7.89	7.93	7.98	2.33	2.88	3.93
30-Mar	91	-0.1	0.0	0.8	615	644	695	7.67	7.88	8.08	2.18	3.93	8.04
31-Mar	96	0.0	0.0	0.0	695	700	705	8.02	8.05	8.07	2.63	3.69	5.20
01-Apr	96	0.0	0.0	0.0	704	708	713	7.96	8.00	8.03	2.53	4.42	6.69
02-Apr	96	0.0	0.0	0.0	713	719	723	7.94	7.96	8.00	2.38	3.09	3.98
03-Apr	96	0.0	0.0	0.1	723	729	737	7.91	7.94	7.97	2.80	4.05	6.43
04-Apr	96	0.0	0.1	0.1	733	739	744	7.91	7.94	7.95	2.05	4.17	5.89
05-Apr	96	0.1	0.1	0.1	744	749	754	7.91	7.93	7.96	2.05	3.92	5.73
06-Apr	96	0.1	0.3	1.0	754	808	948	7.84	7.89	7.93	2.02	5.95	21.27
07-Apr	95	0.6	1.1	1.5	885	929	969	7.84	7.87	7.91	10.48	24.04	55.37
08-Apr	96	0.9	1.2	1.6	798	852	928	7.89	7.94	7.99	28.09	41.82	71.38
09-Apr	96	1.2	1.5	1.8	755	813	877	7.92	7.95	7.99	49.80	76.99	1049.10
10-Apr	96	1.5	1.8	2.0	710	753	805	7.95	8.00	8.05	52.85	69.28	98.96
11-Apr	96	1.8	2.1	2.4	668	686	710	8.05	8.08	8.10	37.75	56.18	339.17
12-Apr	95	1.9	2.3	3.1	603	661	689	8.03	8.13	8.49	17.13	35.89	48.16
13-Apr	96	1.8	2.3	2.8	587	621	642	8.43	8.48	8.56	13.63	18.81	25.06
14-Apr	95	2.2	2.6	3.0	572	627	662	8.41	8.45	8.48	9.79	15.34	48.30
15-Apr	96	2.4	3.1	3.7	586	635	663	8.39	8.43	8.47	8.90	11.63	15.64
16-Apr	96	2.8	3.6	5.2	517	603	647	8.43	8.47	8.51	4.30	8.26	12.13
17-Apr	95	3.4	3.8	4.7	420	571	650	8.49	8.53	8.58	1.83	5.36	9.97
18-Apr	96	3.3	4.4	6.0	417	565	633	8.48	8.53	8.58	0.95	2.93	5.07
19-Apr	96	2.2	4.3	5.1	400	488	627	8.45	8.52	8.60	0.74	5.11	14.61
20-Apr	96	4.3	5.0	6.4	483	535	622	8.38	8.43	8.46	8.14	13.40	31.73
21-Apr	96	4.3	5.2	6.6	493	520	557	8.35	8.39	8.43	4.77	12.88	20.78
22-Apr	96	3.8	5.9	8.2	497	509	519	8.35	8.39	8.44	12.77	19.03	24.21
23-Apr	94	5.2	6.6	8.3	485	494	513	7.76	8.36	8.47	10.39	16.66	23.14
24-Apr	51	5.9	8.0	9.9	502	505	511	7.96	8.01	8.05	12.39	16.67	21.19
25-Apr	75	7.4	8.2	8.8	496	500	503	7.97	8.02	8.05	10.90	19.53	352.50
26-Apr	57	7.2	8.8	9.8	490	496	498	7.99	8.05	8.10	9.37	14.46	18.81
27-Apr	63	8.0	9.1	11.4	496	499	505	8.02	8.07	8.14	12.13	19.11	31.42
28-Apr	70	8.4	9.5	10.8	0	497	507	6.64	8.10	8.21	9.01	19.40	26.80
29-Apr	77	8.5	10.3	13.0	499	509	520	8.11	8.15	8.21	13.75	18.69	26.78
30-Apr	75	10.1	11.0	11.9	510	514	516	8.12	8.16	8.20	15.32	39.77	629.27
01-May	70	9.4	12.3	15.6	500	517	521	8.07	8.13	8.19	14.69	20.18	80.23
02-May	80	10.7	13.2	15.8	500	517	570	8.10	8.15	8.22	11.67	16.45	43.30
03-May	80	11.6	12.9	14.9	494	522	528	8.10	8.17	8.24	7.43	17.39	40.45
04-May	70	10.9	11.7	12.7	528	531	534	8.04	8.18	8.23	10.80	16.26	22.15
05-May	54	9.2	11.9	16.4	0	273	541	7.02	8.05	8.47	0.53	7.66	41.69
06-May	46	4.6	14.5	21.8	0	0	5	6.09	7.20	8.49	0.46	4.28	35.48

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
07-May	41	11.1	12.1	14.1	0	0	1	6.67	7.08	7.51	1.09	39.62	231.66
08-May	0												
09-May	0												
10-May	0												
11-May	0												
12-May	0												
13-May	0												
14-May	0												
15-May	0												
16-May	0												
17-May	0												
18-May	0												
19-May	0												
20-May	0												
21-May	0												
22-May	39	11.5	11.9	12.1	748	783	801	7.97	8.31	8.5	2.21	3.99	30.23
23-May	76	11.2	12.3	14.2	804	891	952	8.11	8.16	8.23	1.56	2.61	13.87
24-May	86	12.4	14.3	16.3	949	982	1003	8.11	8.13	8.16	1.37	7.14	71.55
25-May	78	14.5	15.7	17.0	1004	1022	1034	8.1	8.14	8.17	1.00	12.33	88.53
26-May	83	14.4	14.8	15.6	1033	1045	1054	8.11	8.14	8.16	0.75	2.11	19.68
27-May	78	13.6	15.1	16.7	1055	1059	1063	8.1	8.12	8.15	0.87	2.11	36.95
28-May	89	14.4	16.2	17.6	1049	1059	1066	8.09	8.13	8.16	0.70	5.10	51.33
29-May	75	15.9	17.3	19.3	1042	1057	1064	8.07	8.11	8.17	0.74	7.90	69.72
30-May	87	17.2	18.1	18.8	1044	1051	1057	8.06	8.13	8.17	0.71	9.09	435.27
31-May	76	17.3	18.4	19.7	1025	1033	1042	8.09	8.15	8.22	0.88	9.70	78.15
01-Jun	86	17.0	18.0	19.2	995	1017	1038	8.14	8.19	8.26	0.70	5.63	176.76
02-Jun	87	16.3	17.6	18.8	987	1002	1010	8.17	8.25	8.31	0.78	1.72	11.97
03-Jun	80	16.0	17.0	19.1	977	989	993	8.2	8.26	8.33	0.54	1.49	14.06
04-Jun	70	15.8	17.2	19.0	949	971	978	8.24	8.29	8.36	0.57	4.78	29.31
05-Jun	78	16.5	18.4	20.4	937	952	966	8.24	8.34	8.41	0.63	10.30	139.74
06-Jun	87	16.4	17.3	18.4	913	932	950	8.27	8.31	8.36	0.70	1.04	2.28
07-Jun	85	15.8	16.5	17.2	894	904	912	8.23	8.30	8.38	0.68	1.04	2.09
08-Jun	82	15.0	16.0	16.8	870	903	957	8.19	8.29	8.34	0.78	18.38	341.91
09-Jun	71	14.3	16.1	18.1	972	1030	1171	8.02	8.07	8.14	3.24	10.84	20.57
10-Jun	95	15.3	17.3	20.0	1006	1013	1053	8.14	8.20	8.25	1.17	2.63	6.01
11-Jun	93	17.6	18.8	20.3	983	995	1006	8.2	8.28	8.38	0.93	2.13	27.49
12-Jun	85	18.6	19.6	21.2	960	982	987	8.18	8.27	8.38	0.71	1.04	2.28
13-Jun	77	19.4	20.3	21.3	949	963	1036	8.14	8.31	8.44	0.68	1.07	8.48
14-Jun	89	15.4	18.4	20.6	836	908	954	8.08	8.20	8.34	0.67	36.75	1739.40
15-Jun	94	13.5	14.1	15.4	668	838	864	7.91	7.98	8.07	13.06	24.34	54.25
16-Jun	68	13.0	14.2	15.9	864	884	889	7.87	7.92	7.97	4.09	10.45	17.43
17-Jun	96	14.2	16.2	18.6	889	893	969	7.87	8.00	8.1	1.46	3.70	37.04
18-Jun	71	15.9	18.8	21.9	881	891	900	8.06	8.12	8.2	1.26	3.41	19.93
19-Jun	86	18.4	21.0	23.8	852	876	889	8.15	8.21	8.25	0.98	3.80	112.19
20-Jun	88	20.5	21.3	22.2	842	859	873	7.82	8.29	8.39	0.79	7.63	239.78
21-Jun	73	20.5	21.3	22.0	775	825	896	8.23	8.32	8.39	1.33	3.02	54.91
22-Jun	76	19.7	20.2	20.9	773	794	811	8.21	8.30	8.37	1.42	2.21	9.67
23-Jun	96	18.5	19.5	20.4	715	741	773	8.16	8.28	8.36	1.76	3.03	25.16
24-Jun	81	18.5	19.9	22.0	683	705	716	8.23	8.28	8.34	1.41	2.43	6.81
25-Jun	90	19.0	19.5	20.5	656	673	685	8.24	8.33	8.43	1.77	2.81	40.21
26-Jun	92	18.1	19.1	20.0	634	651	660	8.24	8.34	8.41	1.72	7.48	232.24
27-Jun	81	18.2	18.7	19.3	624	636	643	8.27	8.34	8.44	1.71	2.22	3.94
28-Jun	80	17.5	18.1	19.0	625	635	641	8.24	8.31	8.36	1.52	2.26	6.55
29-Jun	92	17.3	18.2	19.9	640	649	656	8.21	8.28	8.35	1.82	3.05	7.25
30-Jun	76	17.6	18.2	19.4	637	651	660	8.2	8.25	8.31	1.52	2.66	6.32
01-Jul	28	14.8	16.1	18.2	0	98	639	8.17	8.26	8.39	1.08	1.85	4.83
02-Jul	43	16.0	17.0	18.9	684	700	707	8.12	8.23	8.47	18.90	27.77	63.35
03-Jul	91	14.8	15.6	16.1	663	680	695	7.96	8.05	8.11	19.02	29.31	46.75
04-Jul	86	14.2	15.0	16.5	651	658	665	7.87	7.96	8.04	11.25	17.06	33.49
05-Jul	79	14.6	16.4	18.9	665	687	850	7.99	8.08	8.23	6.58	11.84	125.35
06-Jul	85	15.9	17.7	20.2	691	701	708	8.18	8.23	8.33	4.73	14.63	166.19
07-Jul	84	16.5	17.5	19.4	695	701	710	8.26	8.31	8.37	4.00	10.41	139.14
08-Jul	85	16.6	18.0	20.0	680	698	704	8.17	8.29	8.34	3.97	20.41	189.70
09-Jul	87	16.6	18.0	20.0	663	691	719	8.27	8.31	8.35	4.95	16.20	185.92

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
10-Jul	63	16.5	17.6	18.6	652	672	682	8.26	8.31	8.34	4.51	15.51	118.02
11-Jul	85	17.1	17.7	18.6	639	658	673	8.19	8.23	8.28	2.76	19.80	394.67
12-Jul	83	16.1	17.3	19.4	203	639	679	8.17	8.23	8.32	0.00	5.61	79.18
13-Jul	78	17.8	18.8	19.5	627	656	680	8.08	8.15	8.2	0.00	0.00	0.00
14-Jul	83	17.6	18.5	20.9	599	645	671	8.07	8.16	8.26	0.00	66.69	844.60
15-Jul	96	17.2	18.0	19.6	597	646	672	8.1	8.16	8.23	0.63	13.11	156.95
16-Jul	96	17.6	18.6	20.1	626	647	670	8.09	8.15	8.23	1.09	17.62	271.56
17-Jul	96	18.4	19.1	20.0	620	641	668	8.09	8.18	8.3	1.13	14.01	145.96
18-Jul	96	18.6	19.6	20.6	615	638	663	8.06	8.15	8.24	0.94	18.13	212.26
19-Jul	96	18.4	19.7	21.9	603	636	662	8.08	8.17	8.3	0.94	6.87	87.04
20-Jul	96	18.9	20.2	22.3	620	644	672	8.08	8.15	8.21	1.42	4.23	20.64
21-Jul	96	19.1	19.9	21.4	622	648	672	8.09	8.17	8.23	2.24	23.78	128.53
22-Jul	96	19.3	20.5	22.2	623	653	682	8.04	8.13	8.21	2.30	6.03	35.15
23-Jul	96	19.1	20.3	22.2	617	648	681	8.03	8.15	8.24	3.15	19.06	209.05
24-Jul	96	18.8	19.4	20.2	621	644	665	8.04	8.17	8.27	3.48	25.00	234.24
25-Jul	96	17.7	18.7	19.7	618	656	683	8.06	8.18	8.31	4.73	48.83	517.70
26-Jul	91	17.9	19.5	21.7	426	637	681	8.08	8.21	8.38	3.33	32.61	182.10
27-Jul	96	19.3	21.2	23.4	528	590	624	8.19	8.30	8.36	2.45	34.39	316.56
28-Jul	96	20.8	21.7	23.0	550	599	645	8.11	8.24	8.36	2.57	50.69	228.84
29-Jul	96	20.3	21.5	23.7	568	597	629	8.09	8.23	8.35	2.58	28.81	164.91
30-Jul	96	20.3	21.7	23.4	557	583	607	8.12	8.26	8.37	2.43	36.25	428.11
31-Jul	96	20.9	22.6	24.6	543	572	599	8.11	8.26	8.35	2.24	52.15	297.83
01-Aug	96	22.3	23.8	25.9	542	571	592	8.11	8.25	8.37	2.37	74.22	769.54
02-Aug	96	22.1	23.5	25.0	544	583	607	8.01	8.20	8.32	2.34	18.58	221.79
03-Aug	96	22.2	22.8	23.3	554	579	598	8.08	8.23	8.35	2.54	28.48	238.74
04-Aug	95	20.5	21.1	22.1	551	572	594	8.11	8.26	8.4	2.50	7.26	20.19
05-Aug	96	19.9	21.4	23.7	541	559	577	8.16	8.25	8.34	2.36	4.04	25.04
06-Aug	96	20.0	20.8	21.5	534	551	570	8.14	8.27	8.38	2.51	13.01	203.27
07-Aug	96	19.2	19.9	20.6	524	543	561	8.19	8.32	8.43	2.84	5.30	31.48
08-Aug	96	17.9	18.7	19.5	516	540	560	8.22	8.31	8.43	3.56	7.73	37.95
09-Aug	96	16.8	17.7	18.6	502	533	556	8.25	8.35	8.45	5.37	15.15	118.35
10-Aug	96	16.3	17.3	18.2	489	522	545	8.26	8.38	8.5	7.44	16.99	108.12
11-Aug	95	16.1	17.3	18.9	485	514	530	8.3	8.40	8.49	8.80	16.41	50.53
12-Aug	96	15.8	17.1	18.7	488	516	543	8.32	8.42	8.52	9.67	31.81	205.70
13-Aug	96	15.8	16.7	17.4	502	521	539	8.35	8.45	8.55	11.74	27.87	110.48
14-Aug	96	15.7	16.8	18.5	492	527	545	8.37	8.47	8.57	11.00	38.76	152.09
15-Aug	96	16.5	17.2	18.6	502	527	547	8.37	8.47	8.62	17.68	48.54	139.92
16-Aug	96	16.9	19.3	21.7	467	529	566	8.35	8.49	8.58	10.70	64.48	314.52
17-Aug	96	18.6	20.6	23.2	501	531	589	8.47	8.56	8.64	10.23	45.46	251.38
18-Aug	95	19.7	20.7	22.7	491	528	553	8.33	8.52	8.68	9.11	33.63	212.55
19-Aug	96	19.0	20.3	21.7	503	524	541	8.2	8.52	8.69	10.93	31.79	162.63
20-Aug	96	18.7	19.2	20.2	514	532	549	8.36	8.43	8.6	11.07	16.32	46.73
21-Aug	96	18.1	18.5	19.1	516	540	562	8.22	8.32	8.45	17.38	23.10	40.26
22-Aug	96	16.9	17.5	18.1	547	815	960	7.96	8.14	8.46	22.51	30.33	85.83
23-Aug	96	16.2	17.5	19.0	867	901	942	7.98	8.11	8.26	23.58	27.02	32.78
24-Aug	96	16.5	17.3	18.5	845	875	913	7.98	8.12	8.27	22.95	44.38	191.97
25-Aug	96	16.1	17.2	18.4	806	850	876	8.04	8.19	8.38	18.24	67.43	294.78
26-Aug	96	15.9	16.7	17.6	729	823	862	8.15	8.29	8.44	11.66	67.62	255.89
27-Aug	96	15.4	17.1	19.5	770	801	829	8.24	8.35	8.46	12.38	19.19	85.38
28-Aug	96	15.9	16.6	17.6	725	776	809	8.2	8.34	8.51	13.39	24.69	139.30
29-Aug	96	14.5	15.3	16.3	736	758	786	8.21	8.33	8.42	16.46	62.27	253.63
30-Aug	96	13.5	14.8	16.6	638	743	775	8.24	8.38	8.56	14.04	23.70	83.21
31-Aug	96	13.7	14.0	14.5	691	727	757	8.29	8.40	8.54	15.11	59.35	209.52
01-Sep	96	13.2	14.1	15.1	675	710	746	8.33	8.49	8.64	19.24	89.48	273.65
02-Sep	96	13.5	14.8	16.6	641	696	719	8.4	8.53	8.65	20.43	38.81	121.47
03-Sep	96	13.9	15.0	16.1	644	681	715	8.42	8.55	8.7	20.07	52.44	418.55
04-Sep	96	14.7	15.6	16.8	610	666	696	8.42	8.59	8.75	21.42	44.82	222.14
05-Sep	96	15.4	16.4	18.2	610	655	689	8.43	8.59	8.71	21.49	96.16	344.11
06-Sep	96	15.6	16.2	17.3	612	650	682	8.38	8.51	8.73	33.93	114.98	610.40
07-Sep	96	14.7	16.0	17.8	610	644	674	8.32	8.51	8.73	40.75	119.22	317.65
08-Sep	96	14.9	16.9	19.8	568	632	665	8.4	8.58	8.75	49.27	77.39	283.65
09-Sep	96	15.7	17.6	20.2	546	629	656	8.44	8.62	8.85	65.87	107.31	351.84
10-Sep	96	16.5	18.0	20.2	592	626	651	8.45	8.62	8.77	42.51	160.23	512.12
11-Sep	96	16.4	16.9	17.5	601	626	645	8.38	8.48	8.59	63.05	164.12	357.73

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
12-Sep	96	15.1	15.7	16.4	599	624	649	8.3	8.44	8.61	71.20	87.01	121.30
13-Sep	96	13.6	14.5	15.1	593	623	640	8.26	8.34	8.43	84.18	95.14	137.30
14-Sep	96	11.6	12.8	13.6	614	632	660	8.1	8.19	8.28	51.21	163.17	1043.80
15-Sep	95	10.9	11.9	13.4	662	819	888	7.92	8.13	8.25	139.02	2326.09	5813.60
16-Sep	96	11.1	12.5	17.0	0	783	819	7.61	8.17	8.33	31.89	2901.64	5614.70
17-Sep	90	11.5	13.1	15.9	711	761	819	7.8	8.21	8.43	3.06	1809.43	6497.00
18-Sep	96	12.5	14.0	16.6	699	728	753	8.18	8.32	8.5	1.96	15.25	103.09
19-Sep	95	13.1	13.6	14.3	686	716	752	8.15	8.30	8.44	1.92	7.55	89.55
20-Sep	96	12.6	13.5	14.4	675	704	739	8.14	8.27	8.44	1.95	4.18	25.30
21-Sep	96	12.5	13.2	13.9	663	689	718	8.2	8.32	8.45	1.96	3.33	19.17
22-Sep	96	12.0	13.0	14.3	642	674	706	8.25	8.40	8.65	1.96	2.39	17.04
23-Sep	96	12.2	12.5	13.0	645	668	699	8.28	8.38	8.52	1.96	2.03	2.21
24-Sep	96	12.0	12.4	13.0	644	667	692	8.25	8.36	8.47	1.99	2.46	13.81
25-Sep	96	11.5	11.9	12.4	636	661	687	8.3	8.38	8.53	1.98	2.96	14.71
26-Sep	96	10.7	11.2	11.5	632	654	679	8.29	8.39	8.49	1.84	2.33	13.17
27-Sep	96	10.6	10.8	11.2	623	644	668	8.33	8.41	8.48	1.97	2.07	2.61
28-Sep	96	10.2	10.4	10.6	617	636	659	8.32	8.41	8.51	1.96	2.09	5.68
29-Sep	96	9.6	10.4	12.0	601	626	651	8.36	8.46	8.58	1.94	2.07	2.24
30-Sep	96	9.4	10.2	11.3	590	615	642	8.39	8.49	8.59	1.94	2.09	2.27
01-Oct	96	9.8	10.8	12.7	586	606	625	8.4	8.51	8.63	2.03	2.24	3.55
02-Oct	96	10.1	11.4	13.0	582	604	630	8.41	8.50	8.66	2.05	3.42	18.16
03-Oct	96	10.6	11.9	13.5	578	599	624	8.44	8.56	8.66	2.10	4.73	47.38
04-Oct	96	11.6	12.0	12.6	583	601	623	8.45	8.53	8.6	2.17	3.82	23.78
05-Oct	96	11.2	11.7	12.4	581	603	623	8.39	8.49	8.62	2.15	2.77	7.95
06-Oct	95	10.6	11.2	11.7	584	604	628	8.4	8.50	8.59	2.13	2.25	2.35
07-Oct	96	9.4	9.9	10.6	578	606	631	8.42	8.52	8.7	2.00	2.46	9.06
08-Oct	96	9.0	9.5	10.4	584	609	631	8.41	8.52	8.64	2.01	2.57	18.90
09-Oct	96	8.0	8.7	9.4	612	665	722	8.4	8.49	8.56	1.97	2.07	2.36
10-Oct	96	7.9	8.4	8.7	691	819	955	8.24	8.33	8.49	1.83	2.01	3.71
11-Oct	96	6.6	7.6	8.3	905	1026	1218	8.16	8.24	8.3	1.80	2.03	4.14
12-Oct	96	4.9	6.0	7.0	1163	1233	1313	8.28	8.29	8.32	1.68	1.92	2.38
13-Oct	89	4.3	5.1	5.8	1196	1255	1314	8.26	8.30	8.37	1.56	1.83	2.45
14-Oct	96	4.2	5.2	6.5	1189	1267	1407	8.24	8.29	8.36	1.61	1.85	2.46
15-Oct	94	3.9	5.5	6.6	1291	1377	1478	8.17	8.24	8.3	1.69	2.44	5.59
16-Oct	96	4.9	5.5	6.1	1258	1350	1433	8.16	8.23	8.26	1.98	3.15	5.52
17-Oct	96	2.2	3.9	4.9	1116	1246	1344	8.21	8.25	8.32	2.16	3.86	7.89
18-Oct	96	1.6	2.9	4.0	1031	1134	1251	8.25	8.27	8.29	2.99	8.26	15.59
19-Oct	95	1.0	2.3	3.3	867	969	1102	8.25	8.28	8.34	8.58	15.45	21.05
20-Oct	96	0.6	1.3	2.5	873	941	1007	8.25	8.27	8.35	2.92	6.24	12.37
21-Oct	96	0.6	1.3	2.7	877	928	970	8.24	8.26	8.29	2.86	4.44	12.32
22-Oct	96	1.3	1.7	2.4	870	931	976	8.23	8.24	8.25	2.27	3.85	7.62
23-Oct	96	1.3	1.9	2.9	852	903	967	8.19	8.23	8.25	2.12	3.19	5.22
24-Oct	96	1.3	2.2	3.5	852	900	957	8.21	8.23	8.28	1.97	3.07	5.97
25-Oct	96	1.6	2.4	3.4	855	901	947	8.21	8.23	8.27	1.94	4.64	16.44
26-Oct	96	2.0	2.4	2.9	796	875	930	8.22	8.23	8.24	2.05	3.04	16.95
27-Oct	96	1.9	2.3	2.9	803	843	889	8.2	8.23	8.25	2.03	4.93	22.27
28-Oct	96	1.7	2.4	3.2	813	847	890	8.22	8.25	8.29	1.97	3.81	20.26
29-Oct	91	2.4	3.0	3.8	814	849	890	8.25	8.27	8.31	2.06	4.63	26.30
30-Oct	96	2.5	3.2	3.7	788	834	875	8.26	8.28	8.31	2.24	10.67	88.02
31-Oct	96	2.4	2.7	3.4	748	797	844	8.27	8.30	8.33	2.35	5.47	17.73
01-Nov	96	2.0	2.5	3.3	741	774	830	8.27	8.30	8.36	2.00	3.84	8.38
02-Nov	96	2.5	2.9	3.5	761	861	977	8.06	8.19	8.34	2.43	7.03	23.20
03-Nov	95	2.6	3.0	3.3	921	1003	1080	8	8.09	8.18	5.54	10.42	17.87
04-Nov	96	2.1	2.5	3.0	1026	1128	1213	8.03	8.06	8.09	10.13	14.44	24.27
05-Nov	96	1.5	1.9	2.1	1130	1174	1233	8.05	8.07	8.09	12.65	21.38	32.24
06-Nov	96	-0.2	1.4	1.7	0	1183	1243	6.92	8.07	8.15	1.22	15.86	25.72
07-Nov	96	0.7	0.9	1.3	1055	1169	1265	8.08	8.13	8.21	5.78	9.60	35.09
08-Nov	96	0.5	0.7	1.3	923	1005	1128	8.18	8.23	8.26	5.15	10.45	30.42
09-Nov	96	0.4	0.6	0.8	835	903	983	8.21	8.26	8.3	7.55	10.40	26.95
10-Nov	96	0.4	0.5	0.7	774	832	895	8.1	8.18	8.28	6.31	9.07	11.58
11-Nov	96	0.4	0.5	0.7	753	791	868	8.04	8.06	8.1	5.14	7.58	10.07
12-Nov	96	0.4	0.4	0.6	769	798	830	8.02	8.06	8.08	3.14	4.65	6.20
13-Nov	96	0.3	0.4	0.6	780	817	868	8.07	8.09	8.12	2.58	3.96	10.56
14-Nov	96	0.3	0.4	0.5	804	831	870	8.09	8.11	8.13	2.13	4.57	19.01

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
15-Nov	95	0.3	0.3	0.4	821	852	936	8.12	8.13	8.14	2.55	2.95	3.74
16-Nov	96	0.3	0.3	0.4	824	848	881	8.1	8.11	8.13	2.25	2.96	7.74
17-Nov	96	0.2	0.3	0.4	822	849	886	8.1	8.10	8.11	2.40	5.57	19.50
18-Nov	96	0.2	0.2	0.2	822	848	890	8.09	8.10	8.1	2.25	3.57	8.01
19-Nov	96	0.2	0.2	0.3	816	836	876	8.06	8.07	8.09	2.32	2.64	3.23
20-Nov	96	0.2	0.3	0.4	814	838	869	8.07	8.09	8.11	2.27	2.62	3.07
21-Nov	96	0.3	0.3	0.5	817	844	878	8.1	8.12	8.13	1.94	2.30	2.74
22-Nov	96	0.3	0.3	0.4	817	842	879	8.12	8.13	8.13	1.84	2.13	2.37
23-Nov	96	0.3	0.3	0.5	815	842	878	8.1	8.11	8.12	1.92	2.13	2.83
24-Nov	96	0.3	0.3	0.4	805	836	876	8.1	8.11	8.13	1.96	2.32	2.86
25-Nov	96	0.3	0.3	0.4	804	829	863	8.1	8.12	8.13	2.06	2.38	2.97
26-Nov	96	0.3	0.4	0.5	794	824	859	8.11	8.12	8.13	1.99	2.19	2.47
27-Nov	96	0.4	0.5	0.6	800	828	871	8.09	8.12	8.15	2.04	2.30	2.70
28-Nov	96	0.2	0.3	0.5	735	804	854	8.1	8.14	8.16	1.61	1.85	2.50
29-Nov	96	0.2	0.2	0.3	654	697	763	7.99	8.05	8.14	1.78	3.24	9.58
30-Nov	96	0.2	0.3	0.4	628	657	698	7.96	7.98	8.01	3.52	5.91	7.78
01-Dec	96	0.2	0.3	0.3	645	678	721	7.93	7.95	7.98	3.32	4.38	6.09
02-Dec	96	0.2	0.3	0.4	667	690	727	7.93	7.95	7.97	2.45	3.14	3.97
03-Dec	96	0.2	0.3	0.3	680	712	752	7.92	7.94	7.97	2.31	2.87	5.08
04-Dec	96	0.2	0.3	0.5	692	714	740	7.94	7.96	7.97	2.40	3.19	3.80
05-Dec	96	0.2	0.3	0.5	689	713	741	7.92	7.94	7.97	2.36	3.03	4.07
06-Dec	96	0.3	0.3	0.4	701	725	753	7.91	7.92	7.94	1.83	2.37	2.97
07-Dec	96	0.3	0.4	0.5	691	722	755	7.94	7.99	8.03	2.03	2.94	3.49
08-Dec	96	0.4	0.4	0.6	717	752	787	7.97	8.00	8.03	1.94	2.44	3.25
09-Dec	96	0.3	0.4	0.4	744	778	823	7.96	7.99	8.02	1.67	1.98	2.74
10-Dec	96	0.2	0.3	0.3	780	812	847	8.01	8.02	8.03	1.89	2.16	2.90
11-Dec	93	0.1	0.2	0.3	41	715	839	8.03	8.09	8.31	2.22	5.51	22.91
12-Dec	96	0.1	0.2	0.3	750	785	824	8.11	8.11	8.19	3.13	4.89	43.95
13-Dec	96	-0.1	0.3	0.3	61	791	856	8.05	8.09	8.4	3.30	7.07	16.87
14-Dec	96	-2.3	0.2	0.3	0	821	870	6.21	8.05	8.11	0.19	9.34	59.15
15-Dec	96	0.1	0.2	0.3	0	840	881	8.06	8.07	8.08	1.05	3.96	14.71
16-Dec	96	0.1	0.1	0.2	838	858	894	8.07	8.08	8.23	1.52	2.04	3.49
17-Dec	94	0.1	0.3	0.7	848	870	910	8.03	8.07	8.11	1.47	2.35	6.61
18-Dec	96	0.1	0.3	1.0	853	884	911	8.04	8.08	8.11	0.91	4.61	26.23
19-Dec	96	0.1	0.2	0.8	845	879	911	7.98	8.03	8.07	1.18	4.68	17.40
20-Dec	96	0.1	0.1	0.4	802	842	878	7.92	7.96	8	0.97	6.62	25.55
21-Dec	96	0.1	0.1	0.4	777	803	836	7.88	7.92	7.96	1.01	2.15	3.38
22-Dec	96	0.1	0.2	0.4	767	794	818	7.87	7.91	7.98	1.08	2.36	5.67
23-Dec	96	0.1	0.1	0.3	757	787	813	7.88	7.91	7.93	0.86	2.24	3.47
24-Dec	96	0.1	0.1	0.3	741	767	806	7.88	7.91	7.93	0.89	3.54	10.69
25-Dec	96	0.1	0.1	0.3	0	745	776	7.86	7.90	7.98	0.91	2.21	3.25
26-Dec	96	0.1	0.1	0.2	664	743	770	7.86	7.89	7.91	0.96	2.04	2.94
27-Dec	96	0.1	0.1	0.3	732	754	783	7.85	7.89	7.91	1.04	1.67	2.14
28-Dec	96	0.0	0.1	0.1	0	740	790	6.63	7.86	7.9	0.54	1.42	3.06
29-Dec	96	0.1	0.1	0.2	735	756	776	7.84	7.88	7.89	1.05	1.51	3.08
30-Dec	96	0.1	0.1	0.2	701	754	781	7.85	7.88	7.9	1.10	5.11	205.64
31-Dec	96	-1.9	0.1	0.1	0	725	775	6.47	7.88	8.06	0.88	4.41	8.89

*Based on temperature readings

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
24-Apr	23	8.1	8.4	8.8	667	684	706	7.97	8.18	8.22	56.60	66.49	76.13
25-Apr	95	7.4	8.5	9.6	577	689	725	8.12	8.23	8.26	47.36	79.91	137.09
26-Apr	95	7.4	9.2	11.9	655	706	737	8.20	8.23	8.26	43.22	218.32	1079.50
27-Apr	96	8.4	9.4	10.5	550	680	764	8.23	8.28	8.41	38.58	158.06	1557.80
28-Apr	96	8.7	9.3	9.8	551	590	742	8.28	8.31	8.33	45.41	99.71	166.52
29-Apr	96	8.7	10.1	11.6	585	604	622	8.27	8.31	8.33	44.25	53.16	64.01
30-Apr	96	10.0	10.5	11.3	594	612	632	8.26	8.30	8.32	43.91	50.07	57.99
01-May	96	9.6	12.3	16.3	572	621	650	8.04	8.23	8.32	35.63	49.24	153.08
02-May	96	11.0	12.9	15.4	596	631	678	7.99	8.11	8.18	31.09	47.62	198.75
03-May	96	11.3	12.1	13.1	595	637	658	8.09	8.19	8.26	25.39	30.62	35.74
04-May	96	10.9	11.5	12.2	616	639	655	8.20	8.24	8.29	21.23	26.63	32.98
05-May	96	10.6	12.3	14.3	627	643	661	8.20	8.28	8.35	18.58	22.68	37.41
06-May	96	10.9	13.2	16.3	631	648	664	8.27	8.34	8.40	15.52	23.45	76.18
07-May	96	12.1	12.6	14.0	631	648	660	8.37	8.44	8.49	13.47	21.13	295.93
08-May	96	11.3	13.4	16.2	637	652	667	8.41	8.47	8.51	10.62	14.95	105.31
09-May	96	12.1	13.5	15.4	643	676	711	8.36	8.43	8.49	9.62	11.31	14.46
10-May	96	11.9	12.3	13.0	685	757	818	8.35	8.40	8.45	8.80	11.40	22.66
11-May	96	11.1	12.5	14.2	795	855	916	8.32	8.37	8.41	7.96	9.81	17.59
12-May	96	11.9	13.8	15.7	820	925	1028	8.32	8.36	8.39	5.79	9.41	73.63
13-May	96	13.1	14.6	16.8	823	962	1066	8.34	8.39	8.46	5.58	8.93	28.15
14-May	95	12.8	13.4	14.2	980	1030	1074	8.41	8.45	8.49	6.30	7.42	8.86
15-May	96	12.5	13.5	14.4	1038	1089	1131	8.41	8.44	8.48	5.58	6.95	10.60
16-May	96	12.9	14.4	15.9	1087	1130	1175	8.35	8.42	8.45	4.64	8.67	61.04
17-May	96	13.0	13.8	15.2	1120	1152	1200	8.38	8.42	8.45	4.48	6.91	46.97
18-May	96	12.5	13.0	13.6	1145	1184	1213	8.35	8.39	8.42	3.51	4.51	6.89
19-May	95	12.4	13.5	14.7	1175	1212	1248	8.32	8.37	8.40	3.82	9.59	29.10
20-May	93	13.2	14.4	15.6	1191	1328	1654	8.22	8.34	8.41	2.65	12.58	104.72
21-May	96	12.9	13.7	14.7	1565	1628	1690	8.19	8.22	8.25	3.53	724.60	3737.80
22-May	96	11.9	12.2	12.8	1608	1643	1673	8.12	8.16	8.21	4.47	7.22	22.66
23-May	95	11.4	13.5	16.4	1627	1668	1710	8.02	8.08	8.13	7.45	12.00	26.81
24-May	95	12.7	14.2	15.5	1644	1697	1754	8.04	8.11	8.18	8.98	23.12	96.27
25-May	96	14.5	15.3	16.3	1687	1742	1871	8.12	8.20	8.32	7.74	12.88	90.97
26-May	96	14.4	14.8	15.5	1728	1779	1824	8.26	8.33	8.39	6.78	56.88	273.14
27-May	96	13.7	15.2	16.7	1755	1830	2017	7.84	8.31	8.41	5.21	50.93	329.01
28-May	96	14.6	16.2	18.0	1784	1869	1958	7.56	8.06	8.33	3.21	12.36	107.10
29-May	96	15.8	17.0	18.0	1707	1888	2148	7.61	8.06	8.23	2.33	47.26	521.97
30-May	96	16.9	17.6	18.3	1835	1938	2143	8.21	8.29	8.37	2.48	21.51	472.67
31-May	96	17.1	17.9	18.9	1873	1938	2100	8.31	8.37	8.43	4.88	27.48	467.72
01-Jun	96	17.0	17.9	18.8	1878	1953	2019	8.37	8.42	8.46	6.21	34.79	146.30
02-Jun	96	16.8	17.5	18.2	1931	1978	2021	8.41	8.45	8.49	5.22	32.32	151.77
03-Jun	96	16.4	17.2	18.3	1951	1991	2043	8.44	8.47	8.50	4.90	17.74	90.24
04-Jun	96	16.4	17.7	19.4	1942	2006	2056	8.40	8.45	8.48	4.53	14.94	80.82
05-Jun	96	16.9	18.1	19.3	1928	2012	2159	8.42	8.45	8.48	6.22	55.11	324.85
06-Jun	96	16.6	17.4	18.3	1958	2005	2047	8.38	8.43	8.47	8.20	35.73	261.26
07-Jun	95	16.0	16.8	17.7	1937	1978	2020	8.32	8.34	8.39	13.17	50.39	162.74
08-Jun	96	15.8	16.2	16.9	1892	1956	2045	8.22	8.29	8.33	26.65	115.56	481.86
09-Jun	96	15.4	17.2	19.5	1741	1883	1945	8.16	8.20	8.24	65.14	149.23	590.22
10-Jun	96	15.9	18.5	21.4	1663	1864	1967	8.17	8.21	8.24	17.06	153.25	673.77
11-Jun	96	18.2	19.7	21.5	1655	1855	1946	8.18	8.23	8.28	11.26	152.48	3104.90
12-Jun	96	18.6	20.0	21.9	1665	1869	2025	8.19	8.25	8.31	10.83	60.77	465.34
13-Jun	96	19.2	20.3	21.3	1717	1892	1982	8.22	8.30	8.37	11.70	107.77	917.47
14-Jun	96	16.7	18.3	20.2	1680	1876	1944	8.24	8.30	8.34	13.01	67.17	162.88
15-Jun	96	15.1	15.7	16.7	1744	1791	1862	7.85	8.08	8.23	150.90	196.03	236.20
16-Jun	96	14.5	16.2	18.3	1709	1763	1811	7.75	7.91	8.05	165.85	212.18	283.69
17-Jun	96	15.6	17.8	20.9	1655	1747	1804	7.91	8.03	8.14	83.86	244.07	1210.60
18-Jun	96	16.3	19.9	24.0	1415	1717	1856	7.90	7.99	8.17	100.33	314.05	608.96
19-Jun	96	18.5	21.8	25.0	1586	1804	2009	8.06	8.14	8.22	104.41	307.81	801.22
20-Jun	96	20.6	21.5	23.0	1756	1890	2016	8.14	8.26	8.33	131.91	222.54	377.65

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
21-Jun	96	19.8	20.7	21.5	1860	2046	2139	8.25	8.31	8.36	108.06	251.53	339.46
22-Jun	96	19.1	19.7	20.3	2060	2130	2187	7.97	8.16	8.34	251.46	328.29	496.05
23-Jun	96	18.6	19.6	20.6	2116	2197	2259	7.73	7.95	8.05	196.65	418.55	500.08
24-Jun	95	18.8	20.6	22.5	2010	2199	2267	7.96	8.04	8.13	154.40	432.73	692.46
25-Jun	95	19.2	19.7	21.0	2021	2219	2290	8.00	8.07	8.15	3.74	172.58	388.35
26-Jun	96	18.6	19.4	20.4	2149	2217	2263	7.94	8.02	8.08	3.61	8.33	25.42
27-Jun	96	18.8	19.1	19.7	2126	2203	2272	7.76	7.93	8.03	8.64	35.26	171.35
28-Jun	96	18.1	18.9	19.7	2156	2206	2250	7.55	7.72	7.91	30.89	49.11	59.25
29-Jun	96	18.2	19.1	20.4	2165	2209	2254	7.48	7.66	7.79	12.20	34.54	52.57
30-Jun	96	18.5	19.3	20.4	2121	2196	2256	7.37	7.60	7.68	8.04	21.24	68.01
01-Jul	96	17.6	18.6	19.4	2076	2160	2214	7.42	7.65	7.90	8.16	21.61	45.78
02-Jul	96	17.0	18.4	21.2	1945	2040	2136	6.90	7.25	7.41	42.22	58.30	73.24
03-Jul	96	16.7	17.4	18.4	1696	1885	2005	7.30	7.54	7.87	39.62	62.67	122.63
04-Jul	95	16.2	17.2	19.2	1531	1623	1739	7.84	7.94	8.03	47.98	79.50	244.59
05-Jul	96	16.3	18.3	20.5	1502	1581	1641	7.10	7.42	7.96	18.23	44.29	95.01
06-Jul	96	17.5	19.2	21.2	1529	1611	1672	7.16	7.28	7.37	20.11	75.64	438.62
07-Jul	96	18.0	19.1	21.0	1615	1689	1774	7.32	7.46	7.58	11.09	82.46	274.95
08-Jul	96	18.2	19.7	21.7	1471	1710	1791	7.53	7.70	7.87	10.99	37.84	442.40
09-Jul	96	18.8	20.1	21.8	1534	1694	1830	7.77	7.94	8.13	11.42	31.53	66.28
10-Jul	96	18.7	19.9	20.8	1601	1685	1722	7.99	8.14	8.26	10.78	31.48	223.66
11-Jul	96	19.3	20.0	20.7	1648	1697	1758	8.16	8.25	8.32	12.46	17.63	30.40
12-Jul	94	16.8	18.4	19.9	1655	1706	1777	8.12	8.25	8.32	0.80	22.01	163.55
13-Jul	96	15.9	16.7	17.3	1718	1750	1766	8.14	8.22	8.30	0.52	3.45	28.88
14-Jul	96	16.3	18.4	21.1	1693	1764	1794	8.12	8.18	8.24	0.00	1.18	4.64
15-Jul	96	18.5	19.5	20.7	1728	1755	1766	8.07	8.15	8.21	0.00	0.00	0.00
16-Jul	96	19.1	20.1	21.5	1703	1748	1838	8.04	8.16	8.28	0.00	0.00	0.00
17-Jul	96	19.7	20.2	20.7	1718	1746	1773	8.14	8.24	8.32	0.00	0.00	0.00
18-Jul	96	19.8	20.7	21.6	1775	1820	1868	8.16	8.27	8.35	0.00	6.53	626.61
19-Jul	96	19.8	20.9	22.6	1840	1859	1880	8.22	8.29	8.36	0.00	0.00	0.00
20-Jul	96	20.3	21.4	23.0	1858	1871	1876	8.19	8.31	8.41	0.00	0.00	0.00
21-Jul	96	20.7	21.3	22.5	1515	1847	1878	7.87	8.30	8.37	0.00	0.00	0.00
22-Jul	96	20.5	21.6	22.8	1799	1849	1856	8.18	8.28	8.35	0.00	0.00	0.00
23-Jul	96	20.4	21.4	22.5	1826	1837	1845	8.18	8.26	8.33	0.00	34.12	3275.80
24-Jul	94	20.1	20.6	21.4	1483	1814	1838	8.16	8.25	8.31	0.00	0.00	0.00
25-Jul	88	18.9	19.9	20.6	1815	1819	1827	8.19	8.29	8.40	0.00	0.00	0.00
26-Jul	91	19.0	20.3	21.6	1775	1823	1921	8.23	8.28	8.38	0.00	0.99	20.69
27-Jul	92	20.4	22.0	23.7	1824	1860	1905	8.25	8.30	8.38	0.94	6.71	97.93
28-Jul	96	21.3	22.4	23.6	1839	1862	1905	8.29	8.34	8.40	1.06	3.58	36.29
29-Jul	96	21.2	22.5	24.4	1823	1861	1950	8.26	8.34	8.45	1.09	2.72	27.10
30-Jul	90	21.3	22.5	23.6	1766	1843	1886	8.28	8.35	8.49	1.06	3.23	20.72
31-Jul	96	21.7	23.1	24.6	1704	1802	1899	8.26	8.34	8.44	1.29	6.35	55.03
01-Aug	96	22.9	24.2	26.0	1361	1785	1806	8.34	8.39	8.43	1.18	3.23	17.78
02-Aug	96	23.1	24.2	25.5	1766	1789	1804	8.43	8.47	8.60	1.21	5.57	149.19
03-Aug	96	22.7	23.5	24.2	1641	1769	1814	8.48	8.57	8.66	1.49	2.67	11.98
04-Aug	95	21.3	21.8	22.6	1720	1755	1768	8.53	8.60	8.68	1.94	9.02	522.98
05-Aug	96	20.9	22.4	24.4	1737	1747	1779	8.42	8.54	8.64	2.63	4.74	8.86
06-Aug	88	21.1	21.7	22.8	1734	1740	1744	8.54	8.59	8.66	1.89	3.25	6.02
07-Aug	96	19.7	20.4	21.2	1664	1736	1740	8.53	8.59	8.64	2.46	4.02	6.99
08-Aug	96	18.5	19.2	20.1	1336	1722	1748	8.50	8.56	8.61	2.81	4.53	9.96
09-Aug	96	17.4	18.2	18.9	1406	1745	1766	8.49	8.54	8.59	3.36	5.60	12.83
10-Aug	92	16.8	17.6	18.3	1765	1772	1778	8.35	8.49	8.55	4.27	6.02	9.91
11-Aug	95	16.5	17.6	18.7	1772	1781	1830	8.39	8.44	8.50	3.56	5.88	8.77
12-Aug	96	16.2	17.3	18.5	1775	1791	1801	8.35	8.41	8.47	2.41	4.22	21.13
13-Aug	96	15.9	16.7	17.2	1770	1811	1823	8.35	8.41	8.47	1.89	3.25	5.97
14-Aug	96	15.7	16.8	18.0	1791	1820	1825	8.39	8.44	8.49	1.53	2.19	5.21
15-Aug	96	16.6	17.1	18.1	1736	1821	1913	8.40	8.43	8.48	1.25	1.64	2.76
16-Aug	91	17.1	18.8	20.9	1560	1805	1825	8.30	8.38	8.45	1.04	1.65	2.56
17-Aug	96	18.8	20.4	22.4	1773	1791	1805	8.32	8.36	8.39	1.06	1.44	2.37

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
18-Aug	95	19.6	20.4	22.2	1663	1770	1788	8.32	8.41	8.48	1.04	7.97	611.74
19-Aug	96	18.8	19.9	20.9	1709	1731	1756	8.31	8.38	8.49	1.51	2.40	4.67
20-Aug	96	18.4	19.0	20.0	1613	1669	1718	8.24	8.31	8.42	1.51	3.50	17.16
21-Aug	96	17.9	18.2	18.8	1427	1518	1610	8.02	8.15	8.24	3.52	9.18	19.02
22-Aug	90	17.0	17.4	18.0	1239	1329	1451	8.09	8.13	8.18	16.44	54.95	95.44
23-Aug	89	16.0	17.4	19.1	1164	1216	1254	8.14	8.19	8.26	9.71	28.42	44.03
24-Aug	96	16.4	17.3	18.4	1140	1209	1224	8.11	8.17	8.23	2.64	8.63	197.06
25-Aug	96	15.8	16.8	17.6	1066	1234	1257	8.11	8.17	8.24	1.83	5.88	258.07
26-Aug	96	15.5	16.3	17.0	880	1285	1338	8.16	8.25	8.31	1.28	2.04	3.49
27-Aug	96	15.2	16.7	18.5	1217	1378	1424	8.23	8.27	8.30	0.84	8.98	702.12
28-Aug	96	15.9	16.4	17.0	1357	1419	1450	8.23	8.29	8.36	0.69	7.35	303.55
29-Aug	96	14.5	15.2	16.2	1091	1452	1471	8.28	8.34	8.39	0.71	49.65	3262.40
30-Aug	90	13.5	14.5	15.8	1023	1473	1510	8.33	8.37	8.42	0.63	0.83	1.36
31-Aug	96	13.6	13.9	14.4	1493	1521	1553	8.30	8.36	8.40	0.59	0.86	1.98
01-Sep	95	13.1	13.9	14.5	1554	1583	1606	7.98	8.36	8.43	0.61	0.80	1.68
02-Sep	96	13.3	14.3	15.6	1606	1631	1651	8.32	8.36	8.41	0.54	0.69	1.39
03-Sep	89	13.7	14.6	15.4	1350	1652	1668	8.32	8.38	8.44	0.50	2.42	150.16
04-Sep	96	14.4	15.2	15.9	1537	1669	1677	8.35	8.40	8.44	0.51	0.72	1.36
05-Sep	96	15.1	16.0	17.4	1376	1669	1732	8.37	8.43	8.50	0.55	0.73	1.77
06-Sep	96	15.4	15.9	16.7	1654	1668	1673	8.35	8.42	8.48	0.56	0.69	1.15
07-Sep	96	14.5	15.5	16.7	1595	1655	1701	8.35	8.41	8.47	0.55	23.65	2204.50
08-Sep	94	14.7	16.1	17.8	1586	1614	1651	8.29	8.35	8.49	0.59	1.04	6.84
09-Sep	90	15.5	16.9	18.6	1521	1567	1592	8.25	8.30	8.38	0.60	17.59	1125.70
10-Sep	96	16.3	17.3	19.0	1495	1541	1564	8.24	8.29	8.36	0.62	2.01	25.02
11-Sep	96	16.4	16.7	17.2	1463	1492	1534	8.21	8.30	8.35	1.30	12.72	929.68
12-Sep	96	15.1	15.6	16.3	1422	1440	1466	8.22	8.28	8.34	1.45	3.06	6.34
13-Sep	92	13.6	14.3	15.1	1384	1415	1425	8.20	8.23	8.30	1.34	6.15	13.16
14-Sep	96	12.2	12.8	13.6	1401	1405	1411	8.15	8.18	8.20	6.70	11.30	19.69
15-Sep	95	11.5	12.4	13.6	1403	1406	1409	8.17	8.21	8.26	11.10	18.08	25.55
16-Sep	96	11.4	12.6	14.3	1405	1413	1421	8.17	8.21	8.24	9.35	15.30	174.43
17-Sep	96	11.7	13.2	15.4	1417	1432	1448	8.13	8.20	8.27	7.18	11.12	21.86
18-Sep	96	12.6	13.9	16.0	1340	1459	1495	8.19	8.23	8.26	3.84	7.41	13.08
19-Sep	95	13.0	13.4	14.3	1469	1476	1483	8.22	8.26	8.31	2.74	5.07	13.80
20-Sep	96	12.3	13.1	13.9	1239	1450	1475	8.22	8.28	8.33	2.47	4.33	8.96
21-Sep	82	12.2	12.8	13.5	1275	1420	1446	8.29	8.35	8.41	2.18	3.16	5.90
22-Sep	96	11.8	12.6	13.8	911	1352	1518	8.15	8.35	8.38	1.80	6.32	286.40
23-Sep	95	12.1	12.4	12.7	1308	1397	1419	8.31	8.34	8.39	1.25	2.25	5.02
24-Sep	96	11.9	12.3	12.8	1315	1380	1394	8.26	8.32	8.38	1.21	2.75	8.89
25-Sep	90	11.4	11.8	12.3	1118	1344	1390	8.28	8.32	8.34	1.65	2.52	4.89
26-Sep	94	10.7	11.1	11.4	1289	1308	1334	8.28	8.33	8.39	1.86	3.32	6.70
27-Sep	96	10.5	10.8	11.1	1229	1263	1290	8.08	8.34	8.37	1.41	2.88	6.70
28-Sep	96	10.3	10.5	10.6	1065	1223	1249	8.29	8.36	8.42	1.59	3.40	11.15
29-Sep	96	9.6	10.4	11.4	1001	1194	1351	8.35	8.38	8.40	1.50	2.98	6.80
30-Sep	93	9.5	10.2	11.0	1010	1177	1187	8.31	8.37	8.41	0.84	1.70	4.38
01-Oct	81	9.7	10.8	12.3	993	1183	1199	8.29	8.34	8.39	0.96	2.63	52.95
02-Oct	89	10.1	11.2	12.6	1079	1191	1200	8.23	8.32	8.36	0.73	1.30	5.85
03-Oct	96	10.7	11.8	13.1	736	1153	1235	8.21	8.32	8.34	0.75	1.96	27.39
04-Oct	95	11.6	11.9	12.5	792	1206	1217	8.28	8.34	8.40	0.89	2.24	6.57
05-Oct	94	11.2	11.6	12.0	1190	1221	1265	8.33	8.37	8.42	1.72	148.14	4052.00
06-Oct	95	10.5	11.1	11.6	1220	1224	1227	8.35	8.40	8.45	1.86	3.22	6.73
07-Oct	96	9.3	9.8	10.5	1203	1211	1220	8.39	8.43	8.46	1.26	3.02	11.19
08-Oct	96	9.1	9.5	10.0	1189	1197	1210	8.40	8.43	8.46	1.51	2.82	15.16
09-Oct	96	8.6	9.0	9.4	1183	1192	1194	8.28	8.42	8.45	1.26	2.55	10.50
10-Oct	96	7.9	8.5	9.0	1182	1189	1193	8.29	8.33	8.39	4.47	14.77	24.01
11-Oct	94	7.5	7.9	8.4	1181	1184	1191	8.26	8.29	8.31	12.24	17.25	45.22
12-Oct	96	6.7	7.2	7.6	1191	1209	1226	8.28	8.30	8.32	9.47	15.76	27.31
13-Oct	95	6.3	6.6	7.1	1218	1242	1257	8.25	8.28	8.30	7.16	12.07	26.42
14-Oct	96	6.1	6.5	7.2	1256	1272	1288	8.20	8.23	8.26	4.98	9.02	14.03

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
15-Oct	96	5.5	6.0	6.5	1288	1307	1322	8.19	8.21	8.26	3.96	8.07	18.60
16-Oct	96	5.0	5.6	5.8	1321	1342	1369	8.20	8.24	8.28	2.92	5.56	13.46
17-Oct	89	3.4	4.3	5.1	1367	1395	1424	8.26	8.29	8.33	2.34	5.21	11.97
18-Oct	92	2.2	3.0	3.7	1425	1447	1472	8.30	8.34	8.50	0.55	4.37	6.82
19-Oct	92	1.4	2.0	2.6	1471	1499	1521	8.30	8.33	8.42	1.27	4.00	6.80
20-Oct	94	1.3	2.1	2.8	1519	1541	1565	8.27	8.35	8.84	0.71	2.54	6.44
21-Oct	94	2.3	2.4	2.6	1546	1574	1603	8.25	8.31	8.41	0.57	1.19	2.41
22-Oct	93	2.1	2.3	2.5	1600	1626	1651	8.27	8.31	8.40	0.65	0.98	1.85
23-Oct	96	1.9	2.3	2.7	1646	1668	1689	8.27	8.31	8.40	0.59	0.84	1.41
24-Oct	96	2.2	2.4	2.7	1589	1710	1726	8.13	8.28	8.39	0.51	0.71	1.20
25-Oct	96	1.2	1.8	2.7	1651	1710	1761	7.76	7.90	8.12	0.60	4.67	11.11
26-Oct	96	0.9	1.2	1.6	1410	1586	1651	7.68	7.73	7.76	5.12	10.07	18.82
27-Oct	96	1.1	1.5	2.0	1349	1469	1496	7.64	7.66	7.69	4.55	7.90	13.44
28-Oct	96	1.6	2.2	3.1	1419	1443	1474	7.66	7.67	7.70	6.22	12.64	24.47
29-Oct	81	1.9	2.3	3.0	1385	1403	1428	7.60	7.63	7.67	5.74	9.91	13.56
30-Oct	96	1.3	1.8	2.2	1347	1381	1417	7.58	7.60	7.62	3.22	7.49	21.90
31-Oct	94	1.5	1.6	1.9	1330	1357	1366	7.57	7.59	7.60	6.59	7.70	9.84
01-Nov	96	1.4	2.0	2.6	1343	1362	1393	7.59	7.61	7.64	5.16	7.63	60.25
02-Nov	38	2.3	2.7	3.0	1386	1400	1414	7.63	7.64	7.66	5.51	7.06	9.30
03-Nov	0												
04-Nov	0												
05-Nov	0												
06-Nov	0												
07-Nov	0												
08-Nov	0												
09-Nov	0												
10-Nov	0												
11-Nov	0												
12-Nov	0												
13-Nov	0												
14-Nov	28	0.1	0.2	0.3	1280	1288	1300	7.66	7.71	7.74	3.76	5.78	7.92
15-Nov	95	0.0	0.0	0.2	1283	1306	1321	7.60	7.66	7.72	2.93	4.82	6.71
16-Nov	96	0.0	0.0	0.1	1287	1299	1315	7.58	7.66	7.72	2.54	3.98	5.78
17-Nov	96	0.0	0.1	0.2	1280	1291	1302	7.71	7.74	7.77	2.12	3.58	5.18
18-Nov	96	0.2	0.5	1.3	1276	1296	1341	7.60	7.67	7.86	1.64	3.25	6.49
19-Nov	96	1.3	1.6	1.8	1333	1388	1428	7.83	7.87	7.92	0.95	2.49	3.97
20-Nov	96	1.5	1.6	1.7	1402	1435	1452	7.82	7.83	7.85	1.41	2.90	4.55
21-Nov	96	1.1	1.4	1.5	1412	1441	1453	7.78	7.81	7.84	1.70	3.25	4.63
22-Nov	96	1.2	1.3	1.4	1421	1437	1450	7.70	7.78	7.82	2.02	3.22	4.54
23-Nov	96	1.1	1.2	1.3	1404	1427	1442	7.66	7.70	7.74	1.89	3.19	4.69
24-Nov	96	0.2	0.7	1.2	1345	1389	1430	7.62	7.66	7.70	1.77	3.09	4.66
25-Nov	96	0.3	0.4	0.6	1313	1341	1363	7.59	7.62	7.64	1.84	3.16	4.45
26-Nov	96	0.1	0.3	0.5	1308	1327	1349	7.63	7.65	7.68	1.81	3.10	4.52
27-Nov	96	0.1	0.3	0.5	1256	1293	1337	7.64	7.67	7.70	1.83	3.13	4.62
28-Nov	96	0.2	0.3	0.5	1239	1262	1284	7.68	7.70	7.73	2.01	3.50	5.25
29-Nov	96	0.1	0.3	0.4	1249	1264	1277	7.72	7.73	7.75	1.82	3.19	4.49
30-Nov	96	0.2	0.3	0.5	1252	1267	1279	7.60	7.70	7.75	1.81	3.16	5.81
01-Dec	96	0.2	0.3	0.4	1267	1280	1295	7.61	7.69	7.72	1.56	2.99	4.14
02-Dec	96	0.3	0.4	0.6	1246	1280	1292	7.69	7.70	7.72	1.61	2.98	4.05
03-Dec	96	0.3	0.4	0.4	1287	1317	1337	7.67	7.69	7.71	1.44	2.69	3.83
04-Dec	96	0.3	0.4	0.6	1331	1357	1381	7.64	7.66	7.68	1.42	2.63	3.79
05-Dec	96	0.3	0.4	0.4	1369	1382	1411	7.62	7.65	7.67	1.22	2.43	3.58
06-Dec	96	0.3	0.4	0.6	1397	1430	1453	7.57	7.60	7.63	1.29	2.79	4.28
07-Dec	96	0.3	0.4	0.5	1139	1360	1461	7.57	7.59	7.66	0.61	3.03	8.25
08-Dec	96	0.3	0.4	0.5	1388	1426	1454	7.58	7.59	7.62	1.29	3.00	5.73
09-Dec	96	0.2	0.3	0.4	1356	1430	1465	7.60	7.61	7.64	0.69	3.04	4.90
10-Dec	96	0.1	0.2	0.3	1412	1482	1517	7.61	7.62	7.63	1.88	3.41	4.82
11-Dec	96	0.1	0.1	0.2	1505	1524	1543	7.61	7.62	7.63	2.08	3.60	4.88

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
12-Dec	96	0.1	0.2	0.8	1467	1547	1572	7.61	7.65	7.73	1.35	3.20	6.08
13-Dec	96	0.0	0.1	0.4	1565	1585	1612	7.73	7.80	7.83	1.23	2.71	4.36
14-Dec	54	0.0	0.0	0.0	1608	1618	1635	7.78	7.79	7.81	1.60	2.92	4.44
15-Dec	0												
16-Dec	37	-0.1	0.0	0.0	1644	1659	1667	7.77	7.78	7.79	1.78	3.46	5.24
17-Dec	94	-0.1	0.0	0.0	1608	1644	1671	7.71	7.73	7.77	2.01	4.34	7.19
18-Dec	96	0.0	0.0	0.0	1511	1567	1614	7.67	7.70	7.72	2.77	4.73	6.73
19-Dec	96	-0.1	0.0	0.0	1415	1466	1514	7.63	7.66	7.68	3.03	4.87	17.83
20-Dec	96	-0.1	0.0	0.0	1340	1380	1423	7.64	7.66	7.71	2.92	4.80	6.82
21-Dec	96	0.0	0.0	0.0	1265	1303	1339	7.66	7.72	7.77	3.32	5.62	8.17
22-Dec	96	-0.1	0.0	0.0	1061	1228	1271	7.76	7.82	7.87	4.24	7.88	51.72
23-Dec	96	0.0	0.0	0.0	1164	1189	1217	7.87	7.89	7.91	5.22	7.32	9.88
24-Dec	96	0.0	0.0	0.0	1122	1147	1172	7.85	7.87	7.91	4.71	6.95	9.51
25-Dec	68	0.0	0.0	0.0	1093	1112	1125	7.85	7.87	7.91	4.63	6.47	8.66
26-Dec	6	0.0	0.0	0.0	1093	1100	1104	7.89	7.89	7.89	4.65	6.09	7.52
27-Dec	0												
28-Dec	0												
29-Dec	32	-0.3	-0.1	-0.1	110	733	1086	7.90	7.94	8.68	2.57	10.13	33.81
30-Dec	96	-2.3	-0.1	-0.1	0	1023	1214	7.15	7.89	7.96	0.00	12.38	152.16
31-Dec	96	-0.1	0.0	0.4	0	1123	1182	7.43	7.89	7.91	0.13	4.09	9.12

*Based on temperature readings

RSEM-L6

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-Jun	38	21.7	22.4	22.8	948	954	961	8.03	8.06	8.07	3.41	3.96	5.44
21-Jun	96	20.2	21.3	22.4	958	1003	1043	8.00	8.04	8.09	2.69	6.72	44.54
22-Jun	96	19.5	20.2	21.0	1042	1061	1075	8.01	8.10	8.17	3.05	4.68	18.69
23-Jun	96	18.5	19.8	21.1	1071	1078	1083	8.12	8.18	8.25	2.82	4.09	7.85
24-Jun	95	18.7	20.8	22.9	1080	1083	1092	8.20	8.23	8.27	2.74	4.64	29.32
25-Jun	95	18.7	19.8	21.3	1083	1086	1087	8.25	8.30	8.36	2.69	4.64	14.59
26-Jun	96	18.0	19.2	20.6	1085	1089	1099	8.31	8.33	8.36	2.64	3.35	8.49
27-Jun	96	12.2	18.2	21.5	3	801	1122	6.80	8.22	8.47	2.08	5.88	113.83
28-Jun	38	12.6	16.9	17.9	9	1293	1605	8.06	8.14	8.28	2.00	6.92	13.17
29-Jun	0												
30-Jun	0												
01-Jul	0												
02-Jul	0												
03-Jul	0												
04-Jul	0												
05-Jul	0												
06-Jul	44	20.5	21.6	22.3	1231	1277	1312	8.26	8.34	8.40	2.16	97.67	512.55
07-Jul	96	18.4	20.0	22.9	1300	1328	1373	8.30	8.37	8.49	1.63	24.82	132.39
08-Jul	63	18.3	19.7	22.7	1300	1365	1470	8.36	8.41	8.51	1.03	8.63	33.76

*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
10-Apr	24	0.3	0.6	2.5	652	669	681	8.17	8.28	8.57	59.58	133.96	224.67
11-Apr	96	0.0	0.7	1.6	667	678	687	8.38	8.45	8.54	12.28	38.54	102.37
12-Apr	96	0.0	0.6	1.7	646	666	681	8.37	8.42	8.49	5.11	45.70	131.83
13-Apr	37	-3.2	0.1	0.5	0	615	665	0.00	7.94	8.42	0.42	81.96	141.04
14-Apr	36	0.2	0.7	1.1	548	598	620	8.16	8.54	8.82	39.39	89.12	133.99
15-Apr	0												
16-Apr	0												
17-Apr	32	0.8	1.7	2.2	466	468	471	8.58	8.61	8.65	131.19	374.06	563.95
18-Apr	87	0.5	2.7	6.2	447	462	471	8.54	8.61	8.64	37.14	77.54	143.93
19-Apr	94	1.7	3.1	4.4	457	461	465	8.57	8.60	8.63	46.15	73.65	123.60
20-Apr	94	3.5	5.0	7.1	456	463	477	8.55	8.61	8.65	26.88	58.39	105.48
21-Apr	94	4.7	6.5	7.8	463	468	472	8.59	8.62	8.66	37.47	56.65	85.71
22-Apr	95	6.7	8.2	9.9	411	474	503	7.58	8.42	8.67	29.42	46.72	230.15
23-Apr	96	8.3	8.9	10.0	436	476	495	7.90	8.06	8.15	19.41	51.36	224.62
24-Apr	95	7.8	9.3	11.0	493	502	516	8.04	8.15	8.21	16.96	24.46	50.66
25-Apr	95	9.0	9.9	10.6	490	508	520	8.18	8.21	8.25	13.07	25.11	152.63
26-Apr	95	8.6	9.9	11.7	517	522	529	8.19	8.24	8.28	10.21	178.42	916.93
27-Apr	96	8.6	9.9	11.4	519	531	569	7.62	8.15	8.32	11.89	172.86	1068.80
28-Apr	95	9.4	10.4	11.1	549	568	584	7.99	8.09	8.14	8.64	30.94	218.36
29-Apr	95	9.2	10.6	12.0	567	582	602	8.08	8.13	8.17	11.05	22.80	62.22
30-Apr	95	10.8	11.1	11.6	587	604	628	8.09	8.14	8.19	9.44	26.91	255.81
01-May	95	10.1	12.2	15.0	546	611	624	8.13	8.18	8.24	6.26	20.65	177.02
02-May	96	11.4	13.3	16.2	537	605	623	8.15	8.21	8.24	5.64	41.09	295.13
03-May	95	12.0	12.9	14.8	610	627	658	8.21	8.24	8.28	8.23	28.06	295.87
04-May	96	11.4	11.8	12.4	623	631	637	8.21	8.24	8.26	15.20	25.34	77.50
05-May	96	10.5	11.4	13.1	626	645	737	7.36	7.96	8.25	11.20	19.95	106.76
06-May	96	10.3	11.7	13.7	650	675	721	7.42	7.73	8.09	10.26	15.56	48.76
07-May	96	10.1	11.4	12.5	650	716	747	7.33	7.62	7.94	8.19	17.20	56.28
08-May	96	10.9	12.4	14.9	704	732	771	7.29	7.55	7.92	8.29	15.91	91.98
09-May	96	10.3	12.1	13.8	719	758	806	7.37	7.75	7.93	8.09	22.67	65.06
10-May	96	9.8	10.6	11.7	774	808	832	7.72	7.85	7.92	13.08	19.47	30.61
11-May	96	8.0	10.1	12.4	816	851	878	7.84	7.89	7.94	10.82	15.39	32.81
12-May	96	9.0	11.2	13.5	857	885	906	7.70	7.84	7.91	8.87	17.60	36.95
13-May	95	8.4	10.0	11.8	892	925	938	7.41	7.59	7.87	10.52	60.38	144.75
14-May	96	8.4	10.2	11.6	902	920	936	7.62	7.75	7.86	18.05	55.87	145.67
15-May	95	8.5	9.8	10.6	901	913	923	7.55	7.70	7.86	9.54	16.70	32.40
16-May	95	9.5	11.2	12.9	892	904	917	7.69	7.74	7.79	3.14	11.43	110.43
17-May	95	10.9	11.5	12.3	885	894	903	7.77	7.85	7.93	2.46	5.54	35.69
18-May	95	10.4	10.9	11.3	884	890	897	7.93	7.97	8.00	2.01	4.09	22.12
19-May	95	10.6	12.3	14.6	878	888	898	7.99	8.03	8.06	2.09	9.19	70.97
20-May	95	12.3	13.4	14.4	871	886	898	8.01	8.06	8.09	2.27	4.70	16.76
21-May	96	12.0	13.1	14.0	868	877	886	8.04	8.09	8.11	2.97	13.19	42.08
22-May	95	10.9	11.3	12.0	866	874	883	8.08	8.11	8.13	6.79	13.26	34.68
23-May	95	10.6	12.6	15.2	867	874	882	8.05	8.09	8.11	6.65	11.32	24.16
24-May	96	12.3	14.2	15.9	1	864	882	7.99	8.06	8.09	4.84	15.84	149.80
25-May	96	14.6	16.0	17.6	858	874	921	8.02	8.04	8.06	3.89	12.10	60.79
26-May	96	14.8	15.3	16.2	866	873	880	8.01	8.04	8.06	4.26	7.75	22.19
27-May	96	13.9	15.0	16.0	867	874	880	8.02	8.05	8.07	4.16	6.93	11.43
28-May	96	14.1	16.6	19.4	851	875	905	8.01	8.06	8.07	5.14	19.23	68.05
29-May	96	16.2	17.9	19.7	865	876	882	7.99	8.06	8.09	5.35	35.19	176.34
30-May	96	17.3	18.1	19.4	868	875	884	8.00	8.06	8.08	4.38	14.77	66.45
31-May	96	17.3	18.1	19.0	859	869	876	8.01	8.07	8.12	4.17	8.23	26.97
01-Jun	96	16.8	18.0	19.2	859	868	875	8.07	8.11	8.13	4.19	10.58	68.43
02-Jun	57	16.5	17.5	19.7	0	660	877	6.28	7.92	8.33	0.38	12.79	75.80

*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
19-Apr	19	7.7	9.2	19.3	1	1143	1335	7.02	7.44	9.36	0.00	53.88	85.26
20-Apr	93	6.2	9.4	13.1	1257	1330	1406	6.85	7.16	7.64	34.76	45.64	82.05
21-Apr	95	9.1	10.8	12.7	1396	1435	1521	7.55	7.91	8.30	27.57	42.01	56.70
22-Apr	95	9.5	11.4	13.9	1472	1503	1529	7.60	8.30	8.69	26.17	50.40	91.44
23-Apr	49	9.4	10.4	11.5	1525	1540	1555	7.61	8.40	8.88	23.90	47.33	109.44
24-Apr	0												
25-Apr	0												
26-Apr	0												
27-Apr	0												
28-Apr	0												
29-Apr	0												
30-Apr	0												
01-May	0												
02-May	0												
03-May	0												
04-May	0												
05-May	0												
06-May	0												
07-May	0												
08-May	0												
09-May	0												
10-May	0												
11-May	0												
12-May	0												
13-May	0												
14-May	0												
15-May	0												
16-May	0												
17-May	0												
18-May	0												
19-May	0												
20-May	0												
21-May	0												
22-May	0												
23-May	0												
24-May	0												
25-May	0												
26-May	0												
27-May	0												
28-May	0												
29-May	0												
30-May	0												
31-May	0												
01-Jun	0												
02-Jun	0												
03-Jun	0												
04-Jun	0												
05-Jun	0												
06-Jun	0												
07-Jun	0												
08-Jun	0												
09-Jun	0												
10-Jun	0												
11-Jun	0												
12-Jun	0												
13-Jun	0												
14-Jun	0												
15-Jun	0												

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
16-Jun	0												
17-Jun	0												
18-Jun	0												
19-Jun	0												
20-Jun	0												
21-Jun	0												
22-Jun	0												
23-Jun	0												
24-Jun	0												
25-Jun	0												
26-Jun	0												
27-Jun	0												
28-Jun	0												
29-Jun	0												
30-Jun	0												
01-Jul	0												
02-Jul	0												
03-Jul	34	16.0	16.3	16.8	1030	1060	1137	7.75	7.82	8.01	77.31	122.93	195.27
04-Jul	96	15.6	17.0	19.6	1001	1039	1051	7.85	7.96	8.11	17.76	46.62	305.37
05-Jul	96	16.3	18.9	22.0	1019	1047	1064	8.04	8.18	8.46	9.66	14.57	44.95
06-Jul	96	17.8	20.1	23.2	1008	1055	1081	8.40	8.51	8.71	7.20	25.40	393.47
07-Jul	62	11.8	17.1	25.0	0	19	1069	7.14	8.12	8.71	0.77	2.26	11.51

*Based on temperature readings

RSEM-R5A-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
29-Jun	27	19.7	20.7	21.7	1024	1134	1324	6.83	7.07	8.17	63.69	115.15	271.16
30-Jun	96	18.1	19.8	21.9	1017	1072	1139	6.56	7.06	8.44	21.70	40.31	64.70
01-Jul	53	16.0	18.1	19.6	1	879	1066	6.68	7.61	8.77	2.75	21.55	40.35
02-Jul	0												
03-Jul	0												
04-Jul	50	15.7	16.7	18.0	696	1040	1317	7.96	8.01	8.08	148.41	203.74	294.06
05-Jul	95	16.0	18.5	23.0	814	1542	2255	7.31	7.99	8.08	63.60	112.67	208.63
06-Jul	49	17.7	18.8	21.1	1956	2247	2933	7.82	7.98	8.04	52.03	69.75	107.33

*Based on temperature readings

RSEM-R5A-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
03-Jul	39	15.4	15.8	16.2	506	558	801	7.81	7.96	8.22	183.05	337.62	441.76
04-Jul	46	15.2	15.4	15.6	554	835	951	7.91	8.00	8.11	241.71	295.90	447.94

*Based on temperature readings

Appendix 3-B: 2020 In Situ Field Measurement Water Quality Data

PEACE RIVER
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Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
85-WP	2020-06-08 14:00	13	8.6	891	10.2	10.2	10.2
85-WP	2020-06-09 18:20	18.8	8.4	977	55.1	54.5	55.1
85-WP	2020-06-10 18:40	21.1	8.4	971	20	20.1	20
85-WP	2020-06-11 16:30	19.9	8.4	966	9.6	9.5	9.6
85-WP	2020-06-13 17:42	20.4	8.3	979	10.1	10	10.1
85-WP	2020-06-14 21:38	14.8	8	937	96.3	96.1	96.3
85-WP	2020-06-15 21:00	13.6	8.2	877	58.6	60	58.6
85-WP	2020-06-16 9:30	13.7	8.3	927	86.6	87.6	86.6
85-WP	2020-07-01 18:00	15.7	8.5	945	56.8	57.1	56.8
A25_EOP	2020-04-17 18:47	2.8	8.7	309	90.9	91.2	90.9
A25_EOP	2020-07-03 18:55	16.2	8.3	365	84.5	84.7	84.5
AC_E_HAIRPIN_DITCH	2020-01-01 12:15	3.8	8.2	861	14.9	14.6	14.9
AC_E_HAIRPIN_DITCH	2020-01-02 15:10	4.1	8.3	852	11.7	11.8	11.7
AC_E_HAIRPIN_DITCH	2020-01-03 11:20	1.6	7.8	847	11.3	11.3	11.3
AC_E_HAIRPIN_DITCH	2020-01-04 13:45	0.9	7.7	848	6.8	6.8	6.8
AC_E_HAIRPIN_DITCH	2020-01-05 11:40	3.9	7.6	852	5.7	5.7	5.7
AC_E_HAIRPIN_DITCH	2020-01-06 11:50	2.5	7.9	801	1.6	1.6	1.6
AC_E_HAIRPIN_DITCH	2020-01-07 11:25	3	7.6	815	2.4	2.3	2.4
AC_E_HAIRPIN_DITCH	2020-01-08 11:50	0.3	8	812	1.8	1.7	1.8
AC_E_HAIRPIN_DITCH	2020-01-09 13:05	2.2	8.1	858	13.6	13.7	13.6
AC_E_HAIRPIN_DITCH	2020-01-10 13:00	3.8	7.9	837	9	8.9	9
AC_E_HAIRPIN_DITCH	2020-01-11 10:10	4.7	8.2	874	5.1	5	5.1
AC_E_HAIRPIN_DITCH	2020-01-12 13:55	1.7	7.9	833	8.6	7.5	8.6
AC_E_HAIRPIN_DITCH	2020-01-13 10:02	3.7	7.5	945	5.3	5.5	5.3
AC_E_HAIRPIN_DITCH	2020-01-14 10:07	3.1	8.4	877	4.4	4.3	4.4
AC_E_HAIRPIN_DITCH	2020-01-15 11:20	3.4	8.4	845	3	3	3
AC_E_HAIRPIN_DITCH	2020-01-16 10:47	4.8	8.4	867	1.6	1.6	1.6
AC_E_HAIRPIN_DITCH	2020-01-17 14:30	3.5	8.2	849	4.2	4.1	4.2
AC_E_HAIRPIN_DITCH	2020-01-18 10:17	3	8.2	872	6.9	6.8	6.9
AC_E_HAIRPIN_DITCH	2020-01-19 11:55	3.9	8.3	837	2	2.1	2
AC_E_HAIRPIN_DITCH	2020-01-20 11:05	4.1	8.3	800	1.7	1.7	1.7
AC_E_HAIRPIN_DITCH	2020-01-21 13:00	2.9	7.6	816	3.3	3.3	3.3
AC_E_HAIRPIN_DITCH	2020-01-22 14:20	4.2	8	815	4.6	4.6	4.6
AC_E_HAIRPIN_DITCH	2020-01-23 16:50	3.2	8	799	6.4	5.8	6.4
AC_E_HAIRPIN_DITCH	2020-01-24 12:15	3.6	7.8	819	3.8	3.7	3.8
AC_E_HAIRPIN_DITCH	2020-01-25 11:20	3.9	8	817	3.3	3.3	3.3
AC_E_HAIRPIN_DITCH	2020-01-26 12:55	3.7	7.7	817	4	4	4
AC_E_HAIRPIN_DITCH	2020-01-27 15:45	3.5	7.7	808	3.4	3.2	3.4
AC_E_HAIRPIN_DITCH	2020-01-28 11:25	4.5	7.9	826	4.9	4.8	4.9
AC_E_HAIRPIN_DITCH	2020-01-29 10:06	4.4	8.2	817	1.8	1.8	1.8
AC_E_HAIRPIN_DITCH	2020-01-30 11:48	5	8	808	1.7	1.7	1.7
AC_E_HAIRPIN_DITCH	2020-01-31 12:00	5.1	8.2	817	2	2	2
AC_E_HAIRPIN_DITCH	2020-02-01 0:00	5.4	8.1	802	2.8	2.8	2.8
AC_E_HAIRPIN_DITCH	2020-02-02 11:34	3.4	8.4	820	3.9	3.9	3.9
AC_E_HAIRPIN_DITCH	2020-02-03 11:00	2.1	8.3	827	3.3	3.3	3.3
AC_E_HAIRPIN_DITCH	2020-02-04 10:40	2.9	8.4	837	3.1	3.1	3.1
AC_E_HAIRPIN_DITCH	2020-02-05 11:30	4.8	8	794	3.6	3.6	3.6
AC_E_HAIRPIN_DITCH	2020-02-06 10:47	6	8.1	828	4.5	4.4	4.5
AC_E_HAIRPIN_DITCH	2020-02-07 13:00	7.1	8.1	833	5.2	5.2	5.2
AC_E_HAIRPIN_DITCH	2020-02-08 10:45	4.7	8.1	809	3.5	3.5	3.5
AC_E_HAIRPIN_DITCH	2020-02-09 12:05	5.2	8.2	818	2.5	2.5	2.5
AC_E_HAIRPIN_DITCH	2020-02-11 14:20	1.5	7.7	797	4	3.9	4
AC_E_HAIRPIN_DITCH	2020-02-12 14:20	1.9	8	806	2	2	2
AC_E_HAIRPIN_DITCH	2020-02-13 12:55	5.8	7.9	822	1.4	1.3	1.4
AC_E_HAIRPIN_DITCH	2020-02-14 10:25	1.8	8	823	2.1	2.1	2.1
AC_E_HAIRPIN_DITCH	2020-02-15 10:35	2.7	7.9	816	4.8	4.8	4.8
AC_E_HAIRPIN_DITCH	2020-02-16 13:00	2.7	8	846	22	21.8	22
AC_E_HAIRPIN_DITCH	2020-02-17 14:10	2.3	7.7	816	6.8	6.6	6.8
AC_E_HAIRPIN_DITCH	2020-02-18 11:15	-0.1	7.9	871	77	77	77
AC_E_HAIRPIN_DITCH	2020-02-19 12:25	2	7.9	803	3.2	3.2	3.2
AC_E_HAIRPIN_DITCH	2020-02-20 11:22	2.7	8	806	4.5	4.6	4.5
AC_E_HAIRPIN_DITCH	2020-02-21 10:35	3.1	8	795	4.6	4.6	4.6
AC_E_HAIRPIN_DITCH	2020-02-22 11:03	3.8	8.1	805	3.1	3.1	3.1
AC_E_HAIRPIN_DITCH	2020-02-23 10:00	1.6	8.2	809	3	2.8	3
AC_E_HAIRPIN_DITCH	2020-02-25 13:10	2.3	8	784	2.7	2.7	2.7
AC_E_HAIRPIN_DITCH	2020-02-27 15:05	2.6	8	794	2	2	2
AC_E_HAIRPIN_DITCH	2020-02-28 15:30	3.1	8.2	780	7.8	7.9	7.8
AC_E_HAIRPIN_DITCH	2020-02-29 11:30	1.7	8.3	825	4.2	4.3	4.2
AC_E_HAIRPIN_DITCH	2020-03-01 10:20	2.3	8.1	830	3.7	3.9	3.7
AC_E_HAIRPIN_DITCH	2020-03-03 10:40	6	7.3	926	4.5	4.4	4.5
AC_E_HAIRPIN_DITCH	2020-03-04 15:30	3.3	7.9	731	27.2	26.7	27.2
AC_E_HAIRPIN_DITCH	2020-03-05 14:20	3.7	7.4	800	21.3	21.3	21.3
AC_E_HAIRPIN_DITCH	2020-03-06 10:15	3.4	7.8	937	7.1	7.2	7.1
AC_E_HAIRPIN_DITCH	2020-03-07 10:15	4.3	7.3	928	9	8.8	9
AC_E_HAIRPIN_DITCH	2020-03-08 13:20	5.1	7.4	942	4.9	4.9	4.9
AC_E_HAIRPIN_DITCH	2020-03-09 12:30	2.8	7.3	887	6.6	6.5	6.6
AC_E_HAIRPIN_DITCH	2020-03-11 11:55	5.6	7.9	1553	30	30.5	30
AC_E_HAIRPIN_DITCH	2020-03-24 11:30	3	7.4	895	29.6	29.3	29.6
AC_E_HAIRPIN_DITCH	2020-03-25 11:50	4.2	7.5	894	14.5	14.4	14.5
AC_E_HAIRPIN_DITCH	2020-03-27 15:40	3.9	7.3	758	28	27	28
AC_E_HAIRPIN_DITCH	2020-03-28 13:00	3.4	7.4	839	10.1	10.2	10.1
AC_E_HAIRPIN_DITCH	2020-03-29 12:40	3.9	7.6	895	8.9	8.7	8.9
AC_E_HAIRPIN_DITCH	2020-04-09 15:17	2.9	3.9	586	74	75	74
AC_E_HAIRPIN_DITCH	2020-04-12 10:56	19.4	6.4	1615	67.7	67.6	67.7
AC_E_HAIRPIN_DITCH	2020-04-15 11:50	18.1	7.6	2190	73.6	73.6	73.6
AC_E_HAIRPIN_DITCH	2020-04-16 11:18	14.7	5.9	2910	31.7	31.9	31.7
AC_E_HAIRPIN_DITCH	2020-04-18 9:10	8.2	7.8	3090	14.4	14.4	14.4
AC_E_HAIRPIN_DITCH	2020-04-19 14:00	8.5	7.9	951	10.3	9.9	10.3
AC_E_HAIRPIN_DITCH	2020-04-20 13:20	10.4	8	1225	1334	1330	1334
AC_E_HAIRPIN_DITCH	2020-04-21 9:55	10.3	8	1693	36.1	36.3	36.1

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
AC_E_HAIRPIN_DITCH	2020-04-22 10:20	7.7	8.4	1271	2644	2641	2644
AC_E_HAIRPIN_DITCH	2020-04-23 13:02	8.8	8.4	1726	10	10	10
AC_E_HAIRPIN_DITCH	2020-04-24 9:54	6.9	8.4	1690	20	20	20
AC_E_HAIRPIN_DITCH	2020-04-25 9:55	7.3	7.5	1624	79.1	79.3	79.1
AC_E_HAIRPIN_DITCH	2020-04-26 10:26	8.7	7.7	2420	50.6	50.7	50.6
AC_E_HAIRPIN_DITCH	2020-04-27 11:58	9.4	8.4	1416	37	37.2	37
AC_E_HAIRPIN_DITCH	2020-04-28 10:58	10.4	8.1	1565	7.9	7.9	7.9
AC_E_HAIRPIN_DITCH	2020-04-29 12:35	10.4	7.5	2500	45.2	44.8	45.2
AC_E_HAIRPIN_DITCH	2020-04-30 12:51	9.8	8.1	845	7.1	7	7.1
AC_E_HAIRPIN_DITCH	2020-05-05 15:15	9.8	8.2	1057	4.2	4.2	4.2
AC_E_HAIRPIN_DITCH	2020-05-06 15:30	9.6	7.5	903	15.5	15.2	15.5
AC_E_HAIRPIN_DITCH	2020-05-09 11:45	8.7	7.5	887	5.3	5.2	5.3
AC_E_HAIRPIN_DITCH	2020-05-10 14:00	1.2	7.4	871	1.2	1.2	1.2
AC_E_HAIRPIN_DITCH	2020-05-12 10:26	14	7.3	1215	3.9	3.8	3.9
AC_E_HAIRPIN_DITCH	2020-05-13 10:23	11.8	7.8	1166	4.1	4.1	4.1
AC_E_HAIRPIN_DITCH	2020-05-14 10:25	7.8	7.9	883	4.1	4	4.1
AC_E_HAIRPIN_DITCH	2020-05-16 10:35	11.4	7.7	874	1.5	1.5	1.5
AC_E_HAIRPIN_DITCH	2020-05-18 10:45	9.4	8.1	980	19.6	19.4	19.6
AC_E_HAIRPIN_DITCH	2020-05-19 11:12	12.4	7.5	2250	53.4	53.3	53.4
AC_E_HAIRPIN_DITCH	2020-05-20 11:03	15.6	7.5	2870	72.8	71.5	72.8
AC_E_HAIRPIN_DITCH	2020-05-21 12:55	10.7	7.7	2270	736	735	736
AC_E_HAIRPIN_DITCH	2020-05-22 13:40	9.4	7.7	2260	704	704	704
AC_E_HAIRPIN_DITCH	2020-05-27 16:00	10.4	7.7	842	8	7.7	8
AC_E_HAIRPIN_DITCH	2020-05-28 16:30	11.6	7.4	884	3.9	3	3.9
AC_E_HAIRPIN_DITCH	2020-05-29 13:40	17.7	7.4	876	1.7	1.6	1.7
AC_E_HAIRPIN_DITCH	2020-05-31 14:45	11.6	7.4	847	3.1	3.8	3.1
AC_E_HAIRPIN_DITCH	2020-06-02 12:50	11.5	7.5	975	11.6	11.2	11.6
AC_E_HAIRPIN_DITCH	2020-06-04 10:17	16.1	7.6	927	7.5	7.6	7.5
AC_E_HAIRPIN_DITCH	2020-06-05 14:10	20.5	7.8	982	9.6	9.5	9.6
AC_E_HAIRPIN_DITCH	2020-06-06 9:45	15.1	8	2280	25.1	25	25.1
AC_E_HAIRPIN_DITCH	2020-06-07 9:45	12.9	7.8	989	4.5	4.5	4.5
AC_E_HAIRPIN_DITCH	2020-06-12 11:36	16.1	7.6	945	2.6	2.6	2.6
AC_E_HAIRPIN_DITCH	2020-06-13 11:25	19.8	7.5	3140	18.5	18	18.5
AC_E_HAIRPIN_DITCH	2020-06-24 10:10	17.2	7.8	936	4.3	4.2	4.3
AC_E_HAIRPIN_DITCH	2020-10-20 16:50	6.4	8.7	879	12.2	11.8	12.2
AC_E_HAIRPIN_DITCH	2020-10-21 13:45	5.9	7.5	989	5.6	5.7	5.6
AC_E_HAIRPIN_DITCH	2020-10-22 12:30	5	7.3	989	8	7.9	8
AC_E_HAIRPIN_DITCH	2020-10-23 14:45	7.1	7.6	1018	7.4	7.4	7.4
AC_E_HAIRPIN_DITCH	2020-10-24 16:10	3.8	7.7	1006	OR		
AC_E_HAIRPIN_DITCH	2020-10-25 15:30	6.2	7.8	1060	5.7	5.6	5.7
AC-E-GW-Sump	2020-05-18 15:30	12.7	8.2	2500	29.2	29.3	29.2
AC-E-GW-Sump	2020-06-08 11:20	14.5	8.4	2230	17.9	17.9	17.9
AC-E-GW-Sump	2020-06-12 16:30	19.3	8.3	1819	46.8	46.8	46.8
AC-E-GW-Sump	2020-06-17 0:00						
AC-E-Sump	2020-05-12 10:36	13.6	7.2	2580	54.4	53.8	54.4
AC-E-Sump	2020-05-13 10:40	14.2	7.5	2780	6.4	6.4	6.4
AC-E-Sump	2020-05-14 10:32	11	7.6	2930	8.5	8.5	8.5
AC-E-Sump	2020-05-18 11:05	10.8	7.8	2360	5.4	5.3	5.4
AC-E-Sump	2020-06-04 10:24	15.5	8	2410	7.5	7.5	7.5
AC-E-Sump	2020-06-05 14:18	20.6	7.3	2130	20.2	19.3	20.2
AC-E-Sump	2020-06-12 11:43	18.3	7.5	2910	6.7	6.6	6.7
AC-E-Sump	2020-06-24 10:03	19	7.5	2450	7.7	7.9	7.7
AC-E-Sump	2020-06-27 13:45	18.6	7.8	1968	7.2	7.1	7.2
AC-E-Sump	2020-10-25 15:35	5.5	8.1	901	5.4	5.3	5.4
AC-E-Sump	2020-10-26 15:30	5.9	7.9	979	16.5	16.5	16.5
AC-E-Sump	2020-10-28 15:00	7	7.8	1003	8.7	8.7	8.7
AC-E-Sump	2020-10-29 17:00	7.6	7.8	1015	9.2	9.1	9.2
AC-E-Sump	2020-10-30 15:20	5.8	7.7	1003	6.2	6.2	6.2
AC-E-Sump	2020-11-01 14:10	6.8	7.6	871	34	34	34
AC-E-Sump	2020-11-02 13:00	6.8	7.4	1179	71.1	71.1	71.1
AC-E-Sump	2020-11-17 15:00	4	7.8	1024	7.8	7.8	7.8
AC-E-Sump	2020-11-20 17:15	4.3	7.6	987	4	4	4
AC-E-Sump	2020-12-09 16:15	5.6	7.5	972	7.8	7.8	7.8
AC-E-Sump	2020-12-10 15:20	1.9	7.7	988	2.2	2.3	2.2
AC-E-Sump	2020-12-12 16:00	3.2	7.8	1007	6.5	6.5	6.5
AC-E-Sump	2020-12-22 12:25	4.4	7.9	1024	4.9	4.8	4.9
AC-E-Sump	2020-12-24 14:00	6.7	7.8	1011	4.2	4.2	4.2
AC-E-Sump	2020-12-26 13:20	5.6	7.7	1009	4.3	4.2	4.3
AC-E-Sump	2020-12-27 14:30	6.4	7.6	909	4.2	4.2	4.2
AC-E-Sump	2020-12-30 15:51	5	7.1	1006	4.6	4.7	4.6
AC-E-Sump	2020-12-31 15:30	5.7	7.2	1002	3.8	3.8	3.8
AC-W-Sump	2020-05-13 10:30	11.3	8	1246	0.9	0.9	0.9
AC-W-Sump	2020-05-19 16:35	20.3	8.6	1186	2.1	2.1	2.1
AC-W-Sump	2020-06-28 14:05	16.8	8.1	1420	7.3	7.3	7.3
AC-W-Sump	2020-11-04 12:45	1.9	8.1	1392	6.4	6.4	6.4
AC-W-Sump	2020-11-13 10:50	2.1	8.4	1249	4.6	4.6	4.6
AC-W-Sump	2020-11-15 10:52	0.3	8.2	1394	5.2	5.2	5.2
AC-W-Sump	2020-11-25 12:40	0.1	8.2	1336	7.6	7.6	7.6
AC-W-Sump	2020-11-29 11:30	1.8	8.3	1278	8.3	8.2	8.3
AC-W-Sump	2020-11-30 12:18	2.8	8.5	1284	4.6	4.6	4.6
AC-W-Sump	2020-12-01 11:58	1.7	8.3	1265	5.5	5.5	5.5
AC-W-Sump	2020-12-03 11:30	1.1	8.3	1283	5	5	5
AC-W-Sump	2020-12-05 11:56	3.2	8.2	1242	10.7	10.6	10.7
AC-W-Sump	2020-12-16 12:25	-0.1	8	1354	8.3	8.2	8.3
Area_30_EOP	2020-04-16 10:45	3.6	7.9	393	48	48.5	48
Area_30_EOP	2020-05-22 13:10	7.6	8.1	981	24.5	24.6	24.5
Area_30_EOP	2020-06-07 9:15	11.3	8.2	1355	14.2	14.4	14.2
Area_A_N_Ditch	2020-01-08 0:00	1.6	7.7	631	6.6	6.5	6.6
Area_A_N_Ditch	2020-02-06 14:40	4.1	7.7	661	8.9	8.9	8.9
Area_A_N_Ditch	2020-03-11 11:30	3.8	7.9	367	24.7	24.7	24.7

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
Area_A_N_Ditch	2020-04-03 12:15	3	7.7	572	4.4	4.4	4.4
Area_A_N_Ditch	2020-05-07 13:45	11.4	7.9	646	11.4	11.4	11.4
Area_A_N_Ditch	2020-06-05 13:55	19	7.8	742	4.5	4.5	4.5
Area_A_N_Ditch	2020-07-08 14:45	19.5	7.9	570	5.8	5.8	5.8
Area_A_N_Ditch	2020-07-09 14:45	19.5	7.9	570	5.8	5.8	5.8
Area_A_N_Ditch	2020-10-01 14:30	14.8	8.1	454	6.1	6.3	6.1
Area_A_N_Ditch	2020-10-08 14:18	10.9	7.8	512	16.6	16.6	16.6
Area_A_N_Ditch	2020-10-22 11:15	6.9	8.5	592	10.3	10.2	10.3
Area_A_N_Ditch	2020-12-26 13:30	1	7.3	607	3.6	3.6	3.6
CVC_BT	2020-03-03 14:40	13.3	7.2	1613	11.3	11.2	11.3
CVC_BT	2020-03-04 15:20	13	8.2	1727	12.8	12.6	12.8
DIC_Sump	2020-05-13 14:10	14.7	7.7	780	25.3	25.2	25.3
DIC_Sump	2020-05-14 13:10	9.2	7.7	562	6.2	6.3	6.2
DIC-DIP	2020-08-18 17:55	21.9	8.1	242	9.4	9.4	9.4
DIC-DIP	2020-08-19 12:45	19.8	8.1	250	11.2	11.2	11.2
DIC-DIP	2020-08-20 16:10	17.3	8.2	241	10.1	10.1	10.1
DIC-DIP	2020-08-21 16:00	17.9	8.6	222	9.4	9.3	9.4
DIC-DIP	2020-08-22 14:20	16.6	8.6	232	11.1	11	11.1
DIC-DIP	2020-08-23 17:00	18.4	8.6	260	6.6	6.6	6.6
DIC-DIP	2020-08-24 16:20	17.9	8.5	263	5.4	5.3	5.4
DIC-DIP	2020-08-25 13:20	17.4	8.2	306	7	7	7
DIC-DIP	2020-08-26 14:30	17.7	8.3	296	6.9	6.9	6.9
DIC-DIP	2020-08-27 13:25	19.3	8.2	304	6.3	6.2	6.3
DIC-DIP	2020-08-28 15:20	16.8	8.4	277	4	3.8	4
DIC-DIP	2020-08-29 12:30	15	8.2	270	11.2	11.1	11.2
DIC-DIP	2020-08-30 11:10	13.7	8.2	242	41.4	42.5	41.4
DIC-DIP	2020-08-31 15:20	13.6	8.6	235	52.9	53.5	52.9
DIC-DIP	2020-09-01 15:05	14.7	8.5	235	93.9	95.6	93.9
DIC-DIP	2020-09-02 12:35	14.8	9	259	103.4	103.3	103.4
DIC-DIP	2020-09-03 13:05	14.7	9.1	279	58.5	59.3	58.5
DIC-DIP	2020-09-04 11:10	14.4	9.2	290	43.4	43.9	43.4
DIC-DIP	2020-09-05 10:35	6.5	9	266	25.9	26	25.9
DIC-DIP	2020-09-06 13:40	15.5	9	291	22.4	22.6	22.4
DIC-DIP	2020-09-07 9:40	12.6	9.2	299	55.7	55.5	55.7
DIC-DIP	2020-09-08 10:15	17.2	9.3	291	37.4	37.2	37.4
DIC-DIP	2020-09-09 9:40	16.1	9.2	311			
DIC-DIP	2020-09-10 14:45	15.5	9	349	68.3	68	68.3
DIC-DIP	2020-09-11 11:00	14.5	9	347	39.5	39.4	39.5
DIC-DIP	2020-09-21 17:20	12.8	8.3	243	8.8	8.8	8.8
DIC-DIP	2020-09-23 16:30	13.1	8.6	226	9.8	9.6	9.8
DIC-DIP	2020-09-27 11:30	11.1	8.1	251	7	6.9	7
DIC-DIP	2020-10-02 12:30	12.9	8.4	250	10.6	10.9	10.7
DOC_S_Sump	2020-01-08 15:15	1.6	8	1133	1.1	1.1	1.1
DOC_S_Sump	2020-02-06 13:30	7	8.1	1004	3	2.8	3
DOC_S_Sump	2020-06-06 12:30	13.6	12.3	4170	63	63	63
DOC_S_Sump	2020-07-11 14:00	23.4	7.2	2350	7.4	7.6	7.4
DOC-DOP	2020-08-22 14:10	16.2	8.2	254	11.8	11.4	11.8
DOC-DOP	2020-08-23 16:45	19.5	8.5	259	14.6	14.4	14.6
DOC-DOP	2020-08-24 16:10	18.5	8.3	265	15.8	15.7	15.8
DOC-DOP	2020-08-25 13:00	17.9	8.4	318	11.6	11.8	11.6
DOC-DOP	2020-08-26 14:15	18.6	8.4	289	13.3	13.3	13.3
DOC-DOP	2020-08-27 13:10	18.6	8.5	295	13.2	13.1	13.2
DOC-DOP	2020-08-28 15:00	17.3	8.6	283	19.4	19.5	19.4
DOC-DOP	2020-08-29 12:15	15.7	8.6	245	9.8	10.1	9.8
DOC-DOP	2020-08-30 11:20	15.2	8.6	240	5.8	5.7	5.8
DOC-DOP	2020-08-31 15:35	15.1	8.3	246	5.8	5.7	5.8
DOC-DOP	2020-09-01 14:50	14.9	8.2	268	20	17.7	20
DOC-DOP	2020-09-02 13:05	15.6	8.4	249	10.2	10.3	10.2
DOC-DOP	2020-09-03 12:50	14.4	8.6	242	10.3	10.2	10.3
DOC-DOP	2020-09-04 11:25	14.7	8.6	234	24.8	24.8	24.8
DOC-DOP	2020-09-05 10:10	15.5	8.4	208	44.2	44	44.2
DOC-DOP	2020-09-06 13:05	14	8.8	243	69.7	69.6	69.7
DOC-DOP	2020-09-07 9:28	12.9	8.7	228	113	114	113
DOC-DOP	2020-09-08 16:30	15.9	8.7	222	78.2	76.1	78.2
DOC-DOP	2020-09-09 15:00	19.8	8.4	259	70.5	71	70.5
DOC-DOP	2020-09-10 14:00	16	8.7	626	83	82.2	83
DOC-DOP	2020-09-11 9:00	14.1	8.8	251	68.9	68.4	68.9
DOC-DOP	2020-09-21 16:20	14	8.4	226	15.7	15.6	15.7
DOC-DOP	2020-09-23 15:55	13	8.6	221	30.8	30.8	30.8
DOC-DOP	2020-09-27 12:55	12.3	8.3	231	15.5	15.8	15.5
DOC-DOP	2020-10-02 12:10	12.8	8.3	248	9.9	10.2	10.2
DOP_BT_East	2020-01-08 15:40	4.9	8	4050	27.9	27.8	27.9
DS_L3	2020-07-10 21:00				285		285
DS_L3	2020-07-11 4:00				278		278
DS_L3	2020-07-11 20:30				162		162
DS_L3	2020-07-12 4:00				176		176
DS_L3	2020-07-12 10:30				161		161
DS_L3	2020-07-12 14:30				155		155
DS_L3	2020-07-12 20:30				139		139
DS_L3	2020-07-13 4:00				130		130
DS_L3	2020-07-13 10:30				124		124
DS_L3	2020-07-13 15:00				146		146
DS_L3	2020-07-13 20:30				160		160
DS_L3	2020-07-14 4:00				208		208
DS_L3	2020-07-14 11:00				169		169
DS_L3	2020-07-14 15:30				160		160
DS_L3	2020-07-14 20:30				159		159
DS_L3	2020-07-15 4:00				134		134
DS_L3	2020-07-15 10:30				126		126

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
DS_L3	2020-07-15 15:00				94		94
DS_L3	2020-07-15 20:30				99		99
DS_L3	2020-07-16 4:00				102		102
DS_L3	2020-07-16 10:45				83		83
DS_L3	2020-07-16 14:45				82		82
DS_L3	2020-07-16 20:30				90		90
DS_L3	2020-07-17 4:00				86		86
DS_L3	2020-07-17 11:00				70		70
DS_L3	2020-07-17 14:50				71		71
DS_L3	2020-07-17 20:30				77		77
DS_L3	2020-07-18 4:00				81		81
DS_L3	2020-07-18 11:15				77		77
DS_L3	2020-07-18 15:30				76		76
DS_L3	2020-07-18 20:30				77		77
DS_L3	2020-07-19 4:00				81		81
DS_L3	2020-07-19 12:00				59		59
DS_L3	2020-07-19 15:00				60		60
DS_L3	2020-07-19 20:30				59		59
DS_L3	2020-07-20 4:00				53		53
DS_L3	2020-07-20 20:30				51		51
DS_L3	2020-07-21 4:00				44		44
DS_L3	2020-07-21 10:00				117		117
DS_L3	2020-07-21 14:30				144		144
DS_L3	2020-07-21 20:30				42		42
DS_L3	2020-07-22 4:00				39		39
DS_L3	2020-07-22 9:30				55		55
DS_L3	2020-07-22 14:30				56		56
DS_L3	2020-07-22 20:30				53		53
DS_L3	2020-07-23 4:00				58		58
DS_L3	2020-07-23 9:00				53		53
DS_L3	2020-07-23 14:50				47		47
DS_L3	2020-07-23 20:30				65		65
DS_L3	2020-07-24 9:10				39		39
DS_L3	2020-07-24 14:40				37		37
DS_L3	2020-07-24 20:30				101		101
DS_L3	2020-07-25 4:00				110		110
DS_L3	2020-07-25 9:30				47		47
DS_L3	2020-07-25 14:00				63		63
DS_L3	2020-07-25 20:30				48		48
DS_L3	2020-07-26 4:00				39		39
DS_L3	2020-07-26 9:10				102		102
DS_L3	2020-07-26 14:00				87		87
DS_L3	2020-07-26 20:30				164		164
DS_L3	2020-07-27 4:00				65		65
DS_L3	2020-07-27 9:30				55		55
DS_L3	2020-07-27 14:00				52		52
DS_L3	2020-07-27 20:30				54		54
DS_L3	2020-07-28 4:30				46		46
DS_L3	2020-07-28 9:00				37		37
DS_L3	2020-07-28 14:20				41		41
DS_L3	2020-07-28 20:30				38		38
DS_L3	2020-07-29 4:30				36		36
DS_L3	2020-07-29 9:00				31		31
DS_L3	2020-07-29 14:20				33		33
DS_L3	2020-07-29 20:30				39		39
DS_L3	2020-07-30 4:30				29		29
DS_L3	2020-07-30 10:15				28		28
DS_L3	2020-07-30 20:30				29		29
DS_L3	2020-07-31 4:30				30		30
DS_L3	2020-07-31 9:20				29		29
DS_L3	2020-07-31 15:10				30		30
DS_L3	2020-07-31 20:30				26		26
DS_L3	2020-08-01 4:30				26		26
DS_L3	2020-08-01 20:30				29		29
DS_L3	2020-08-02 4:30				27		27
DS_L3	2020-08-02 11:00				21.5		21.5
DS_L3	2020-08-02 15:00				27.9		27.9
DS_L3	2020-08-02 20:30				25		25
DS_L3	2020-08-03 4:30				24		24
DS_L3	2020-08-03 11:00				30.7		30.7
DS_L3	2020-08-03 15:00				26.6		26.6
DS_L3	2020-08-03 20:30				24		24
DS_L3	2020-08-04 4:30				26		26
DS_L3	2020-08-04 11:00				22		22
DS_L3	2020-08-04 15:00				23.8		23.8
DS_L3	2020-08-04 20:30				25		25
DS_L3	2020-08-05 4:00				22		22
DS_L3	2020-08-05 11:00				19.3		19.3
DS_L3	2020-08-05 15:00				22.2		22.2
DS_L3	2020-08-05 20:30				13		13
DS_L3	2020-08-06 4:00				27		27
DS_L3	2020-08-06 11:00				19		19
DS_L3	2020-08-06 15:00				21.4		21.4
DS_L3	2020-08-06 20:30				23		23
DS_L3	2020-08-07 4:30				24		24
DS_L3	2020-08-07 11:00				18.2		18.2
DS_L3	2020-08-07 15:00				18.1		18.1
DS_L3	2020-08-07 20:30				20		20
DS_L3	2020-08-08 4:30				19		19

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
DS_L3	2020-08-08 11:00				26		26
DS_L3	2020-08-08 15:00				25.8		25.8
DS_L3	2020-08-08 20:30				27		27
DS_L3	2020-08-09 4:30				26		26
DS_L3	2020-08-09 20:30				22		22
DS_L3	2020-08-10 4:30				21		21
DS_L3	2020-08-10 20:30				27		27
DS_L3	2020-08-11 4:30				23		23
DS_L3	2020-08-11 9:30				20		20
DS_L3	2020-08-11 14:20				20		20
DS_L3	2020-08-11 20:30				21		21
DS_L3	2020-08-12 4:30				22		22
DS_L3	2020-08-12 9:50				23		23
DS_L3	2020-08-12 15:15				27		27
DS_L3	2020-08-12 20:30				21		21
DS_L3	2020-08-13 4:30				23		23
DS_L3	2020-08-13 13:45				19		19
DS_L3	2020-08-13 20:30				16		16
DS_L3	2020-08-14 4:30				15		15
DS_L3	2020-08-14 9:15				12		12
DS_L3	2020-08-14 15:45				17		17
DS_L3	2020-08-15 5:00				14		14
DS_L3	2020-08-15 8:45				17		17
DS_L3	2020-08-15 14:30				20		20
DS_L3	2020-08-15 20:30				17		17
DS_L3	2020-08-16 5:00				13		13
DS_L3	2020-08-16 9:30				18		18
DS_L3	2020-08-16 14:30				15		15
DS_L3	2020-08-16 20:30				13		13
DS_L3	2020-08-17 5:00				12		12
DS_L3	2020-08-17 9:20				17		17
DS_L3	2020-08-17 14:30				16		16
DS_L3	2020-08-17 20:30				15		15
DS_L3	2020-08-18 4:30				14		14
DS_L3	2020-08-18 20:30				15		15
DS_L3	2020-08-19 5:00				19		19
DS_L3	2020-08-19 20:30				13		13
DS_L3	2020-08-20 5:00				9		9
DS_L3	2020-08-20 20:30				10		10
DS_L3	2020-08-21 5:00				11		11
DS_L3	2020-08-21 19:30				8		8
DS_L3	2020-08-22 5:00				29		29
DS_L3	2020-08-22 19:30				41		41
DS_L3	2020-08-23 5:00				70		70
DS_L3	2020-08-23 19:30				222		222
DS_L3	2020-08-24 5:00				227		227
DS_L3	2020-08-24 11:00				150.3		150.3
DS_L3	2020-08-24 15:30				148.9		148.9
DS_L3	2020-08-24 20:30				95		95
DS_L3	2020-08-25 5:30				70		70
DS_L3	2020-08-25 11:00				55		55
DS_L3	2020-08-25 15:30				52		52
DS_L3	2020-08-25 20:30				40		40
DS_L3	2020-08-26 5:30				35		35
DS_L3	2020-08-26 11:00				41		41
DS_L3	2020-08-26 16:00				31.8		31.8
DS_L3	2020-08-26 20:30				31		31
DS_L3	2020-08-27 5:30				29		29
DS_L3	2020-08-27 20:30				24		24
DS_L3	2020-08-28 20:30				15		15
DS_L3	2020-08-29 20:30				11		11
DS_L3	2020-08-30 5:30				12		12
DS_L3	2020-08-30 11:00				11.7		11.7
DS_L3	2020-08-30 16:00				12.6		12.6
DS_L3	2020-08-30 20:30				10		10
DS_L3	2020-08-31 5:30				11		11
DS_L3	2020-09-01 9:30				9		9
DS_L3	2020-09-01 14:45				11		11
DS_L3	2020-09-01 20:30				8		8
DS_L3	2020-09-02 5:30				10		10
DS_L3	2020-09-02 9:00				12		12
DS_L3	2020-09-02 15:15				13		13
DS_L3	2020-09-02 20:30				10		10
DS_L3	2020-09-03 9:00				28		28
DS_L3	2020-09-03 15:00				26		26
DS_L3	2020-09-03 20:30				21		21
DS_L3	2020-09-04 5:30				16		16
DS_L3	2020-09-04 9:00				13		13
DS_L3	2020-09-04 15:30				14		14
DS_L3	2020-09-04 20:30				16		16
DS_L3	2020-09-05 5:30				17		17
DS_L3	2020-09-05 20:00				14		14
DS_L3	2020-09-06 5:30				12		12
DS_L3	2020-09-06 9:00				12		12
DS_L3	2020-09-06 15:15				13		13
DS_L3	2020-09-06 20:00				11		11
DS_L3	2020-09-07 13:15				17		17
DS_L3	2020-09-07 20:00				11		11
DS_L3	2020-09-08 5:45				10		10

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
DS_L3	2020-09-08 8:45				11		11
DS_L3	2020-09-08 14:15				10		10
DS_L3	2020-09-08 20:00				15		15
DS_L3	2020-09-09 5:45				13		13
DS_L3	2020-09-09 9:45				12		12
DS_L3	2020-09-09 14:15				10		10
DS_L3	2020-09-09 20:00				10		10
DS_L3	2020-09-10 5:45				12		12
DS_L3	2020-09-10 9:00				8		8
DS_L3	2020-09-10 14:00				11		11
DS_L3	2020-09-10 20:00				10		10
DS_L3	2020-09-11 5:45				14		14
DS_L3	2020-09-11 10:00				9		9
DS_L3	2020-09-11 15:15				13		13
DS_L3	2020-09-11 20:00				10		10
DS_L3	2020-09-12 5:45				13		13
DS_L3	2020-09-12 20:00				12		12
DS_L3	2020-09-13 6:00				13		13
DS_L3	2020-09-13 10:00				11		11
DS_L3	2020-09-13 13:15				11		11
DS_L3	2020-09-13 20:00				10		10
DS_L3	2020-09-14 20:00				25		25
DS_L3	2020-09-15 11:00				23.6		23.6
DS_L3	2020-09-15 15:30				57.3		57.3
DS_L3	2020-09-15 20:00				54		54
DS_L3	2020-09-16 14:00				16.5		16.5
DS_L3	2020-09-16 19:30				20		20
DS_L3	2020-09-17 12:30				16.5		16.5
DS_L3	2020-09-17 15:00				15.7		15.7
DS_L3	2020-09-17 19:30				18		18
DS_L3	2020-09-18 19:30				12		12
DS_L3	2020-09-19 10:30				16.1		16.1
DS_L3	2020-09-19 15:00				14.6		14.6
DS_L3	2020-09-19 19:30				16		16
DS_L3	2020-09-20 11:00				12.5		12.5
DS_L3	2020-09-20 15:00				13.4		13.4
DS_L3	2020-09-20 19:30				13		13
DS_L3	2020-09-21 19:30				15		15
DS_L3	2020-09-22 9:15				13		13
DS_L3	2020-09-22 15:15				12		12
DS_L3	2020-09-23 9:00				11		11
DS_L3	2020-09-23 15:30				6		6
DS_L3	2020-09-24 9:15				10		10
DS_L3	2020-09-24 14:00				7.5		7.5
DS_L3	2020-09-24 18:30				11		11
DS_L3	2020-09-25 9:00				11.5		11.5
DS_L3	2020-09-25 14:00				10		10
DS_L3	2020-09-25 18:30				14		14
DS_L3	2020-09-26 9:15				15		15
DS_L3	2020-09-26 14:15				13		13
DS_L3	2020-09-27 18:30				12		12
DS_L3	2020-09-28 11:30				9		9
DS_L3	2020-09-28 14:15				9		9
DS_L3	2020-09-28 18:30				8		8
DS_L3	2020-09-29 10:30				10		10
DS_L3	2020-09-29 14:30				11		11
DS_L3	2020-09-29 18:30				14		14
DS_L3	2020-09-30 9:30				17		17
DS_L3	2020-09-30 14:00				20		20
DS_L3	2020-09-30 18:30				46		46
DS_L3	2020-10-01 10:15				18		18
DS_L3	2020-10-01 15:30				16		16
DS_L3	2020-10-01 18:30				14		14
DS_L3	2020-10-02 9:00				19		19
DS_L3	2020-10-02 16:00				17		17
DS_L3	2020-10-02 18:30				18		18
DS_L3	2020-10-03 9:00				15		15
DS_L3	2020-10-03 16:00				21		21
DS_L3	2020-10-03 18:30				16		16
DS_L3	2020-10-04 8:00				17		17
DS_L3	2020-10-04 16:00				19		19
DS_L3	2020-10-04 18:30				18		18
DS_L3	2020-10-05 15:30				12.6		12.6
DS_L3	2020-10-05 18:30				16		16
DS_L3	2020-10-06 18:30				14		14
DS_L3	2020-10-07 11:00				11.6		11.6
DS_L3	2020-10-07 15:00				9.3		9.3
DS_L3	2020-10-08 11:00				7.4		7.4
DS_L3	2020-10-08 16:00				7.4		7.4
DS_L3	2020-10-08 18:30				9		9
DS_L3	2020-10-09 15:00				9.6		9.6
DS_L3	2020-10-09 18:30				8		8
DS_L3	2020-10-10 11:00				9.6		9.6
DS_L3	2020-10-10 14:00				10.5		10.5
DS_L3	2020-10-10 18:30				13		13
DS_L3	2020-10-11 11:00				19.8		19.8
DS_L3	2020-10-11 14:30				19.6		19.6
DS_L3	2020-10-11 18:30				20		20
DS_L3	2020-10-12 11:30				16.7		16.7

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
DS_L3	2020-10-12 15:30				16.1		16.1
DS_L3	2020-10-12 18:30				14		14
DS_L3	2020-10-13 14:30				14.3		14.3
DS_L3	2020-10-13 15:30				15.3		15.3
DS_L3	2020-10-13 18:30				12		12
DS_L3	2020-10-14 11:30				11.3		11.3
DS_L3	2020-10-14 15:30				10.9		10.9
DS_L3	2020-10-14 18:30				9		9
DS_L3	2020-10-15 18:30				9		9
DS_L3	2020-10-16 18:30				8		8
DS_L3	2020-10-17 18:30				7		7
DS_L3	2020-10-18 11:00				7		7
DS_L3	2020-10-18 15:30				6		6
DS_L3	2020-10-19 10:00				7		7
DS_L3	2020-10-19 14:00				6		6
DS_L3	2020-10-20 10:00				6		6
DS_L3	2020-10-20 15:15				7		7
DS_L3	2020-10-22 9:45				5		5
DS_L3	2020-10-22 14:45				4		4
DS_L3	2020-10-23 11:00				4		4
DS_L3	2020-10-23 15:00				4		4
DS_L3	2020-10-24 12:00				3		3
DS_L3	2020-10-24 15:45				3		3
DS_L3	2020-10-25 9:30				3		3
DS_L3	2020-10-25 14:15				3		3
DS_L3	2020-10-27 10:45				6		6
DS_L3	2020-10-27 15:15				10		10
DS_L3	2020-10-28 11:00				8		8
DS_L3	2020-10-28 15:30				8		8
DS_L3	2020-10-29 11:00				9		9
DS_L3	2020-10-29 15:30				9		9
DS_L3	2020-10-31 11:00				7		7
DS_L3	2020-10-31 15:30				9		9
DS_L3	2020-11-01 11:00				8		8
DS_L3	2020-11-01 15:30				9		9
DS_L3	2020-11-02 11:15				17		17
DS_L3	2020-11-02 15:30				27		27
DS_L3	2020-11-03 10:00				25		25
DS_L3	2020-11-03 15:15				28		28
DS_L3	2020-11-04 10:00				29		29
DS_L3	2020-11-04 15:00				29		29
DS_L3	2020-11-06 10:45				9		9
DS_L3	2020-11-06 15:30						
DS_L3	2020-11-07 10:00				11		11
DS_L3	2020-11-07 15:15				11		11
DS_L3	2020-11-08 11:15				7		7
DS_L3	2020-11-08 15:30				9		9
DS_L3	2020-11-11 9:00				6		6
DS_L3	2020-11-11 16:30				6		6
DS_L3	2020-11-12 9:00				8		8
DS_L3	2020-11-12 16:00				9		9
DS_L3	2020-11-13 16:00				8		8
DS_L3	2020-11-14 9:30				8		8
DS_L3	2020-11-14 15:15				10		10
DS_L3	2020-11-15 9:30				11		11
DS_L3	2020-11-15 16:00				16		16
DS_L3	2020-11-16 10:30				11.8		11.8
DS_L3	2020-11-16 15:30				11.8		11.8
DS_L3	2020-11-17 11:00				8.2		8.2
DS_L3	2020-11-17 16:00				6.7		6.7
DS_L3	2020-11-18 10:30				8.5		8.5
DS_L3	2020-11-19 10:30				14		14
DS_L3	2020-11-19 15:00				10.5		10.5
DS_L3	2020-11-20 11:00				7.8		7.8
DS_L3	2020-11-20 15:30				7.2		7.2
DS_L3	2020-11-21 12:00				6.1		6.1
DS_L3	2020-11-21 15:00				6.1		6.1
DS_L3	2020-11-24 10:15				13		13
DS_L3	2020-11-24 15:00				11		11
DS_L3	2020-11-25 9:30				6		6
DS_L3	2020-11-25 15:00				6		6
DS_L3	2020-11-26 10:00				5		5
DS_L3	2020-11-26 15:00				7		7
DS_L3	2020-11-27 9:45				23		23
DS_L3	2020-11-27 16:00				11		11
DS_L3	2020-11-29 9:30				6		6
DS_L3	2020-11-29 15:30				15		15
DS_L3	2020-12-01 14:00				7		7
DS_L3	2020-12-02 9:30				5		5
DS_L3	2020-12-02 15:45				4		4
DS_L3	2020-12-03 10:00				5		5
DS_L3	2020-12-03 14:15				8		8
DS_L3	2020-12-04 11:00				12		12
DS_L3	2020-12-04 15:00				11.2		11.2
DS_L3	2020-12-05 10:00				6		6
DS_L3	2020-12-05 15:45				5		5
DS_L3	2020-12-06 9:00				7		7
DS_L3	2020-12-06 16:00				11		11
DS_L3	2020-12-07 11:00				9.2		9.2

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
DS_L3	2020-12-12 12:00				5		5
DS_L3	2020-12-12 15:00				5.8		5.8
DS_L3	2020-12-13 14:00				4.6		4.6
DS_L3	2020-12-15 11:00				7		7
DS_L3	2020-12-15 16:00				5		5
DS_L3	2020-12-16 11:00				3		3
DS_L3	2020-12-16 15:30				3		3
DS_L3	2020-12-17 10:30				8		8
DS_L3	2020-12-17 15:30				3		3
DS_L3	2020-12-18 14:15				3		3
DS_L3	2020-12-19 15:15				3		3
DS_L3	2020-12-25 11:00				4.4		4.4
DS_L3	2020-12-25 14:00				4.1		4.1
DS_L3	2020-12-26 14:00				3.1		3.1
DS_L3	2020-12-27 11:00				3.8		3.8
DS_L3	2020-12-27 15:00				3.7		3.7
DS_L3	2020-12-29 14:00				2.7		2.7
DS_L3	2020-12-30 14:00				3.7		3.7
DS_L3	2020-12-31 14:00				6.2		6.2
DS_Moberly	2020-07-10 21:00				215		215
DS_Moberly	2020-07-11 4:00				230		230
DS_Moberly	2020-07-11 20:30				134		134
DS_Moberly	2020-07-12 4:00				127		127
DS_Moberly	2020-07-12 20:30				165		165
DS_Moberly	2020-07-13 4:00				359		359
DS_Moberly	2020-07-13 10:30				698		698
DS_Moberly	2020-07-13 15:00				314		314
DS_Moberly	2020-07-13 20:30				507		507
DS_Moberly	2020-07-14 4:00				368		368
DS_Moberly	2020-07-14 10:30				1004		1004
DS_Moberly	2020-07-14 15:00				820		820
DS_Moberly	2020-07-14 20:30				860		860
DS_Moberly	2020-07-15 4:00				729		729
DS_Moberly	2020-07-15 11:00				790		790
DS_Moberly	2020-07-15 15:00				651		651
DS_Moberly	2020-07-15 20:30				821		821
DS_Moberly	2020-07-16 4:00				712		712
DS_Moberly	2020-07-16 11:00				641		641
DS_Moberly	2020-07-16 15:00				676		676
DS_Moberly	2020-07-16 20:30				695		695
DS_Moberly	2020-07-17 4:00				795		795
DS_Moberly	2020-07-17 11:00				598		598
DS_Moberly	2020-07-17 15:00				574		574
DS_Moberly	2020-07-17 20:30				734		734
DS_Moberly	2020-07-18 4:00				604		604
DS_Moberly	2020-07-18 11:00				559		559
DS_Moberly	2020-07-18 15:00				349		349
DS_Moberly	2020-07-18 20:30				673		673
DS_Moberly	2020-07-19 4:00				598		598
DS_Moberly	2020-07-19 11:00				448		448
DS_Moberly	2020-07-19 15:00				471		471
DS_Moberly	2020-07-19 20:30				561		561
DS_Moberly	2020-07-20 4:00				260		260
DS_Moberly	2020-07-20 20:30				276		276
DS_Moberly	2020-07-21 4:00				279		279
DS_Moberly	2020-07-21 10:00				173		173
DS_Moberly	2020-07-21 14:30				171		171
DS_Moberly	2020-07-21 20:30				261		261
DS_Moberly	2020-07-22 4:00				447		447
DS_Moberly	2020-07-22 9:30				1915		1915
DS_Moberly	2020-07-22 14:30				677		677
DS_Moberly	2020-07-22 20:30				241		241
DS_Moberly	2020-07-23 4:00				238		238
DS_Moberly	2020-07-23 9:00				421		421
DS_Moberly	2020-07-23 14:50				383		383
DS_Moberly	2020-07-23 20:30				415		415
DS_Moberly	2020-07-24 9:10				304		304
DS_Moberly	2020-07-24 14:40				286		286
DS_Moberly	2020-07-24 20:30				240		240
DS_Moberly	2020-07-25 4:00				199		199
DS_Moberly	2020-07-25 9:30				370		370
DS_Moberly	2020-07-25 14:00				261		261
DS_Moberly	2020-07-25 20:30				180		180
DS_Moberly	2020-07-26 9:10				233		233
DS_Moberly	2020-07-26 14:00				294		294
DS_Moberly	2020-07-26 20:30				230		230
DS_Moberly	2020-07-27 4:00				188		188
DS_Moberly	2020-07-27 9:30				265		265
DS_Moberly	2020-07-27 14:00				410		410
DS_Moberly	2020-07-27 20:30				227		227
DS_Moberly	2020-07-28 4:30				264		264
DS_Moberly	2020-07-28 9:00				195		195
DS_Moberly	2020-07-28 14:20				463		463
DS_Moberly	2020-07-28 20:30				152		152
DS_Moberly	2020-07-29 4:30				234		234
DS_Moberly	2020-07-29 9:00				199		199
DS_Moberly	2020-07-29 14:20				222		222
DS_Moberly	2020-07-29 20:30				182		182
DS_Moberly	2020-07-30 4:30				235		235

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
DS_Moberly	2020-07-30 10:15				134		134
DS_Moberly	2020-07-30 20:30				255		255
DS_Moberly	2020-07-31 4:30				173		173
DS_Moberly	2020-07-31 9:20				282		282
DS_Moberly	2020-07-31 15:10				142		142
DS_Moberly	2020-07-31 20:30				116		116
DS_Moberly	2020-08-01 4:30				131		131
DS_Moberly	2020-08-01 20:30				200		200
DS_Moberly	2020-08-02 4:30				155		155
DS_Moberly	2020-08-02 11:00				268		268
DS_Moberly	2020-08-02 15:00				151		151
DS_Moberly	2020-08-02 20:30				168		168
DS_Moberly	2020-08-03 4:30				200		200
DS_Moberly	2020-08-03 11:00				222.7		222.7
DS_Moberly	2020-08-03 15:00				127.2		127.2
DS_Moberly	2020-08-03 20:30				202		202
DS_Moberly	2020-08-04 4:30				204		204
DS_Moberly	2020-08-04 11:00				145		145
DS_Moberly	2020-08-04 15:00				131.2		131.2
DS_Moberly	2020-08-04 20:30				189		189
DS_Moberly	2020-08-05 4:00				131		131
DS_Moberly	2020-08-05 11:00				137.6		137.6
DS_Moberly	2020-08-05 15:00				123.7		123.7
DS_Moberly	2020-08-05 20:30				91		91
DS_Moberly	2020-08-06 4:30				162		162
DTIP_BT_1	2020-06-17 17:10	13.1	7	3170	66.1	66.4	66.1
GC-Debris-US	2020-05-07 15:00	9.4	8.2	959	OR		
GC-Debris-US	2020-05-12 15:30	16.4	8.5	1243	OR		
GC-Debris-US	2020-05-14 14:30	12	8.4	1445	OR		
GC-Debris-US	2020-05-19 16:00	15.1	8.4	1580	OR		
GC-Debris-US	2020-05-20 14:40	15.7	8.5	1449	OR		
GC-Debris-US	2020-06-02 14:00	15.2	8.4	1643	OR		
GC-Debris-US	2020-06-10 17:40	18.9	8.3	981	OR		
GC-Debris-US	2020-06-15 20:20	12.2	7.9	660	OR		
GC-Debris-US	2020-07-01 15:30	15.1	8	1927	OR		
GC-Debris-US	2020-07-04 16:45	18.2	8	610	OR		
GC-Debris-US	2020-07-11 18:00	16	7.9	1354	OR		
GC-Debris-US	2020-07-24 12:00	14.9	6.4	4050	3439	3426	3439
GC-Debris-US	2020-08-01 13:15	23.4	6.5	3420	OR		
GC-Debris-US	2020-08-22 12:45	15.9	7.9	2500	1815	1812	1815
GC-Debris-US	2020-09-13 16:30	10.2	7.9	2510	136	136	136
GC-Debris-US	2020-10-04 13:20	14.3	8.1	1935	8.2	8.2	8.2
L3-DC-DS	2020-03-26 18:30	2.3	8.1	895	3401	3413	3401
L3-DC-DS	2020-04-08 17:50	1.8	8.4	382	108	117	108
L3-DC-DS	2020-05-22 11:00	6.9	7.9	1086	7.5	7.6	7.5
L3-DC-DS	2020-06-08 18:10	11.5	8	1022	2023	1986	2023
L3-DC-DS	2020-07-03 18:40	16.1	8.2	380	2017	2017	2017
L3-DC-US	2020-04-08 17:40	2.9	8.6	436	898	901	898
L3-DC-US	2020-05-22 10:55	6.7	7.8	1114	8.7	8.5	8.7
L3-DC-US	2020-06-08 18:00	11.8	8.1	1096	3415	3419	3415
L3-DC-US	2020-07-03 18:30	15.8	8.4	393	2093	2104	2093
LBCD-Sump-BT	2020-01-01 15:10	10.9	8.4	989	8.1	7.4	8.1
LBCD-Sump-BT	2020-01-02 16:30	7.2	8.5	914	6.2	6.2	6.2
LBCD-Sump-BT	2020-01-03 14:30	2.9	8.1	944	3.5	3.5	3.5
LBCD-Sump-BT	2020-01-04 13:00	6	8	1008	1.7	1.7	1.7
LBCD-Sump-BT	2020-01-05 15:25	5.1	8	979	1.9	1.9	1.9
LBCD-Sump-BT	2020-01-06 14:20	5.8	8.2	979	1.4	1.4	1.4
LBCD-Sump-BT	2020-01-07 15:40	3.2	8.3	990	1.1	1.1	1.1
LBCD-Sump-BT	2020-01-09 14:20	7.4	8.2	935	0.9	0.9	0.9
LBCD-Sump-BT	2020-01-10 15:00	1.7	8.4	993	2.9	2.9	2.9
LBCD-Sump-BT	2020-01-11 13:45	4.7	8.6	941	2.1	2	2.1
LBCD-Sump-BT	2020-01-12 15:00	3.9	8	909	1	0.9	1
LBCD-Sump-BT	2020-01-13 13:45	6.6	8.5	907	1	1	1
LBCD-Sump-BT	2020-01-14 13:35	2.1	8.6	945	0.7	0.7	0.7
LBCD-Sump-BT	2020-01-15 10:30	2.6	8.4	934	0.7	0.7	0.7
LBCD-Sump-BT	2020-01-16 15:55	0.7	8.5	944	6.4	6.2	6.4
LBCD-Sump-BT	2020-01-19 17:03	3.4	8.5	888	2.5	2.5	2.5
LBCD-Sump-BT	2020-01-20 12:23	5	8.4	862	1.2	1.2	1.2
LBCD-Sump-BT	2020-01-21 12:40	10.2	7.9	893	0.7	0.7	0.7
LBCD-Sump-BT	2020-01-22 14:00	10.5	8	870	1.7	1.7	1.7
LBCD-Sump-BT	2020-01-23 14:20	9.3	8	841	0.6	0.6	0.6
LBCD-Sump-BT	2020-01-24 12:30	10.2	8.1	842	0.8	0.8	0.8
LBCD-Sump-BT	2020-01-25 13:50	10.6	8.1	846	0.9	0.8	0.9
LBCD-Sump-BT	2020-01-26 14:20	9.6	8.1	846	0.7	0.7	0.7
LBCD-Sump-BT	2020-01-27 17:00	10.4	8.1	840	1.6	1.6	1.6
LBCD-Sump-BT	2020-01-28 14:40	10.6	8.3	834	1.8	1.8	1.8
LBCD-Sump-BT	2020-01-29 12:50	2.6	8.3	825	0.8	0.8	0.8
LBCD-Sump-BT	2020-01-30 14:52	9.2	8.3	801	26.3	25.3	26.3
LBCD-Sump-BT	2020-01-31 14:57	12.8	8.4	828	2	2	2
LBCD-Sump-BT	2020-02-01 13:15	7.8	8.3	831	1.6	1.6	1.6
LBCD-Sump-BT	2020-02-02 15:30	7.8	8.4	835	1.2	1.2	1.2
LBCD-Sump-BT	2020-02-03 13:40	3.7	8.6	871	3.1	3.2	3.1
LBCD-Sump-BT	2020-02-04 13:15	10.6	8.4	840	1.2	1.2	1.2
LBCD-Sump-BT	2020-02-05 14:45	7.8	8.3	839	1.4	1.4	1.4
LBCD-Sump-BT	2020-02-06 14:00	9.4	8.3	831	1	1	1
LBCD-Sump-BT	2020-02-08 13:25	6.9	8.3	828	0.8	0.8	0.8
LBCD-Sump-BT	2020-02-09 15:00	10.5	8.3	812	4	4.1	4
LBCD-Sump-BT	2020-02-10 11:50	5.3	8.4	821	2	1.9	2
LBCD-Sump-BT	2020-02-11 12:30	11.1	8.3	860	6	6.7	6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBCD-Sump-BT	2020-02-12 16:20	6.3	8.2	793	1.5	1.5	1.5
LBCD-Sump-BT	2020-02-13 15:30	3.3	8	2030	10	10	10
LBCD-Sump-BT	2020-02-14 9:50	3.8	8	2110	4.6	4.5	4.6
LBCD-Sump-BT	2020-02-15 13:15	6.2	8	827	3.4	3.4	3.4
LBCD-Sump-BT	2020-02-16 15:00	1.9	8.4	1119	4.4	4.4	4.4
LBCD-Sump-BT	2020-02-17 13:00	4.2	8.2	1115	2.7	2.7	2.7
LBCD-Sump-BT	2020-02-18 14:20	4.7	8.4	1055	2	1.9	2
LBCD-Sump-BT	2020-02-19 13:50	7.1	8.4	2130	31.2	31.1	31.2
LBCD-Sump-BT	2020-02-20 13:55	5.1	8.3	1056	1.2	1.2	1.2
LBCD-Sump-BT	2020-02-21 13:40	14.8	8.2	921	9.3	9.1	9.3
LBCD-Sump-BT	2020-02-22 15:08	12.1	8.4	788	0.6	0.6	0.6
LBCD-Sump-BT	2020-02-23 13:25	12.6	8.4	799	0.9	1	0.9
LBCD-Sump-BT	2020-02-24 12:40	15.3	8.5	945	4.1	4.3	4.1
LBCD-Sump-BT	2020-02-25 13:40	14	8.4	936	2.1	2	2.1
LBCD-Sump-BT	2020-02-26 13:30	11	8.4	938	1.4	1.4	1.4
LBCD-Sump-BT	2020-02-27 16:55	8.2	8.5	714	55.3	55.6	55.3
LBCD-Sump-BT	2020-02-28 16:45	9.7	8.5	713	24.1	23.9	24.1
LBCD-Sump-BT	2020-02-29 14:00	7	8.6	742	10.7	10.4	10.7
LBCD-Sump-BT	2020-03-01 12:15	5.8	8.6	770	5.7	5.8	5.7
LBCD-Sump-BT	2020-03-03 14:00	7.1	8	471	135	135	135
LBCD-Sump-BT	2020-03-04 17:40	6.3	7	414	16.7	16.6	16.7
LBCD-Sump-BT	2020-03-05 16:20	7.1	8.2	868	21.1	20.8	21.1
LBCD-Sump-BT	2020-03-06 12:00	3.6	7.9	999	3.7	3.6	3.7
LBCD-Sump-BT	2020-03-07 12:05	4.7	8.1	1052	5.1	5.1	5.1
LBCD-Sump-BT	2020-03-08 15:50	6.9	8.1	1021	3.8	3.7	3.8
LBCD-Sump-BT	2020-03-09 15:30	13.5	8	1006	4.9	4.9	4.9
LBCD-Sump-BT	2020-03-10 13:20	6.6	8.2	726	46	46	46
LBCD-Sump-BT	2020-03-11 14:55	7	8.4	860	23	22.9	23
LBCD-Sump-BT	2020-03-12 12:35	6	8.5	996	2.5	2.5	2.5
LBCD-Sump-BT	2020-03-15 14:25	9.6	8.4	1048	3	2.7	3
LBCD-Sump-BT	2020-03-16 14:05	11.5	8.4	1027	4.2	4.1	4.2
LBCD-Sump-BT	2020-03-17 13:45	10.9	8.3	959	1.7	1.7	1.7
LBCD-Sump-BT	2020-03-18 13:10	10.8	8.4	988	2.8	2.7	2.8
LBCD-Sump-BT	2020-03-19 13:35	9	8.5	1036	2.6	2.7	2.6
LBCD-Sump-BT	2020-03-20 13:13	7.6	8.6	998	5.6	5.9	5.6
LBCD-Sump-BT	2020-03-21 12:30	7.8	8.6	940	6	6	6
LBCD-Sump-BT	2020-03-22 12:33	7.6	8.6	849	9.4	9.3	9.4
LBCD-Sump-BT	2020-03-24 17:10	8.3	8.1	899	11.2	11.2	11.2
LBCD-Sump-BT	2020-03-25 13:40	5.8	8.2	996	14.9	14	14.9
LBCD-Sump-BT	2020-03-26 15:50	9.3	7.8	683	95	95	95
LBCD-Sump-BT	2020-03-28 17:00	3.9	7.8	895	13.2	13.2	13.2
LBCD-Sump-BT	2020-03-29 17:05	0.4	8.1	864	8.2	8.2	8.2
LBCD-Sump-BT	2020-03-30 17:15	10.9	8.2	747	7.6	7.3	7.6
LBCD-Sump-BT	2020-03-31 13:15	12.9	8.2	734	9.7	9.8	9.7
LBCD-Sump-BT	2020-04-01 12:56	11.1	8.4	740	6.3	6.3	6.3
LBCD-Sump-BT	2020-04-02 12:40	11.9	8.4	730	5	5	5
LBCD-Sump-BT	2020-04-03 12:43	2.4	8.4	717	4.1	4.1	4.1
LBCD-Sump-BT	2020-04-04 12:25	11.4	8.5	714	3.1	3.2	3.1
LBCD-Sump-BT	2020-04-05 13:35	16.3	8.4	712	3.3	3.3	3.3
LBCD-Sump-BT	2020-04-06 13:45	20.1	8.5	741	3.6	3.6	3.6
LBCD-Sump-BT	2020-04-07 13:50	5	10.8	2070	46.9	46.9	46.9
LBCD-Sump-BT	2020-04-08 15:00	8.6	10.2	1622	606	605	606
LBCD-Sump-BT	2020-04-10 13:05	7	9.9	1025	43.5	43.4	43.5
LBCD-Sump-BT	2020-04-12 15:35	13	10.3	1011	60	60.2	60
LBCD-Sump-BT	2020-04-14 16:50	12.6	10.2	975	43.9	43.7	43.9
LBCD-Sump-BT	2020-04-15 14:55	11.2	10.4	843	52.4	52.5	52.4
LBCD-Sump-BT	2020-04-16 13:58	12.3	10.4	986	49.5	49.7	49.5
LBCD-Sump-BT	2020-04-18 12:02	10.9	10.2	3490	27.5	27.5	27.5
LBCD-Sump-BT	2020-04-19 16:00	16.5	10.2	3590	22.5	22.4	22.5
LBCD-Sump-BT	2020-04-27 11:30	10.1	9.6	3750	28.4	28.6	28.4
LBCD-Sump-BT	2020-04-28 14:36	11.8	8.4	2760	12	12	12
LBCD-Sump-BT	2020-04-29 13:05	13.7	9.3	2610	10	10.2	10
LBCD-Sump-BT	2020-04-30 13:40	10.4	7.9	3940	12.5	12.4	12.5
LBCD-Sump-BT	2020-05-02 11:10	11.2	7	2500	6.8	6.8	6.8
LBCD-Sump-BT	2020-05-04 15:15	9.1	9.2	4720	25.3	25.3	25.3
LBCD-Sump-BT	2020-05-05 12:45	10.2	9.4	4660	11.8	11.8	11.8
LBCD-Sump-BT	2020-05-06 16:50	13.6	8.9	2370	22.7	22.7	22.7
LBCD-Sump-BT	2020-05-09 14:00	21.3	6.9	2600	12.9	12.8	12.9
LBCD-Sump-BT	2020-05-10 16:00	13.5	9.2	2680	56.9	56.9	56.9
LBCD-Sump-BT	2020-05-12 14:10	23.7	9	2490	125	125	125
LBCD-Sump-BT	2020-05-13 13:50	23.7	8.7	2350	55.8	55.7	55.8
LBCD-Sump-BT	2020-05-14 13:02	18.1	9.2	2670	7.4	7.3	7.4
LBCD-Sump-BT	2020-05-15 10:40	12.9	9.2	2520	16	16.1	16
LBCD-Sump-BT	2020-05-16 14:02	21.6	9	1350	16.4	16.3	16.4
LBCD-Sump-BT	2020-05-18 14:12	12.5	9.5	4450	95.6	95.9	95.6
LBCD-Sump-BT	2020-05-19 14:35	23.3	9.4	3860	36.9	37.3	36.9
LBCD-Sump-BT	2020-05-20 13:20	23.7	9.3	3330	39.2	39.1	39.2
LBCD-Sump-BT	2020-05-21 15:20	10.8	9.5	2750	731	731	731
LBCD-Sump-BT	2020-05-22 16:35	11.3	9.6	3320	192	192	192
LBCD-Sump-BT	2020-05-24 13:25	23.3	9	3520	53.7	53.7	53.7
LBCD-Sump-BT	2020-05-27 14:45	22.6	9	2370	21.6	23.8	21.6
LBCD-Sump-BT	2020-05-28 17:00	22.5	8.6	3370	23.7	23.7	23.7
LBCD-Sump-BT	2020-05-30 17:30	17.8	7.8	2350	9.5	10	9.5
LBCD-Sump-BT	2020-06-01 16:10	20.9	8.8	3321	17.3	17.2	17.3
LBCD-Sump-BT	2020-06-02 13:45	20.9	8.4	1601	11.7	11.6	11.7
LBCD-Sump-BT	2020-06-04 12:55	21.6	8.4	1633	3.3	3	3.3
LBCD-Sump-BT	2020-06-05 13:20	24.9	8.2	1419	3.8	3.7	3.8
LBCD-Sump-BT	2020-06-06 12:50	12.7	8.6	1493	6.4	6.2	6.4
LBCD-Sump-BT	2020-06-07 12:50	18.5	9.2	4250	131	132	131

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBCD-Sump-BT	2020-06-08 16:20	13.5	8.2	1356	56.4	56.4	56.4
LBCD-Sump-BT	2020-06-10 12:21	21.8	8.9	3230	OR		
LBCD-Sump-BT	2020-06-11 14:10	25.1	8.7	4220	51.6	51.6	51.6
LBCD-Sump-BT	2020-06-13 15:30	22.5	7.5	2640	23.5	23.3	23.5
LBCD-Sump-BT	2020-06-14 13:35	13.3	8.2	1062	53.6	54.1	53.6
LBCD-Sump-BT	2020-06-18 12:40	24.7	8.3	1887	8	7.8	8
LBCD-Sump-BT	2020-06-20 13:00	21.8	8.5	2060	8.2	8.4	8.2
LBCD-Sump-BT	2020-06-24 10:51	20	8.2	1080	50.3	50.2	50.3
LBCD-Sump-BT	2020-06-27 19:45	13.7	8.4	1307	11.7	11.6	11.7
LBCD-Sump-BT	2020-06-28 14:40	21	8.8	3500	18.6	18.7	18.6
LBCD-Sump-BT	2020-06-30 15:45	22.6	6.4	5270	668	668	668
LBCD-Sump-BT	2020-07-01 15:00	16.7	8.6	1381	17	18	17
LBCD-Sump-BT	2020-07-11 14:00	23.4	7.2	2350	7.4	7.6	7.4
LBCD-Sump-BT	2020-07-31 10:45	23.5	7.9	2290	7.8	7.8	7.8
LBCD-Sump-BT	2020-08-01 13:00	26.1	8.4	2340	6.1	6.2	6.1
LBCD-Sump-BT	2020-08-20 16:15	17.7	8.5	2100	67.3	67.3	67.3
LBCD-Sump-BT	2020-09-08 13:45	21.2	8.4	1072	2.9	2.9	2.9
LBCD-Sump-BT	2020-09-14 16:30	8.2	8.2	4210	41.4	41.3	41.4
LBCD-Sump-BT	2020-09-30 16:20	13.7	8.5	1616	11.7	11.6	11.7
LBCD-Sump-BT	2020-10-16 16:00	6.4	7.9	5530	21	21.3	21
LBCD-Sump-BT	2020-10-18 11:45	2.1	8	1883	16.8	16.8	16.8
LBCD-Sump-BT	2020-10-27 11:30	8.3	8	1848	15.2	15.1	15.2
LBCD-Sump-BT	2020-11-03 11:05	3.8	8.7	1865	124	124	124
LBCD-Sump-BT	2020-11-04 11:30	8.5	8.5	1950	40	39.9	40
LBCD-Sump-BT	2020-11-06 12:20	5	8.6	2320	73.1	73	73.1
LBCD-Sump-BT	2020-11-07 15:00	3.7	8.1	1867	30.8	30.7	30.8
LBCD-Sump-BT	2020-11-08 12:40	5.1	8.3	1889	30	30.1	30
LBCD-Sump-BT	2020-11-09 13:35	7.2	8.6	1854	9.2	9	9.2
LBCD-Sump-BT	2020-11-10 10:40	4.2	8.7	2360	56.1	56.1	56.1
LBCD-Sump-BT	2020-11-11 10:35	3.5	7.8	1871	6.9	6.8	6.9
LBCD-Sump-BT	2020-11-12 9:35	5.3	8	3640	13.6	13.6	13.6
LBCD-Sump-BT	2020-11-13 11:45	5.5	7.9	6070	80.5	80.2	80.5
LBCD-Sump-BT	2020-11-14 9:55	7	8.1	2040	21.9	21.5	21.9
LBCD-Sump-BT	2020-11-15 10:10	6	7.9	1885	4.5	4.5	4.5
LBCD-Sump-BT	2020-11-16 9:50	6.4	8.1	2140	9.4	9.4	9.4
LBCD-Sump-BT	2020-11-22 15:00	4.9	7.9	1588	8.2	8.2	8.2
LBCD-Sump-BT	2020-11-24 11:00	5.4	7.9	1619	1.5	1.4	1.5
LBCD-Sump-BT	2020-11-25 11:30	3.2	8.1	1635	1.2	1.2	1.2
LBCD-Sump-BT	2020-11-26 10:30	4.7	8.4	1806	0.9	0.9	0.9
LBCD-Sump-BT	2020-11-28 10:32	2.5	8.4	1802	0.7	0.8	0.7
LBCD-Sump-BT	2020-11-29 10:45	2.9	8.1	1701	2.2	2.2	2.2
LBCD-Sump-BT	2020-11-30 11:40	5.3	8.5	1764	0.6	0.6	0.6
LBCD-Sump-BT	2020-12-01 10:23	6	8.4	2770	1042	1040	1042
LBCD-Sump-BT	2020-12-02 10:35	6.5	8.7	1600	67	68	67
LBCD-Sump-BT	2020-12-03 10:40	5.1	8.8	2810	36	37	36
LBCD-Sump-BT	2020-12-04 11:10	6.4	8.5	3670	1665	1666	1665
LBCD-Sump-BT	2020-12-05 11:10	6.2	8	3190	85.6	85.4	85.6
LBCD-Sump-BT	2020-12-06 14:10	6.3	8.5	2510	30.7	30.5	30.7
LBCD-Sump-BT	2020-12-15 11:00	6.2	7.8	1697	3.6	3.6	3.6
LBCD-Sump-BT	2020-12-16 11:35	5.6	8	1583	3.3	3.3	3.3
LBCD-Sump-BT	2020-12-17 11:35	5.3	8.1	1667	4	4	4
LBCD-Sump-BT	2020-12-19 10:30	6.5	8.1	2100	30	29.2	30
LBCD-Sump-BT	2020-12-27 14:15	2	8.2	3470	45.1	45.4	45.1
LBEX_B1	2020-02-22 15:35	3.4	8.6	797	37.6	37.5	37.6
LBEX_B1	2020-02-23 14:00	3.8	8.4	865	19.8	19.7	19.8
LBEX_B1	2020-03-22 13:00	2.8	8.6	1083	23.7	23.6	23.7
LBEX_B1	2020-04-07 14:30	2.8	8.7	984	946	947	946
LBEX_B1	2020-04-08 15:40	5.8	8.3	851	OR		
LBEX_B1	2020-04-20 14:45	17.5	8.4	1344	41.1	40.7	41.1
LBEX_B1	2020-04-21 13:40	13.3	8.5	1406	82.3	83.2	82.3
LBEX_B1	2020-04-22 14:35	14.7	8.3	744	97	97.5	97
LBEX_B1	2020-04-26 14:35	11.8	8.3	1111	26.1	26.6	26.1
LBEX_B1	2020-05-14 14:10	14.4	8.5	1561	18.4	17.7	18.4
LBEX_B1	2020-05-17 13:30	9.8	8.5	1451	28.7	28.7	28.7
LBEX_B1	2020-05-22 17:30	9.7	8.4	1238	27.6	27.7	27.6
LBEX_B1	2020-06-08 16:45	13.1	7.2	1990	OR		
LBEX_B1	2020-06-09 14:35	21.7	8.2	1413	44.1	44	44.1
LBEX_B1	2020-06-14 13:30	13.4	7.6	1200	OR		
LBEX_B1	2020-07-01 16:10	15.7	8.2	1046	2091	2095	2091
LBEX_B1	2020-07-02 16:51	18.8	8	1057	58.2	58.2	58.2
LBEX_B1	2020-07-17 14:45	21.4	8.2	2090	16.2	16	16.2
LBEX_B1	2020-07-21 12:30	20.2	8	2130	30.6	30.8	30.6
LBEX_B1	2020-07-22 12:00	23.2	8.1	1801	11	11.2	11
LBEX_B1	2020-07-24 12:10	17.7	8	1743	11.8	11.7	11.8
LBEX_B1	2020-07-25 9:50	17.3	7.4	1727	7.3	7.3	7.3
LBEX_B1	2020-07-26 11:20	19.8	8	1710	5	4.9	5
LBEX_B1	2020-08-30 9:50	14.2	8.1	1571	2	2	2
LBEX_B1	2020-09-04 10:30	15.6	8	1559	18.1	17.6	18.1
LBEX_B1	2020-09-22 10:20	11.9	8.2	1905	6.2	6.2	6.2
LBEX_B1	2020-10-18 11:00	3.7	8.2	1761	12.8	12.6	12.8
LBEX_B1	2020-10-21 12:20	5.6	7.4	1929	10.1	10.1	10.1
LBEX_B1	2020-10-22 14:15	3.6	7.6	1953	6.9	6.9	6.9
LBEX_B1	2020-10-29 16:40	5.4	7.6	1662	76.2	76.1	76.2
LBEX_B1	2020-11-01 15:00	5.6	8	1433	OR		
LBEX_B1	2020-11-03 9:40	3.5	7.6	1415	21.5	21.4	21.5
LBEX_B1	2020-11-21 13:00	4.4	7.4	1956	28.9	29	28.9
LBEX_B1	2020-12-05 10:15	4.1	7.6	1448	1314	1317	1314
LBEX_B1	2020-12-10 15:50	0.5	7.8	1822	24.9	24.9	24.9
LBGC-OUT	2020-02-29 14:10	1.6	8.1	1486	20	20	20

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBGC-OUT	2020-03-02 20:20	1.2	5.2	1701	28.9	28.8	28.9
LBGC-OUT	2020-03-03 13:00	2.4	5.4	1406	10	10	10
LBGC-OUT	2020-03-04 17:30	1.8	5.4	1494	7.2	7.1	7.2
LBGC-OUT	2020-03-05 16:40	1.4	7.4	1645	6	6	6
LBGC-OUT	2020-03-26 18:00	2.3	7.8	1166	3663	3661	3663
LBGC-OUT	2020-03-27 12:45	1.9	8.2	1336	717	719	717
LBGC-OUT	2020-04-07 14:05	1.5	8.5	2200	34.6	34.6	34.6
LBGC-OUT	2020-04-08 15:10	0.4	8.5	1481	OR		
LBGC-OUT	2020-04-09 13:30	3.6	8.3	785	OR		
LBGC-OUT	2020-04-10 15:20	1.2	8.7	717	OR		
LBGC-OUT	2020-04-12 15:45	3.1	8.6	679	OR		
LBGC-OUT	2020-04-13 9:30	2.5	8.1	462	2161	2165	2161
LBGC-OUT	2020-04-14 16:45	3.5	8.3	369	OR		
LBGC-OUT	2020-04-15 15:10	4.2	8.5	269	OR		
LBGC-OUT	2020-04-16 14:15	1.3	8.7	294	OR		
LBGC-OUT	2020-04-17 12:30	1.9	8.6	307	OR		
LBGC-OUT	2020-04-18 12:15	1.1	8.7	313	OR		
LBGC-OUT	2020-04-20 15:05	9.6	8.3	391	OR		
LBGC-OUT	2020-04-21 12:55	7	8.5	408	OR		
LBGC-OUT	2020-04-22 14:45	8.1	8.4	470	OR		
LBGC-OUT	2020-04-23 12:20	6.1	8.1	437	OR		
LBGC-OUT	2020-04-24 13:05	8.5	8.2	505	OR		
LBGC-OUT	2020-04-25 13:15	6.4	8.2	559	OR		
LBGC-OUT	2020-04-26 13:50	6.3	8.3	660	OR		
LBGC-OUT	2020-04-27 11:00	7.1	8.2	625	OR		
LBGC-OUT	2020-04-28 14:50	8.2	8.4	789	OR		
LBGC-OUT	2020-04-29 13:30	10.4	8.4	809	OR		
LBGC-OUT	2020-04-30 13:55	7.1	8.5	852	OR		
LBGC-OUT	2020-05-01 13:10	9.2	8.3	860	OR		
LBGC-OUT	2020-05-02 10:25	8.4	8.4	921	OR		
LBGC-OUT	2020-05-05 13:45	11.3	8.5	1151	OR		
LBGC-OUT	2020-05-06 17:00	13.1	8.3	852	OR		
LBGC-OUT	2020-05-07 14:30	10	8.4	917	OR		
LBGC-OUT	2020-05-08 12:30						
LBGC-OUT	2020-05-09 15:00	1	7	1006	OR		
LBGC-OUT	2020-05-11 13:30	13.9	8.4	1177	OR		
LBGC-OUT	2020-05-12 14:20	15.8	8.6	1241	OR		
LBGC-OUT	2020-05-13 14:25	14	8.2	1364	OR		
LBGC-OUT	2020-05-14 13:20	8.6	8.8	1637	OR		
LBGC-OUT	2020-05-15 9:55	7.5	8.7	1702	3881	3880	3881
LBGC-OUT	2020-05-16 14:20	14.4	8.5	1623	OR		
LBGC-OUT	2020-05-17 12:40	8.6	8.6	1613	OR		
LBGC-OUT	2020-05-18 14:15	11.1	8.6	1764	OR		
LBGC-OUT	2020-05-21 15:35	7.5	8.6	1588	OR		
LBGC-OUT	2020-05-22 16:45	9.3	8.4	932	OR		
LBGC-OUT	2020-05-23 15:15	12.4	8.2	809	OR		
LBGC-OUT	2020-05-24 13:30	15.5	8.5	937	OR		
LBGC-OUT	2020-05-31 16:00	17.6	8.5	1316	OR		
LBGC-OUT	2020-06-02 13:50	14	8.5	1640	OR		
LBGC-OUT	2020-06-04 13:00	13.8	8.5	1994	1723	1719	1723
LBGC-OUT	2020-06-05 13:05	14.4	8.3	1912	1340	1340	1340
LBGC-OUT	2020-06-06 13:00	11.2	8.6	1374	OR		
LBGC-OUT	2020-06-07 12:55	14.7	8.6	1529	OR		
LBGC-OUT	2020-06-08 16:30	11.1	8.3	1945	OR		
LBGC-OUT	2020-06-09 14:00	17.7	8.3	891	OR		
LBGC-OUT	2020-06-10 11:15	15.6	8.3	980	OR		
LBGC-OUT	2020-06-11 14:15	19.6	8.4	1138	OR		
LBGC-OUT	2020-06-12 14:30	20.9	8.4	1220	OR		
LBGC-OUT	2020-06-13 15:55	17.6	8.5	1362	OR		
LBGC-OUT	2020-06-14 13:25	13.1	8.2	1925	OR		
LBGC-OUT	2020-06-15 19:30	12.6	8.3	751	OR		
LBGC-OUT	2020-06-24 11:15	18.1	8.2	1821	OR		
LBGC-OUT	2020-06-26 14:15	17.8	7.7	2910	26	25	26
LBGC-OUT	2020-07-01 15:07	15.5	8.3	1594	2195	2188	2195
LBGC-OUT	2020-07-04 15:40	15.6	8.3	665	OR		
LBGC-OUT	2020-07-11 17:45	17.9	8.2	1350	OR		
LBGC-OUT	2020-07-15 13:30	18.7	7.8	2780	OR		
LBGC-OUT	2020-07-24 12:25	15.2	6.7	4030	3443	3427	3443
LBGC-OUT	2020-08-01 13:05	19.3	7.3	3470	OR		
LBGC-OUT	2020-08-22 14:30	14.2	8.2	2690	100	99	100
LBGC-OUT	2020-09-13 16:20	10.6	8.2	2480	34.6	34.7	34.6
LBGC-OUT	2020-10-04 13:30	11	8.1	1979	2.8	2.7	2.8
LBGC-WI	2020-02-20 10:04	2	8.8	217	3.4		3.4
LBGC-WI	2020-02-21 10:10				3.1		3.1
LBGC-WI	2020-02-22 14:15				3.3		3.3
LBGC-WI	2020-02-24 10:00	1.8	8.8	217	3.7		3.7
LBGC-WI	2020-03-12 12:20				6.8		6.8
LBPR-6.90	2020-01-07 11:45	0.9	8.7	221	9.1	9.6	9.1
LBPR-6.90	2020-01-07 16:00	0.8	8.6	215	10.1	10.1	10.1
LBPR-6.90	2020-01-08 11:00	0.9	8.7	217	3.5		3.5
LBPR-6.90	2020-01-08 16:25				5.5		5.5
LBPR-6.90	2020-01-26 10:30	1	8.7	232	2		2
LBPR-6.90	2020-01-26 15:20				2.5		2.5
LBPR-6.90	2020-01-27 12:45	1	8.7	226	2.1		2.1
LBPR-6.90	2020-01-27 16:05				1.9		1.9
LBPR-6.90	2020-01-28 15:00	1.3	8.6	226	2.7		2.7
LBPR-6.90	2020-02-05 10:45				7		7
LBPR-6.90	2020-02-05 13:20				7.3		7.3
LBPR-6.90	2020-02-20 11:55				4.6		4.6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBPR-6.90	2020-02-20 15:15				4		4
LBPR-6.90	2020-02-21 11:00	3	8.9	226	3.1		3.1
LBPR-6.90	2020-02-22 11:12	1.9	8.9	217	4.2		4.2
LBPR-6.90	2020-02-24 11:40				3.4		3.4
LBPR-6.90	2020-02-25 10:10				2.8		2.8
LBPR-6.90	2020-02-25 16:50				3		3
LBPR-6.90	2020-02-26 9:25				3.8		3.8
LBPR-6.90	2020-03-12 12:00				6		6
LBPR-6.90	2020-03-12 16:00				9.6		9.6
LBPR-6.90	2020-03-21 10:45				2.6		2.6
LBPR-6.90	2020-03-21 15:20				4.1		4.1
LBPR-6.90	2020-03-25 10:05				2.6		2.6
LBPR-6.90	2020-03-25 15:06				3.1		3.1
LBPR-6.90	2020-03-26 9:38				2.1		2.1
LBPR-6.90	2020-03-26 16:31			2560			
LBPR-6.90	2020-03-27 10:20				3.2		3.2
LBPR-6.90	2020-03-27 15:47				4		4
LBPR-6.90	2020-03-28 9:25				2.2		2.2
LBPR-6.90	2020-03-28 15:40				2.9		2.9
LBPR-6.90	2020-03-29 10:25				2.7		2.7
LBPR-6.90	2020-04-01 11:15				6.2		6.2
LBPR-6.90	2020-04-01 16:23				6.1		6.1
LBPR-6.90	2020-04-02 9:30				4.5		4.5
LBPR-6.90	2020-04-02 15:28				12.9		12.9
LBPR-6.90	2020-04-03 10:27				4.1		4.1
LBPR-6.90	2020-04-03 15:08				4		4
LBPR-6.90	2020-04-04 9:21				4.2		4.2
LBPR-6.90	2020-04-04 15:26				4.3		4.3
LBPR-6.90	2020-04-05 8:37				5		5
LBPR-6.90	2020-04-05 15:29				14.2		14.2
LBPR-6.90	2020-04-06 10:29				11.9		11.9
LBPR-6.90	2020-04-06 16:32				12.1		12.1
LBPR-6.90	2020-04-08 8:41				6.1		6.1
LBPR-6.90	2020-04-08 15:30				12.9		12.9
LBPR-6.90	2020-04-09 10:30				11.1		11.1
LBPR-6.90	2020-04-09 15:42				12.6		12.6
LBPR-6.90	2020-04-10 9:35				10		10
LBPR-6.90	2020-04-10 16:21				13.9		13.9
LBPR-6.90	2020-04-11 10:03				8.6		8.6
LBPR-6.90	2020-04-11 15:38				10.6		10.6
LBPR-6.90	2020-04-12 10:29				8.9		8.9
LBPR-6.90	2020-04-14 11:00	3.8		264	11.5		11.5
LBPR-6.90	2020-04-14 14:45				15.4		15.4
LBPR-6.90	2020-04-15 11:00				12.3		12.3
LBPR-6.90	2020-04-15 14:37				27.7		27.7
LBPR-6.90	2020-04-16 11:25				75.9		75.9
LBPR-6.90	2020-04-16 15:06				87.5		87.5
LBPR-6.90	2020-04-17 10:48				51.8		51.8
LBPR-6.90	2020-04-17 15:38				113		113
LBPR-6.90	2020-04-18 9:28				56		56
LBPR-6.90	2020-04-18 16:17				63.8		63.8
LBPR-6.90	2020-04-19 14:38				72.8		72.8
LBPR-6.90	2020-04-20 11:47				94		94
LBPR-6.90	2020-04-20 15:51				123		123
LBPR-6.90	2020-04-23 16:10				907		907
LBPR-6.90	2020-04-24 11:35				624		624
LBPR-6.90	2020-04-24 16:18				629		629
LBPR-6.90	2020-04-25 11:12				73		73
LBPR-6.90	2020-04-25 15:54				65		65
LBPR-6.90	2020-04-26 10:45				50		50
LBPR-6.90	2020-04-26 16:17				65		65
LBPR-6.90	2020-04-28 10:39				58		58
LBPR-6.90	2020-04-28 16:33				63.1		63.1
LBPR-6.90	2020-04-29 10:58				81.1		81.1
LBPR-6.90	2020-04-29 15:10				89.7		89.7
LBPR-6.90	2020-04-30 9:17				62.8		62.8
LBPR-6.90	2020-04-30 14:11				71.4		71.4
LBPR-6.90	2020-05-01 9:52				60.7		60.7
LBPR-6.90	2020-05-01 15:18				52.8		52.8
LBPR-6.90	2020-05-03 9:44				59.8		59.8
LBPR-6.90	2020-05-03 15:38				60.2		60.2
LBPR-6.90	2020-05-04 9:05				58		58
LBPR-6.90	2020-05-04 15:21				57.8		57.8
LBPR-6.90	2020-05-05 9:25				62.9		62.9
LBPR-6.90	2020-05-05 15:32				60.4		60.4
LBPR-6.90	2020-05-06 13:24				39.8		39.8
LBPR-6.90	2020-05-07 10:02				29.3		29.3
LBPR-6.90	2020-05-07 15:00				31.2		31.2
LBPR-6.90	2020-05-08 15:06				67.7		67.7
LBPR-6.90	2020-05-09 10:57				75.3		75.3
LBPR-6.90	2020-05-09 15:00				85		85
LBPR-6.90	2020-05-10 11:10	7.9		350	76.4		76.4
LBPR-6.90	2020-05-10 16:21				74.5		74.5
LBPR-6.90	2020-05-11 10:17				57.1		57.1
LBPR-6.90	2020-05-11 11:00				42.9		42.9
LBPR-6.90	2020-05-11 16:00				47.6		47.6
LBPR-6.90	2020-05-12 11:00				42.9		42.9
LBPR-6.90	2020-05-12 15:18				41.6		41.6
LBPR-6.90	2020-05-13 11:00				39.9		39.9

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBPR-6.90	2020-05-13 16:30				40		40
LBPR-6.90	2020-05-14 14:11	9.5		260	44.6		44.6
LBPR-6.90	2020-05-14 16:18				44.7		44.7
LBPR-6.90	2020-05-15 14:42				32.1		32.1
LBPR-6.90	2020-05-15 16:06				33.2		33.2
LBPR-6.90	2020-05-16 12:28				32.8		32.8
LBPR-6.90	2020-05-16 15:41				37.5		37.5
LBPR-6.90	2020-05-17 10:33	8.3		260	38.2		38.2
LBPR-6.90	2020-05-17 15:10				32.6		32.6
LBPR-6.90	2020-05-18 11:04				51.6		51.6
LBPR-6.90	2020-05-18 16:43				57.7		57.7
LBPR-6.90	2020-05-20 10:56				61.5		61.5
LBPR-6.90	2020-05-20 16:59				59		59
LBPR-6.90	2020-05-21 9:48				62.9		62.9
LBPR-6.90	2020-05-21 16:05				61.2		61.2
LBPR-6.90	2020-05-23 11:15				76.1		76.1
LBPR-6.90	2020-05-23 15:50				79.3		79.3
LBPR-6.90	2020-05-24 8:30				78.9		78.9
LBPR-6.90	2020-05-24 15:40				71.1		71.1
LBPR-6.90	2020-05-25 9:15				55.8		55.8
LBPR-6.90	2020-05-25 15:05				71.4		71.4
LBPR-6.90	2020-05-26 9:25				54		54
LBPR-6.90	2020-05-26 16:25				55.1		55.1
LBPR-6.90	2020-05-27 10:46	10.2		320	54.4		54.4
LBPR-6.90	2020-05-27 16:02				58.3		58.3
LBPR-6.90	2020-05-28 11:09				45.2		45.2
LBPR-6.90	2020-05-28 15:48				53.1		53.1
LBPR-6.90	2020-05-29 10:30	12.2		250	38		38
LBPR-6.90	2020-05-29 15:34				65.1		65.1
LBPR-6.90	2020-05-30 11:37				40		40
LBPR-6.90	2020-05-30 16:25				35.2		35.2
LBPR-6.90	2020-05-31 11:30				49.2		49.2
LBPR-6.90	2020-05-31 16:30				49.3		49.3
LBPR-6.90	2020-06-01 11:50				95.1		95.1
LBPR-6.90	2020-06-01 16:42				93.4		93.4
LBPR-6.90	2020-06-03 10:06				100.5		100.5
LBPR-6.90	2020-06-03 16:55				99.3		99.3
LBPR-6.90	2020-06-04 11:11				60.5		60.5
LBPR-6.90	2020-06-04 15:41				63.2		63.2
LBPR-6.90	2020-06-05 10:52	11.7		300	41.4		41.4
LBPR-6.90	2020-06-05 16:35				41.6		41.6
LBPR-6.90	2020-06-06 12:00	11.1		280	38.2		38.2
LBPR-6.90	2020-06-06 15:30				37.2		37.2
LBPR-6.90	2020-06-07 10:54	10.2		280	95.2		95.2
LBPR-6.90	2020-09-22 9:15				13		13
LBPR-6.90	2020-09-22 15:15				12		12
LBPR-6.90	2020-10-03 9:00				11		11
LBPR-6.90	2020-10-03 16:00				10		10
LBPR-6.90	2020-10-03 18:30				17		17
LBPR-6.90	2020-10-04 0:00				19		19
LBPR-6.90	2020-10-04 8:00				13		13
LBPR-6.90	2020-10-04 16:00				11		11
LBPR-6.90	2020-10-05 15:30				11.7		11.7
LBPR-6.90	2020-10-05 18:30				13		13
LBPR-6.90	2020-10-06 18:30				12		12
LBPR-6.90	2020-10-07 11:00				11.1		11.1
LBPR-6.90	2020-10-07 16:00				8.9		8.9
LBPR-6.90	2020-10-07 18:30				11		11
LBPR-6.90	2020-10-08 11:00				7.9		7.9
LBPR-6.90	2020-10-08 16:00				7.8		7.8
LBPR-6.90	2020-10-08 18:30				8		8
LBPR-6.90	2020-10-09 15:00				10		10
LBPR-6.90	2020-10-09 18:30				10		10
LBPR-6.90	2020-10-10 11:30				10.3		10.3
LBPR-6.90	2020-10-10 14:00				11.1		11.1
LBPR-6.90	2020-10-10 18:30				13		13
LBPR-6.90	2020-10-11 11:00				19.7		19.7
LBPR-6.90	2020-10-11 14:30				19.6		19.6
LBPR-6.90	2020-10-11 18:30				19		19
LBPR-6.90	2020-10-12 11:30				16.8		16.8
LBPR-6.90	2020-10-12 15:30				15.2		15.2
LBPR-6.90	2020-10-12 18:30				17		17
LBPR-6.90	2020-10-13 14:30				14.3		14.3
LBPR-6.90	2020-10-13 15:30				14		14
LBPR-6.90	2020-10-13 18:30				19		19
LBPR-6.90	2020-10-14 11:30				12.3		12.3
LBPR-6.90	2020-10-14 15:30				10.6		10.6
LBPR-6.90	2020-10-14 18:30				10		10
LBPR-6.90	2020-10-15 18:30				8		8
LBPR-6.90	2020-10-16 18:30				7		7
LBPR-6.90	2020-10-17 18:30				8		8
LBPR-6.90	2020-10-18 11:00				6		6
LBPR-6.90	2020-10-18 15:30				6		6
LBPR-6.90	2020-10-19 10:00				6		6
LBPR-6.90	2020-10-19 14:00				4		4
LBPR-6.90	2020-10-20 10:00				6		6
LBPR-6.90	2020-10-20 15:15				5		5
LBPR-6.90	2020-10-22 9:45				5		5
LBPR-6.90	2020-10-22 14:45				4		4

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBPR-6.90	2020-10-23 11:00				4		4
LBPR-6.90	2020-10-23 15:00				4		4
LBPR-6.90	2020-10-24 12:00				3		3
LBPR-6.90	2020-10-24 15:45				3		3
LBPR-6.90	2020-10-25 9:30				3		3
LBPR-6.90	2020-10-25 14:15				3		3
LBPR-6.90	2020-10-27 10:45				6		6
LBPR-6.90	2020-10-27 15:15				12		12
LBPR-6.90	2020-10-28 11:00				9		9
LBPR-6.90	2020-10-28 15:30				8		8
LBPR-6.90	2020-10-29 11:00				10		10
LBPR-6.90	2020-10-29 15:30				9		9
LBPR-6.90	2020-10-31 11:00				7		7
LBPR-6.90	2020-10-31 15:30				8		8
LBPR-6.90	2020-11-01 11:00				9		9
LBPR-6.90	2020-11-01 15:30				9		9
LBPR-6.90	2020-11-02 11:15				17		17
LBPR-6.90	2020-11-02 15:30				27		27
LBPR-6.90	2020-11-03 10:00				29		29
LBPR-6.90	2020-11-03 15:15				24		24
LBPR-6.90	2020-11-04 10:00				28		28
LBPR-6.90	2020-11-04 15:00				27		27
LBPR-6.90	2020-11-06 10:45				9		9
LBPR-6.90	2020-11-06 15:30				11		11
LBPR-6.90	2020-11-07 10:00				12		12
LBPR-6.90	2020-11-07 15:15				15		15
LBPR-6.90	2020-11-08 11:15				9		9
LBPR-6.90	2020-11-08 15:30				8		8
LBPR-6.90	2020-11-11 9:00				7		7
LBPR-6.90	2020-11-11 16:30				6		6
LBPR-6.90	2020-11-12 9:00				7		7
LBPR-6.90	2020-11-12 16:00				8		8
LBPR-6.90	2020-11-13 9:30				9		9
LBPR-6.90	2020-11-13 16:00				8		8
LBPR-6.90	2020-11-14 9:30						
LBPR-6.90	2020-11-14 15:15				9		9
LBPR-6.90	2020-11-15 9:30				9		9
LBPR-6.90	2020-11-15 16:00				11		11
LBPR-6.90	2020-11-16 10:30				12		12
LBPR-6.90	2020-11-16 15:30				10.2		10.2
LBPR-6.90	2020-11-17 11:00				7.6		7.6
LBPR-6.90	2020-11-17 16:00				7.6		7.6
LBPR-6.90	2020-11-18 10:30				8.1		8.1
LBPR-6.90	2020-11-19 10:30				13.6		13.6
LBPR-6.90	2020-11-19 15:00				10.8		10.8
LBPR-6.90	2020-11-20 11:00				7.1		7.1
LBPR-6.90	2020-11-20 15:30				7.2		7.2
LBPR-6.90	2020-11-21 12:00				6.6		6.6
LBPR-6.90	2020-11-21 15:00				6.4		6.4
LBPR-6.90	2020-11-24 10:15				15		15
LBPR-6.90	2020-11-24 15:00				13		13
LBPR-6.90	2020-11-25 9:30				7		7
LBPR-6.90	2020-11-25 15:00				6		6
LBPR-6.90	2020-11-26 10:00				6		6
LBPR-6.90	2020-11-26 15:00				7		7
LBPR-6.90	2020-11-27 9:45				23		23
LBPR-6.90	2020-11-27 16:00				11		11
LBPR-6.90	2020-11-29 9:30				7		7
LBPR-6.90	2020-11-29 15:30				16		16
LBPR-6.90	2020-12-01 14:00				9		9
LBPR-6.90	2020-12-02 9:30				5		5
LBPR-6.90	2020-12-02 15:45				4		4
LBPR-6.90	2020-12-03 10:00				7		7
LBPR-6.90	2020-12-03 14:15				7		7
LBPR-6.90	2020-12-04 11:00				12.6		12.6
LBPR-6.90	2020-12-04 15:00				11.2		11.2
LBPR-6.90	2020-12-05 10:00				5		5
LBPR-6.90	2020-12-05 15:45				5		5
LBPR-6.90	2020-12-06 9:00				7		7
LBPR-6.90	2020-12-06 16:00				9		9
LBPR-6.90	2020-12-07 11:00				9.5		9.5
LBPR-6.90	2020-12-12 12:00				5.6		5.6
LBPR-6.90	2020-12-12 15:00				5.7		5.7
LBPR-6.90	2020-12-13 14:00				5.5		5.5
LBPR-6.90	2020-12-15 11:00				5		5
LBPR-6.90	2020-12-15 16:00				7		7
LBPR-6.90	2020-12-16 11:00				4		4
LBPR-6.90	2020-12-16 15:30				3		3
LBPR-6.90	2020-12-17 10:30				5		5
LBPR-6.90	2020-12-17 15:30				4		4
LBPR-6.90	2020-12-18 14:15				4		4
LBPR-6.90	2020-12-19 15:15				4		4
LBPR-6.90	2020-12-25 11:00				4.8		4.8
LBPR-6.90	2020-12-25 14:00				4		4
LBPR-6.90	2020-12-26 14:00				3.6		3.6
LBPR-6.90	2020-12-27 11:00				3.4		3.4
LBPR-6.90	2020-12-27 15:00				3.4		3.4
LBPR-6.90	2020-12-29 14:00				2.5		2.5
LBPR-6.90	2020-12-30 15:00				3.5		3.5

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBPR-6.90	2020-12-31 14:00				6.4		6.4
MWTF-SLP-R5B	2020-01-03 0:00	1.5	7.2	1799	2.1	2	2.1
MWTF-SLP-R5B	2020-01-04 15:00	1.3	8.4	1584	2.9	3	2.9
MWTF-SLP-R5B	2020-01-05 12:00	0.4	7.4	1504	2.9	2.9	2.9
MWTF-SLP-R5B	2020-01-06 12:00	0.3	7.5	1442	2.6	2.6	2.6
MWTF-SLP-R5B	2020-01-07 11:55	2.4	7.8	1409	2.5	2.5	2.5
MWTF-SLP-R5B	2020-01-08 11:58	-0.2	8.1	1404	2.3	2.3	2.3
MWTF-SLP-R5B	2020-01-09 12:30	0.7	8.1	1471	4	3.9	4
MWTF-SLP-R5B	2020-01-10 12:30	1.1	7.5	1482	4.9	4.9	4.9
MWTF-SLP-R5B	2020-01-11 10:30	1.7	8.2	1422	3.6	3.6	3.6
MWTF-SLP-R5B	2020-01-12 12:00	-0.4	7.1	1439	2.3	2.3	2.3
MWTF-SLP-R5B	2020-01-13 10:13	1.3	8.1	1494	2.8	2.8	2.8
MWTF-SLP-R5B	2020-01-14 10:16	0.2	8.1	1654	2.8	2.8	2.8
MWTF-SLP-R5B	2020-01-15 11:35	0.9	8.1	1757	3.2	3.2	3.2
MWTF-SLP-R5B	2020-01-16 11:10	1.9	10	1907	4.3	4.2	4.3
MWTF-SLP-R5B	2020-01-17 14:55	1	8.6	2100	4.3	4.2	4.3
MWTF-SLP-R5B	2020-01-18 10:45	0.4	8.2	2190	4.7	4.7	4.7
MWTF-SLP-R5B	2020-01-19 12:28	3	8.2	2170	4.8	4.8	4.8
MWTF-SLP-R5B	2020-01-20 11:12	0.9	8.1	2250	5.2	5.2	5.2
MWTF-SLP-R5B	2020-01-21 13:10	0.9	8.7	2250	6.8	6.8	6.8
MWTF-SLP-R5B	2020-01-29 10:20	2.3	8.7	2150	5.2	5.2	5.2
MWTF-SLP-R5B	2020-01-30 12:00	2.6	8	2050	4.7	4.7	4.7
MWTF-SLP-R5B	2020-01-31 12:10	3.5	7.8	1936	3.9	3.9	3.9
MWTF-SLP-R5B	2020-02-01 10:22	2.8	8.1	1948	3.4	3.4	3.4
MWTF-SLP-R5B	2020-02-02 11:45	1.6	8.2	1924	2.9	2.9	2.9
MWTF-SLP-R5B	2020-02-03 11:10	0.8	8.1	1948	3.2	3.2	3.2
MWTF-SLP-R5B	2020-02-04 10:53	1.5	9.7	1970	4.4	4.3	4.4
MWTF-SLP-R5B	2020-02-05 11:41	2.1	8.2	2050	3.6	3.6	3.6
MWTF-SLP-R5B	2020-02-06 11:25	3.4	7.8	1963	3.2	3.4	3.2
MWTF-SLP-R5B	2020-02-07 12:30	2.1	7.9	1911	3.9	3.9	3.9
MWTF-SLP-R5B	2020-02-08 10:57	1.9	8.1	1892	6.1	6.1	6.1
MWTF-SLP-R5B	2020-02-09 12:17	2.6	8.1	1847	3.9	3.9	3.9
MWTF-SLP-R5B	2020-02-10 11:35	2.1	8	1834	3.4	3.4	3.4
MWTF-SLP-R5B	2020-02-11 14:25	1.1	7.9	1894	4.6	4.6	4.6
MWTF-SLP-R5B	2020-02-12 14:35	0.1	7.9	1935	3.2	3.2	3.2
MWTF-SLP-R5B	2020-02-13 13:00	3	7.4	1973	2.8	2.8	2.8
MWTF-SLP-R5B	2020-02-15 10:45	0.5	7.8	1899	2.9	3	2.9
MWTF-SLP-R5B	2020-02-16 13:05	1	7.6	1849	22	21.8	22
MWTF-SLP-R5B	2020-02-17 13:35	0.4	7.5	1745	3.9	3.9	3.9
MWTF-SLP-R5B	2020-02-18 11:27	-0.1	7.8	1678	3.2	3.3	3.2
MWTF-SLP-R5B	2020-02-19 12:35	0.9	7.9	1617	2.2	2.2	2.2
MWTF-SLP-R5B	2020-02-20 11:35	2.4	7.9	1594	2.7	2.7	2.7
MWTF-SLP-R5B	2020-02-21 10:45	3.5	8	1641	3	2.9	3
MWTF-SLP-R5B	2020-02-22 11:15	3	8.2	1638	3.6	3.6	3.6
MWTF-SLP-R5B	2020-02-23 10:12	1.6	8.1	1544	4.3	4.2	4.3
MWTF-SLP-R5B	2020-02-24 12:02	3.2	8	1493	3.5	3.5	3.5
MWTF-SLP-R5B	2020-02-25 11:26	3.3	7.8	1422	2.8	2.8	2.8
MWTF-SLP-R5B	2020-02-26 10:20	4.3	7.7	1426	2	2	2
MWTF-SLP-R5B	2020-02-27 15:20	3.5	8	1540	2.3	2.4	2.3
MWTF-SLP-R5B	2020-02-28 12:26	4.4	7.9	1575	3.2	3.2	3.2
MWTF-SLP-R5B	2020-02-29 11:40	1.2	8.1	1624	4.4	4.4	4.4
MWTF-SLP-R5B	2020-03-01 10:30	1.1	8.2	1748	2.6	2.6	2.6
MWTF-SLP-R5B	2020-03-02 20:00	1.2	7.5	1860	5.5	5.4	5.5
MWTF-SLP-R5B	2020-03-03 10:50	2.7	7.9	951	25.9	25.6	25.9
MWTF-SLP-R5B	2020-03-04 15:50	3.5	7.6	1707	7.2	7.2	7.2
MWTF-SLP-R5B	2020-03-05 14:25	2.9	7.7	1602	12.6	12.6	12.6
MWTF-SLP-R5B	2020-03-06 10:20	0.3	7.6	1604	6.2	6.2	6.2
MWTF-SLP-R5B	2020-03-07 10:25	0.1	7.8	1528	9	8.9	9
MWTF-SLP-R5B	2020-03-08 13:35	0.8	7.4	1447	3.8	3.7	3.8
MWTF-SLP-R5B	2020-03-09 13:30	2.3	7.4	1306	5.7	5.7	5.7
MWTF-SLP-R5B	2020-03-10 10:15	3.9	7.9	1175	5.4	5.4	5.4
MWTF-SLP-R5B	2020-03-11 12:08	3.7	8	1090	6.1	6.1	6.1
MWTF-SLP-R5B	2020-03-12 10:02	2.8	8.1	1091	4.7	4.7	4.7
MWTF-SLP-R5B	2020-03-13 14:18	2.9	8	1183	3.3	3.4	3.3
MWTF-SLP-R5B	2020-03-14 11:05	2.7	8.2	1283	3.9	3.9	3.9
MWTF-SLP-R5B	2020-03-15 11:45	1	8.3	1244	4.1	4.1	4.1
MWTF-SLP-R5B	2020-03-16 11:25	2.6	6.9	1248	4.8	4.8	4.8
MWTF-SLP-R5B	2020-03-17 10:55	3.7	8	1264	5.1	5.1	5.1
MWTF-SLP-R5B	2020-03-18 10:15	3.9	8.2	1321	6.9	6.9	6.9
MWTF-SLP-R5B	2020-03-19 10:18	3.5	8.1	1336	9	9	9
MWTF-SLP-R5B	2020-03-20 10:38	3.2	8.3	1248	11.2	11.2	11.2
MWTF-SLP-R5B	2020-03-21 9:42	4	8	1326	8	8	8
MWTF-SLP-R5B	2020-03-22 9:55	3.5	8.1	1474	5	5	5
MWTF-SLP-R5B	2020-03-23 12:11	3.2	8	1361	7.8	7.8	7.8
MWTF-SLP-R5B	2020-03-24 11:35	1.2	7.3	1373	7.9	7.8	7.9
MWTF-SLP-R5B	2020-03-25 12:05	2.3	7.8	1459	10.2	10.1	10.2
MWTF-SLP-R5B	2020-03-26 11:55	5.1	7.2	1571	6.8	6.8	6.8
MWTF-SLP-R5B	2020-03-27 9:35	3.2	7.9	1662	10.1	10.4	10.1
MWTF-SLP-R5B	2020-03-28 13:10	0.8	7.7	1673	11	11	11
MWTF-SLP-R5B	2020-03-29 12:55	0.5	7.5	1672	11.8	11.8	11.8
MWTF-SLP-R5B	2020-03-30 16:25	2.5	7.5	1492	12.5	12.3	12.5
MWTF-SLP-R5B	2020-03-31 10:45	2.1	8.4	1474	9.4	9.5	9.4
MWTF-SLP-R5B	2020-04-01 10:13	1.7	8.1	1445	5.2	5.2	5.2
MWTF-SLP-R5B	2020-04-02 11:25	1.4	8.1	1524	3.9	4	3.9
MWTF-SLP-R5B	2020-04-03 9:50	2.2	8.2	1562	3.4	3.5	3.4
MWTF-SLP-R5B	2020-04-04 10:05	2.6	8.2	1743	3.1	3.1	3.1
MWTF-SLP-R5B	2020-04-05 11:10	3.4	7.8	1949	2.8	2.8	2.8
MWTF-SLP-R5B	2020-04-08 10:11	1.6	8.7	1649	5	4.8	5
MWTF-SLP-R5B	2020-04-09 15:40	3.8	7.4	1483	8.1	8.2	8.1

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
MWTF-SLP-R5B	2020-04-10 10:12	4.1	7.9	1359	5.9	5.1	5.9
MWTF-SLP-R5B	2020-04-12 12:50	5.2	7.6	1176	7.3	7.5	7.3
MWTF-SLP-R5B	2020-04-13 11:10	4.6	7.8	1217	8.1	8	8.1
MWTF-SLP-R5B	2020-04-14 17:20	6.8	8.1	1228	10.1	10.3	10.1
MWTF-SLP-R5B	2020-04-15 11:56	6.2	7.9	1203	7.5	7.4	7.5
MWTF-SLP-R5B	2020-04-16 11:26	8.6	7	1240	4.9	5	4.9
MWTF-SLP-R5B	2020-04-17 12:07	9.8	7.8	1271	6.9	7	6.9
MWTF-SLP-R5B	2020-04-18 9:23	6.7	7.9	1347	8.7	8.8	8.7
MWTF-SLP-R5B	2020-04-19 14:35	10.1	7.8	1428	4.5	4.3	4.5
MWTF-SLP-R5B	2020-04-22 10:33	11.1	7.7	1574	4.7	4.6	4.7
MWTF-SLP-R5B	2020-04-23 13:15	10.8	8.3	1666	1.2	1.1	1.2
MWTF-SLP-R5B	2020-04-24 10:10	10.5	8.1	1686	1.3	1.3	1.3
MWTF-SLP-R5B	2020-04-25 10:06	10.9	7.9	1730	1.4	1.3	1.4
MWTF-SLP-R5B	2020-04-26 10:40	10.7	8.4	1802	4	4	4
MWTF-SLP-R5B	2020-04-27 12:10	11.1	8.1	1814	2.2	2.2	2.2
MWTF-SLP-R5B	2020-04-28 11:11	11.8	7.8	1834	1.2	1.3	1.2
MWTF-SLP-R5B	2020-04-29 12:21	14.5	7.9	1831	1.2	1.1	1.2
MWTF-SLP-R5B	2020-05-07 12:30	12.5	7.5	1832	4.2	4.2	4.2
MWTF-SLP-R5B	2020-05-10 15:35	12.7	7.8	1784	14.2	14.1	14.2
MWTF-SLP-R5B	2020-05-11 11:15	17.6	7.8	1761	14.5	14.5	14.5
MWTF-SLP-R5B	2020-05-17 11:20	12.8	7.9	1744	5.9	5.8	5.9
MWTF-SLP-R6	2020-05-12 13:30	16.1	8.3	1700	12.9	12.8	12.9
MWTF-SLP-R6	2020-05-14 11:45	12.6	7.7	1750	6.4	6.4	6.4
MWTF-SLP-R6	2020-05-15 11:05	2.7	7.8	1748	6	6	6
MWTF-SLP-R6	2020-05-16 12:50	14.8	8.1	1748	7	7	7
MWTF-SLP-R6	2020-05-18 12:55	13.2	7.9	1784	4	4	4
MWTF-SLP-R6	2020-05-19 13:30	15.4	7.5	1794	4.2	4.2	4.2
MWTF-SLP-R6	2020-05-20 12:20	15.9	7.8	1823	6.5	6.2	6.5
MWTF-SLP-R6	2020-05-21 15:00	12.5	8	1831	15.1	16	15.1
MWTF-SLP-R6	2020-05-22 16:15	11.7	7.8	1885	13.8	13.9	13.8
MWTF-SLP-R6	2020-05-24 12:05	14.9	7.9	2010	12.9	13.2	12.9
MWTF-SLP-R6	2020-05-27 17:00	17.1	7.7	2220	13.6	13.5	13.6
MWTF-SLP-R6	2020-05-28 15:30	19.2	7.6	2250	12.8	12.5	12.8
MWTF-SLP-R6	2020-05-29 14:45	19.2	7.7	2170	9.1	9.1	9.1
MWTF-SLP-R6	2020-05-31 14:30	19.5	7.7	2190	6.9	6.8	6.9
MWTF-SLP-R6	2020-06-01 15:10	19.1	7.8	2060	6.9	6.8	6.9
MWTF-SLP-R6	2020-06-02 15:00	17.7	7.6	2370	6.4	6.4	6.4
MWTF-SLP-R6	2020-06-03 15:00	17.7	7.6	2370	6.4	6.4	6.4
MWTF-SLP-R6	2020-06-04 11:35	18.1	7.6	2360	7.2	7.2	7.2
MWTF-SLP-R6	2020-06-07 11:02	15.4	7.7	2210	12.8	12.9	12.8
MWTF-SLP-R6	2020-06-10 16:20	20.3	7.7	2260	9	9.2	9
MWTF-SLP-R6	2020-06-11 12:32	20.1	7.7	2240	6.3	6.2	6.3
MWTF-SLP-R6	2020-06-12 13:15	19.5	7.6	2260	8.5	8.4	8.5
MWTF-SLP-R6	2020-06-13 13:38	20.2	7.9	2280	7.6	7.6	7.6
MWTF-SLP-R6	2020-06-14 14:28	16.7	7.9	2200	21.7	21.4	21.7
MWTF-SLP-R6	2020-06-15 14:22	15.1	7.8	2200	11.5	11.3	11.5
MWTF-SLP-R6	2020-06-20 14:30	20.8	7.8	2820	2.1	1.7	2.1
MWTF-SLP-R6	2020-06-23 16:30	21.1	7.6	2850	1.6	1.6	1.6
MWTF-SLP-R6	2020-06-24 13:25	21	7.9	2810	1.4	1.4	1.4
MWTF-SLP-R6	2020-06-28 12:02	18.7	7.8	2550	2	2	2
MWTF-SLP-R6	2020-06-30 13:22	19.4	7.8	2510	1.8	1.8	1.8
MWTF-SLP-R6	2020-07-01 14:12	17.9	7.9	2550	2.2	2.2	2.2
MWTF-SLP-R6	2020-07-06 13:15	20.8	7.9	2510	3.3	3.3	3.3
MWTF-SLP-R6	2020-07-12 16:00	18.8	8	2530	3	3	3
MWTF-SLP-R6	2020-07-14 13:15	20.8	7.9	2510	3.3	3.3	3.3
MWTF-SLP-R6	2020-07-15 12:10	20.1	8	2500	3.5	3.3	3.5
MWTF-SLP-R6	2020-07-17 13:25	20	8	2380	2.3	2.2	2.3
MWTF-SLP-R6	2020-07-20 11:02	21.6	8.2	2270	1.9	1.9	1.9
MWTF-SLP-R6	2020-07-22 13:58	22.5	8.3	2260	2.7	2.6	2.7
MWTF-SLP-R6	2020-07-25 11:30	20.2	7.8	2260	2.4	2.4	2.4
MWTF-SLP-R6	2020-07-26 13:40	21.9	7.6	2270	2.1	2.1	2.1
MWTF-SLP-R6	2020-07-31 11:30	23.1	7.3	2190	2.6	2.6	2.6
MWTF-SLP-R6	2020-08-03 12:15	23.1	7.6	2000	4.4	4.3	4.4
MWTF-SLP-R6	2020-08-04 11:50	20.9	7.9	2020	4.4	4.4	4.4
MWTF-SLP-R6	2020-08-05 11:38	22.8	7.3	2000	4.7	4.6	4.7
MWTF-SLP-R6	2020-08-07 11:20	19.9	7.8	2000	3.7	3.7	3.7
MWTF-SLP-R6	2020-08-09 13:40	20.2	8	2110	2.9	3.1	2.9
MWTF-SLP-R6	2020-08-11 12:10	18.3	7.7	2220	2.9	2.8	2.9
MWTF-SLP-R6	2020-08-13 12:40	17.7	7.8	2180	2.5	2.5	2.5
MWTF-SLP-R6	2020-08-15 13:38	17.3	8.1	1980	3	3	3
MWTF-SLP-R6	2020-08-23 16:15	19	7.4	1695	3.4	3.6	3.4
MWTF-SLP-R6	2020-08-25 11:54	17.2	7.6	1974	0.8	0.8	0.8
MWTF-SLP-R6	2020-08-26 13:10	16.8	7.6	2010	3.9	3.9	3.9
MWTF-SLP-R6	2020-08-27 12:00	16.9	8.5	2110	4	4.1	4
MWTF-SLP-R6	2020-08-30 14:08	16	7.6	1876	1.1	1.1	1.1
MWTF-SLP-R6	2020-09-01 13:30	15.6	7.7	1786	2.2	2.2	2.2
MWTF-SLP-R6	2020-09-03 14:45	16.9	7.9	1730	3	2.9	3
MWTF-SLP-R6	2020-09-05 12:50	16.7	7.9	1643	2.4	2.3	2.4
MWTF-SLP-R6	2020-09-13 17:10	13.2	8	1877	8.2	8.2	8.2
MWTF-SLP-R6	2020-09-15 14:05	12.8	7.8	1843	8.6	8.7	8.6
MWTF-SLP-R6	2020-09-17 12:15	12.6	8	1938	9.3	9.3	9.3
MWTF-SLP-R6	2020-09-22 13:00	13.6	8.3	1706	8.5	8.5	8.5
MWTF-SLP-R6	2020-09-24 13:05	13.5	8.5	1556	7.9	8.1	7.9
MWTF-SLP-R6	2020-09-26 12:25	12.5	8.1	1434	7.2	7.3	7.2
MWTF-SLP-R6	2020-09-27 15:10	10.9	8.1	1489	7.3	7.3	7.3
MWTF-SLP-R6	2020-09-30 14:10	11.8	7.6	1608	6.6	6.7	6.6
MWTF-SLP-R6	2020-10-08 14:02	10.6	7.8	1658	6.9	6.9	6.9
MWTF-SLP-R6	2020-10-10 12:30	8.8	7.8	1630	6.1	6.1	6.1
MWTF-SLP-R6	2020-10-11 14:00	9.6	8.3	1656	11	11.1	11

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
MWTF-SLP-R6	2020-10-13 12:45	8.4	7.8	1800	6.4	6.4	6.4
MWTF-SLP-R6	2020-10-14 13:50	7.5	8.3	1929	6.4	6.3	6.4
MWTF-SLP-R6	2020-10-16 15:35	6.6	8.3	2080	4.7	4.7	4.7
MWTF-SLP-R6	2020-10-23 10:50	2	7.7	1990	6.4	6.4	6.4
MWTF-SLP-R6	2020-11-01 13:30	5.6	7.2	1590	9.4	9.6	9.4
MWTF-SLP-R6	2020-11-03 13:15	5.1	7.7	1709	15.2	15.1	15.2
MWTF-SLP-R6	2020-11-04 14:05	3.1	8.1	1748	12.1	12.1	12.1
MWTF-SLP-R6	2020-11-05 12:42	2.8	7.8	1712	9.1	9.1	9.1
MWTF-SLP-R6	2020-11-08 11:00	1.6	8.2	1700	6.8	6.8	6.8
MWTF-SLP-R6	2020-11-09 9:40	3.8	8.2	1691	11.2	11.1	11.2
MWTF-SLP-R6	2020-11-10 12:50	5.2	8	1552	7.9	8	7.9
MWTF-SLP-R6	2020-11-11 12:05	3.3	7.8	1630	7.2	7.2	7.2
MWTF-SLP-R6	2020-11-12 10:50	2.9	7.5	1620	5.8	5.9	5.8
MWTF-SLP-R6	2020-11-13 10:04	2.7	7.4	1663	5	5	5
MWTF-SLP-R6	2020-11-14 11:40	3.5	8	1750	5.2	5.2	5.2
MWTF-SLP-R6	2020-11-15 11:40	2.6	8	2030	5.8	5.8	5.8
MWTF-SLP-R6	2020-11-16 11:06	2.5	8	2210	5.1	5.1	5.1
MWTF-SLP-R6	2020-11-17 15:10	2.5	7.7	2170	7.9	7.9	7.9
MWTF-SLP-R6	2020-11-19 15:00	2.9	7.9	2000	9.4	9.4	9.4
MWTF-SLP-R6	2020-11-24 12:45	3.5	7.9	1728	3.5	3.5	3.5
MWTF-SLP-R6	2020-11-25 13:25	2.2	8.2	1839	3.8	3.8	3.8
MWTF-SLP-R6	2020-11-26 14:00	2.5	8.1	1693	6.7	6.8	6.7
MWTF-SLP-R6	2020-11-27 11:45	3	8.3	1540	8.1	8.1	8.1
MWTF-SLP-R6	2020-11-28 12:05	2.2	8.3	1737	5.3	5.4	5.3
MWTF-SLP-R6	2020-11-29 12:10	2.6	8.1	1789	2.7	2.7	2.7
MWTF-SLP-R6	2020-11-30 13:10	2.1	8	1922	2.6	2.6	2.6
MWTF-SLP-R6	2020-12-01 12:38	4.5	8.2	1932	7.5	7.5	7.5
MWTF-SLP-R6	2020-12-02 12:20	4.2	7.9	1945	2.8	2.9	2.8
MWTF-SLP-R6	2020-12-03 12:15	3.5	8	1989	7	7.2	7
MWTF-SLP-R6	2020-12-04 12:30	3.4	8.1	2090	5.3	5.3	5.3
MWTF-SLP-R6	2020-12-05 12:52	4.1	8.2	1914	6.9	6.9	6.9
MWTF-SLP-R6	2020-12-06 12:30	3.2	8	2010	5.5	5.5	5.5
MWTF-SLP-R6	2020-12-09 16:00	3.4	7.6	1954	9	9	9
MWTF-SLP-R6	2020-12-13 16:10	0	8.4	2100	7	7	7
MWTF-SLP-R6	2020-12-15 14:00	0.7	7.4	2060	5.4	5.3	5.4
MWTF-SLP-R6	2020-12-16 13:15	0.2	7.4	1903	5.1	5.2	5.1
MWTF-SLP-R6	2020-12-17 13:00	0.7	7.7	1758	5.4	5.4	5.4
MWTF-SLP-R6	2020-12-18 12:30	0.6	7.8	1796	5.5	5.4	5.5
MWTF-SLP-R6	2020-12-19 11:50	0.8	7.9	1738	7.8	7.9	7.8
MWTF-SLP-R6	2020-12-20 14:30	1.7	7.7	1670	7.7	7.7	7.7
MWTF-SLP-R6	2020-12-22 15:50	2.2	7.6	1393	9.1	9.1	9.1
MWTF-SLP-R6	2020-12-25 15:50	1.8	8	1393	5.3	5.3	5.3
MWTF-SLP-R6	2020-12-31 15:03	0.5	6.8	1470	4.7	4.7	4.7
PR_DIC	2020-08-28 15:40	15.6	8.2	176	8.8	8.7	8.8
PR_DIC	2020-08-29 12:50	15.2	8.4	175	8.9	8.7	8.9
PR-DIC-DS	2020-09-21 18:15	13.5	8.2	219	11.6	11.7	11.6
PR-DIC-DS	2020-09-27 12:05	12	8.2	226	8.7	8.6	8.7
PR-DIC-DS	2020-10-02 9:40	11.8	8.3	254	9.0	8.9	8.9
PR-DIC-US	2020-09-21 17:45	13.6	8.4	226	28.3	28.2	28.1
PR-DIC-US	2020-09-27 11:10	12.7	7.8	242	7.2	7.3	7.2
PR-DIC-US	2020-10-02 9:50	12	8.3	251	8.5	8.5	8.5
PR_DOC	2020-08-31 16:10	15.4	8.4	174	8.3	8.2	8.3
PR_DOC	2020-09-01 14:30	15.7	8.5	180	6.5	6.6	6.5
PR_DOC	2020-09-05 9:40	14.4	8.5	188	11.1	11.1	11.1
PR_DOC	2020-09-06 13:30	12.7	8.5	201	10.5	10.4	10.5
PR_DOC	2020-09-07 9:10	11.8	8.6	193	8.4	8.2	8.4
PR-DOC-DS	2020-09-21 16:05	14.4	8.45	246	14.1	14.1	14.1
PR-DOC-DS	2020-09-27 13:15	12	8.4	230	11.6	11.7	11.6
PR-DOC-DS	2020-10-02 9:20	11.8	8.48	246	9.56	9.43	9.26
PR-DOC-US	2020-09-21 16:50	14.4	8.4	225	16	25.9	26
PR-DOC-US	2020-09-27 12:30	12	8.4	230	11.6	11.7	11.5
PR-DOC-US	2020-10-02 9:30	11.7	8.33	249	12.1	12.1	11.9
PR-L5-FlowShack	2020-02-05 10:30				5.5		5.5
PR-L5-FlowShack	2020-02-25 9:45				3		3
PR-L5-FlowShack	2020-02-25 16:30				3		3
PR-L5-FlowShack	2020-02-26 9:05				3.7		3.7
PR-L5-FlowShack	2020-03-21 10:20				3.1		3.1
PR-L5-FlowShack	2020-03-21 15:05				2.8		2.8
PR-L5-FlowShack	2020-03-25 9:45				2.1		2.1
PR-L5-FlowShack	2020-03-25 14:48				2.8		2.8
PR-L5-FlowShack	2020-03-26 9:15				2		2
PR-L5-FlowShack	2020-03-26 16:17				2.6		2.6
PR-L5-FlowShack	2020-03-27 9:45				2.6		2.6
PR-L5-FlowShack	2020-03-27 15:30				2.2		2.2
PR-L5-FlowShack	2020-03-28 9:07				2		2
PR-L5-FlowShack	2020-03-28 15:08				3.1		3.1
PR-L5-FlowShack	2020-03-29 10:06				2.9		2.9
PR-L5-FlowShack	2020-04-01 9:11				4.2		4.2
PR-L5-FlowShack	2020-04-01 10:36				6		6
PR-L5-FlowShack	2020-04-01 15:10				5.1		5.1
PR-L5-FlowShack	2020-04-01 16:00				5.3		5.3
PR-L5-FlowShack	2020-04-03 10:05				3.6		3.6
PR-L5-FlowShack	2020-04-03 14:45				3.9		3.9
PR-L5-FlowShack	2020-04-04 9:00				3.6		3.6
PR-L5-FlowShack	2020-04-04 15:02				4		4
PR-L5-FlowShack	2020-04-05 8:15				4.1		4.1
PR-L5-FlowShack	2020-04-05 15:45				5.1		5.1
PR-L5-FlowShack	2020-04-06 10:10				4.3		4.3
PR-L5-FlowShack	2020-04-06 16:10				4.7		4.7

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-L5-FlowShack	2020-04-08 8:25				4.5		4.5
PR-L5-FlowShack	2020-04-08 15:00				4.2		4.2
PR-L5-FlowShack	2020-04-09 10:07				5.2		5.2
PR-L5-FlowShack	2020-04-09 15:15				4.6		4.6
PR-L5-FlowShack	2020-04-10 9:18				4.7		4.7
PR-L5-FlowShack	2020-04-10 16:00				4.1		4.1
PR-L5-FlowShack	2020-04-11 9:45				2.9		2.9
PR-L5-FlowShack	2020-04-11 15:13				3.9		3.9
PR-L5-FlowShack	2020-04-12 10:05				3.6		3.6
PR-L5-FlowShack	2020-04-14 11:50	3.6		227	5.9		5.9
PR-L5-FlowShack	2020-04-15 10:47	4.4		226	11.2		11.2
PR-L5-FlowShack	2020-04-15 15:00				24.4		24.4
PR-L5-FlowShack	2020-04-16 11:00				79.8		79.8
PR-L5-FlowShack	2020-04-16 14:42	5.9		231	107.8		107.8
PR-L5-FlowShack	2020-04-17 10:30				45		45
PR-L5-FlowShack	2020-04-17 15:20				98.9		98.9
PR-L5-FlowShack	2020-04-18 9:15				51.3		51.3
PR-L5-FlowShack	2020-04-18 16:00				57.1		57.1
PR-L5-FlowShack	2020-04-19 14:15				73.9		73.9
PR-L5-FlowShack	2020-04-20 10:12	4.7		237	91		91
PR-L5-FlowShack	2020-04-20 16:05				657		657
PR-L5-FlowShack	2020-04-23 10:18	4.6		266	1225		1225
PR-L5-FlowShack	2020-04-24 11:12	5.3		228	619		619
PR-L5-FlowShack	2020-04-25 11:00	5.1		230	69		69
PR-L5-FlowShack	2020-04-26 10:28	4.3		220	49		49
PR-L5-FlowShack	2020-04-28 10:52				53.8		53.8
PR-L5-FlowShack	2020-04-28 16:10				59.7		59.7
PR-L5-FlowShack	2020-04-29 10:41				75		75
PR-L5-FlowShack	2020-04-29 15:37				91.1		91.1
PR-L5-FlowShack	2020-04-30 9:05				59.1		59.1
PR-L5-FlowShack	2020-04-30 14:32				68.3		68.3
PR-L5-FlowShack	2020-05-01 9:38				59.9		59.9
PR-L5-FlowShack	2020-05-01 15:32				50.2		50.2
PR-L5-FlowShack	2020-05-03 9:30				64.4		64.4
PR-L5-FlowShack	2020-05-03 15:06				62.3		62.3
PR-L5-FlowShack	2020-05-04 8:50				56.5		56.5
PR-L5-FlowShack	2020-05-04 15:10				57.1		57.1
PR-L5-FlowShack	2020-05-05 9:03				65.2		65.2
PR-L5-FlowShack	2020-05-05 15:49				59.3		59.3
PR-L5-FlowShack	2020-05-06 13:10				40		40
PR-L5-FlowShack	2020-05-07 10:17				28.7		28.7
PR-L5-FlowShack	2020-05-07 15:20				26.9		26.9
PR-L5-FlowShack	2020-05-08 14:34				69.1		69.1
PR-L5-FlowShack	2020-05-09 9:28				76.4		76.4
PR-L5-FlowShack	2020-05-10 9:33				78.2		78.2
PR-L5-FlowShack	2020-05-11 9:35	7.1		260	49.3		49.3
PR-L5-FlowShack	2020-05-12 10:41				42.7		42.7
PR-L5-FlowShack	2020-05-13 10:41				34.6		34.6
PR-L5-FlowShack	2020-05-14 10:56	8.1			33.4		33.4
PR-L5-FlowShack	2020-05-15 10:47				31.5		31.5
PR-L5-FlowShack	2020-05-16 11:52				30		30
PR-L5-FlowShack	2020-05-17 10:50				37.7		37.7
PR-L5-FlowShack	2020-05-18 9:30				55.1		55.1
PR-L5-FlowShack	2020-05-20 10:38				60.1		60.1
PR-L5-FlowShack	2020-05-20 16:45				57.9		57.9
PR-L5-FlowShack	2020-05-21 9:35				64.6		64.6
PR-L5-FlowShack	2020-05-21 16:21				61.9		61.9
PR-L5-FlowShack	2020-05-23 11:00				74.5		74.5
PR-L5-FlowShack	2020-05-23 15:30				76		76
PR-L5-FlowShack	2020-05-24 8:15				76.1		76.1
PR-L5-FlowShack	2020-05-24 16:00				68		68
PR-L5-FlowShack	2020-05-25 9:00				51.2		51.2
PR-L5-FlowShack	2020-05-25 15:20				68.3		68.3
PR-L5-FlowShack	2020-05-26 8:50				58.3		58.3
PR-L5-FlowShack	2020-05-26 16:10				54.9		54.9
PR-L5-FlowShack	2020-05-27 11:13				56.7		56.7
PR-L5-FlowShack	2020-05-28 10:35	11.2		290	47.4		47.4
PR-L5-FlowShack	2020-05-29 10:50				40.5		40.5
PR-L5-FlowShack	2020-05-30 10:28	12.9		290	33.1		33.1
PR-L5-FlowShack	2020-05-31 14:05				40.3		40.3
PR-L5-FlowShack	2020-06-01 11:45				92.5		92.5
PR-L5-FlowShack	2020-06-03 9:40				91		91
PR-L5-FlowShack	2020-06-04 13:39				49.7		49.7
PR-L5-FlowShack	2020-06-05 14:43				40.5		40.5
PR-L5-FlowShack	2020-06-06 11:00				44.7		44.7
QAQC_Curing_Tanks	2020-06-08 11:00	22	9.3	2850	2.7	2.6	2.7
QAQC_Curing_Tanks	2020-09-01 11:40	21.9	9.5	1290	3.4	3.3	3.4
QAQC_Sink	2020-06-08 10:30	25.8	7.7	479	0.9	0.9	0.9
QAQC_Sink	2020-09-01 11:20	19.8	11.9	1193	53.4	52.5	53.4
RBAC-SEEP	2020-05-11 10:20	17.6	8.3	1105	4	4	4
RBAC-SEEP	2020-10-20 15:50	6.5	8.2	1052	12.9	12.9	12.9
RBAC-SEEP	2020-10-21 13:30	6.8	8	1042	6.8	6.7	6.8
RBAC-SUMP	2020-05-11 10:30		7.2	2670	108.8	108.9	108.8
RBAC-SUMP	2020-08-01 10:00	19.1	7.1	1150	39.5	39.2	39.5
RBAC-SUMP	2020-10-21 13:15	5.6	7.5	938	27.1	26.7	27.1
RBAC-SUMP	2020-10-24 15:55	8.1	8	1012	5.6	5.7	5.6
RBAC-SUMP	2020-10-26 15:15	4.7	7.8	910	13.7	13.6	13.7
RBAC-SUMP	2020-10-30 15:10	8	8	1040	7	6.8	7
RBAC-SUMP	2020-11-18 15:40	5.3	8.6	1378	13.4	13.4	13.4

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RBAC-SUMP	2020-12-10 15:10	3.2	8	1031	5.2	5.2	5.2
RBAC-SUMP	2020-12-15 13:05	5.7	7.8	1050	12.7	12.7	12.7
RBAC-SUMP	2020-12-19 13:20	5.4	8.2	1153	6.3	6.2	6.3
RBAC-SUMP	2020-12-24 13:45	8.8	8.3	1032	3.5	3.5	3.5
RBAC-SUMP	2020-12-26 13:15	6.9	7.7	1110	5.1	5	5.1
RBAC-SUMP	2020-12-27 14:45	7.2	8	995	4.6	4.6	4.6
RBAC-SUMP	2020-12-29 16:07	5.1	7	1068	4.4	4.3	4.4
RBAC-SUMP	2020-12-30 15:40	4.1	7.4	1098	4.1	4.1	4.1
RBAC-SUMP	2020-12-31 15:18	5.2	7.2	1100	3.9	4	3.9
RBBD	2020-01-24 11:30				1.6		1.6
RBBD	2020-01-25 11:30				1.9		1.9
RBBD	2020-01-29 11:40	1.3	8.8	245	1.9		1.9
RBBD	2020-01-30 14:00				1.3		1.3
RBBD	2020-01-31 10:45	1.7	8.7	222	2.3		2.3
RBBD	2020-01-31 15:00				2.4		2.4
RBBD	2020-02-01 12:00	2.1	8.6	227	2.3		2.3
RBBD	2020-02-02 11:00	2.3	8.8	224	2.5		2.5
RBBD	2020-02-05 11:00				5.8		5.8
RBBD	2020-02-06 9:50				6.2		6.2
RBBD	2020-02-07 10:50				6.3		6.3
RBBD	2020-02-08 9:15				7.2		7.2
RBBD	2020-02-09 10:45				6.1		6.1
RBBD	2020-02-09 11:30				19.1		19.1
RBBD	2020-02-09 16:15				18.4		18.4
RBBD	2020-02-10 10:50				6.3		6.3
RBBD	2020-02-12 11:00	2	8.7	215	2.8		2.8
RBBD	2020-02-23 14:30				3.6		3.6
RBBD	2020-03-10 11:55				2.5		2.5
RBBD	2020-04-14 10:15				2.5		2.5
RBBD	2020-04-17 11:00				24.4		24.4
RBBD	2020-04-17 14:50				37.9		37.9
RBBD	2020-04-18 10:35				27.1		27.1
RBBD	2020-04-18 15:11				27.5		27.5
RBBD	2020-04-19 11:00				61.8		61.8
RBBD	2020-04-20 11:33				60.7		60.7
RBBD	2020-04-21 11:00				619		619
RBBD	2020-04-23 12:00				84		84
RBBD	2020-04-25 14:30				69.6		69.6
RBBD	2020-04-26 12:07				68.3		68.3
RBBD	2020-04-28 10:25				64		64
RBBD	2020-04-28 14:48				61		61
RBBD	2020-04-29 10:00				73.5		73.5
RBBD	2020-04-29 14:50				90.9		90.9
RBBD	2020-04-30 9:56				64.4		64.4
RBBD	2020-04-30 14:00				76.7		76.7
RBBD	2020-05-01 10:05				63		63
RBBD	2020-05-01 15:05				53.1		53.1
RBBD	2020-05-06 13:45				41.6		41.6
RBBD	2020-05-07 9:35				26.1		26.1
RBBD	2020-05-07 14:45				25.8		25.8
RBBD	2020-05-08 15:25				63.4		63.4
RBBD	2020-05-09 10:31				62.5		62.5
RBBD	2020-05-09 16:00				84		84
RBBD	2020-05-10 15:18				58.1		58.1
RBBD	2020-05-12 12:34				44.7		44.7
RBBD	2020-05-13 11:20	9.8		250	42.5		42.5
RBBD	2020-05-15 11:19	9.6		260	35.2		35.2
RBBD	2020-05-16 11:17	9.7		270	30.6		30.6
RBBD	2020-05-17 11:45	8.2		240	30.5		30.5
RBBD	2020-05-18 15:22				59.4		59.4
RBBD	2020-05-18 15:26	8.5		260	53.4		53.4
RBBD	2020-05-20 10:15				56.8		56.8
RBBD	2020-05-21 10:45				63.2		63.2
RBBD	2020-05-21 15:30				60.1		60.1
RBBD	2020-05-23 13:40				88		88
RBBD	2020-05-24 9:00				121		121
RBBD	2020-05-24 15:15				79		79
RBBD	2020-05-25 9:35				37.1		37.1
RBBD	2020-05-25 15:05				71.4		71.4
RBBD	2020-05-26 15:10				57.8		57.8
RBBD	2020-05-28 10:45				56.1		56.1
RBBD	2020-05-29 11:00	12.6		270	42.7		42.7
RBBD	2020-05-31 14:15				54.5		54.5
RBBD	2020-06-01 11:57				93.9		93.9
RBBD	2020-06-03 9:40				91		91
RBBD	2020-06-05 14:55				48.6		48.6
RBBD	2020-06-06 11:13				51.4		51.4
RBBD	2020-07-13 11:00				268		268
RBBD	2020-07-13 15:00				295		295
RBBD	2020-07-13 20:30				243		243
RBBD	2020-07-14 4:00				247		247
RBBD	2020-07-14 11:00				227		227
RBBD	2020-07-14 15:00				228		228
RBBD	2020-07-14 20:30				221		221
RBBD	2020-07-15 4:00				181		181
RBBD	2020-07-15 11:00				164		164
RBBD	2020-07-15 15:00				190		190
RBBD	2020-07-15 20:30				200		200
RBBD	2020-07-16 4:00				171		171

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RBBD	2020-07-16 11:00				175		175
RBBD	2020-07-16 15:00				202		202
RBBD	2020-07-16 20:30				148		148
RBBD	2020-07-17 4:00				140		140
RBBD	2020-07-17 11:00				136		136
RBBD	2020-07-17 15:00				122		122
RBBD	2020-07-17 20:30				126		126
RBBD	2020-07-18 4:00				122		122
RBBD	2020-07-18 11:00				142		142
RBBD	2020-07-18 15:00				134		134
RBBD	2020-07-18 20:30				125		125
RBBD	2020-07-19 4:00				113		113
RBBD	2020-07-19 11:00				100		100
RBBD	2020-07-19 15:00				114		114
RBBD	2020-07-19 20:30				105		105
RBBD	2020-07-20 4:00				107		107
RBBD	2020-07-20 20:30				93		93
RBBD	2020-07-21 4:00				88		88
RBBD	2020-07-21 10:00				136		136
RBBD	2020-07-21 14:30				137		137
RBBD	2020-07-22 4:00				74		74
RBBD	2020-07-22 9:30				70		70
RBBD	2020-07-22 14:30				85		85
RBBD	2020-07-22 20:30				76		76
RBBD	2020-07-23 4:00				75		75
RBBD	2020-07-23 9:00				63		63
RBBD	2020-07-23 14:50				80		80
RBBD	2020-07-23 20:30				79		79
RBBD	2020-07-24 9:10				63		63
RBBD	2020-07-24 14:40				55		55
RBBD	2020-07-24 20:30				68		68
RBBD	2020-07-25 4:00				69		69
RBBD	2020-07-25 9:30				59		59
RBBD	2020-07-25 14:00				54		54
RBBD	2020-07-25 20:30				62		62
RBBD	2020-07-26 4:00				48		48
RBBD	2020-07-26 9:10				73		73
RBBD	2020-07-26 14:00				61		61
RBBD	2020-07-26 20:30				56		56
RBBD	2020-07-27 4:00				48		48
RBBD	2020-07-27 9:30				71		71
RBBD	2020-07-27 14:00				52		52
RBBD	2020-07-27 20:30				48		48
RBBD	2020-07-28 4:30				39		39
RBBD	2020-07-28 9:00				41		41
RBBD	2020-07-28 14:20				39		39
RBBD	2020-07-28 20:30				53		53
RBBD	2020-07-29 4:30				56		56
RBBD	2020-07-29 9:00				35		35
RBBD	2020-07-29 14:20				66		66
RBBD	2020-07-29 20:30				47		47
RBBD	2020-07-30 4:30				39		39
RBBD	2020-07-30 10:15				29		29
RBBD	2020-07-30 14:00				30		30
RBBD	2020-07-30 20:30				31		31
RBBD	2020-07-31 4:30				34		34
RBBD	2020-07-31 9:20				28		28
RBBD	2020-07-31 15:10				34		34
RBBD	2020-07-31 20:30				29		29
RBBD	2020-08-01 4:30				35		35
RBBD	2020-08-01 20:30				54		54
RBBD	2020-08-02 4:30				36		36
RBBD	2020-08-02 11:00				37.4		37.4
RBBD	2020-08-02 15:00				36.2		36.2
RBBD	2020-08-02 20:30				32		32
RBBD	2020-08-03 4:30				41		41
RBBD	2020-08-03 11:00				31.4		31.4
RBBD	2020-08-03 15:00				26.8		26.8
RBBD	2020-08-03 20:30				31		31
RBBD	2020-08-04 4:30				29		29
RBBD	2020-08-04 11:00				26.3		26.3
RBBD	2020-08-04 15:00				28.8		28.8
RBBD	2020-08-04 20:30				33		33
RBBD	2020-08-05 0:00						
RBBD	2020-08-05 4:00				38		38
RBBD	2020-08-05 11:00				23.7		23.7
RBBD	2020-08-05 15:00				25.5		25.5
RBBD	2020-08-05 20:30				28		28
RBBD	2020-08-06 4:30				25		25
RBBD	2020-09-23 20:30				7		7
RB-Core-Trench-Sump	2020-06-12 15:50	21.9	9.8	2610	643	645	643
RB-Core-Trench-Sump	2020-06-13 13:15	19.7	9.4	2080	1327	1330	1327
RB-Core-Trench-Sump	2020-06-14 15:02	14.1	9.9	1384	OR		
RB-Core-Trench-Sump	2020-06-15 16:08	13.6	8.6	1385	OR		
RB-Core-Trench-Sump	2020-06-18 15:45	24.5	8	1716	2484	2483	2484
RB-Core-Trench-Sump	2020-06-20 15:10	22.4	9.3	2680	2357	2350	2357
RB-Core-Trench-Sump	2020-08-01 11:45	22.2	9.3	2230	OR		
RB-Core-Trench-Sump	2020-10-03 14:50	15.3	9.7	2680	OR		
RB-Core-Trench-Sump	2020-10-27 13:15	11.5	8.6	2140	106.5	106.8	106.5

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RB-Core-Trench-Sump	2020-11-21 15:45	7.2	11.7	6530	66.3	66.2	66.3
RB-Core-Trench-Sump	2020-12-13 16:00	5.4	10	4840	16	16.2	16
RB-Core-Trench-Sump	2020-12-29 15:35	8.8	9	6430	16.7	16.9	16.7
RBDA-DS	2020-01-24 11:15	1.1	8.8	222	2		2
RBDA-DS	2020-01-25 11:20	2.1	8.2	216	2.4		2.4
RBDA-DS	2020-01-25 14:55	2.1	8.4	219	1.7		1.7
RBDA-DS	2020-01-29 14:26	1.6	8.5	220	1.4		1.4
RBDA-DS	2020-01-30 14:15	2.1	8.8	228	4		4
RBDA-DS	2020-01-30 15:55				3.2		3.2
RBDA-DS	2020-01-31 11:14				9.8		9.8
RBDA-DS	2020-01-31 14:45				4.6		4.6
RBDA-DS	2020-02-01 12:00	2.1	8.6	227	3.1		3.1
RBDA-DS	2020-02-01 15:00	2.6	8.7	235	7.2		7.2
RBDA-DS	2020-02-02 11:00	2.3	8.8	224	4.8		4.8
RBDA-DS	2020-02-02 14:50	1.7	8.4	221	4.9		4.9
RBDA-DS	2020-02-05 11:35				4.9		4.9
RBDA-DS	2020-02-05 15:20				6		6
RBDA-DS	2020-02-06 10:45				5.5		5.5
RBDA-DS	2020-02-06 15:05				4.2		4.2
RBDA-DS	2020-02-07 13:25				8		8
RBDA-DS	2020-02-08 11:15				7.2		7.2
RBDA-DS	2020-02-08 16:10				5.2		5.2
RBDA-DS	2020-02-09 11:30				19.1		19.1
RBDA-DS	2020-02-09 16:15				18.4		18.4
RBDA-DS	2020-02-10 11:05				10.4		10.4
RBDA-DS	2020-02-10 15:10				7.5		7.5
RBDA-DS	2020-02-23 14:20	1.8	8.8	227	3.6		3.6
RBDA-DS	2020-03-10 11:45	2.5	8.9	228	6.3		6.3
RBDA-DS	2020-03-10 16:00				2.8		2.8
RBDA-DS	2020-04-14 10:20	3		316	8.1		8.1
RBDA-DS	2020-04-14 15:39				20		20
RBDA-DS	2020-04-17 10:55	4.4		218	33.6		33.6
RBDA-DS	2020-04-17 14:00	5.1		231	66.2		66.2
RBDA-DS	2020-04-18 10:35	3.3		223	35.8		35.8
RBDA-DS	2020-04-18 14:55				34.9		34.9
RBDA-DS	2020-04-19 10:55	4.9		232	64.3		64.3
RBDA-DS	2020-04-19 14:45				69.7		69.7
RBDA-DS	2020-04-20 11:33				54.3		54.3
RBDA-DS	2020-04-21 0:00	4.4		231	643		643
RBDA-DS	2020-04-21 15:23				621		621
RBDA-DS	2020-04-23 14:00				94		94
RBDA-DS	2020-04-25 14:26	5		229	75.8		75.8
RBDA-DS	2020-04-26 12:00	4.4		230	67.4		67.4
RBDA-DS	2020-04-26 15:14				69.6		69.6
RBDA-DS	2020-04-28 10:17				56.4		56.4
RBDA-DS	2020-04-28 14:50				65.9		65.9
RBDA-DS	2020-04-29 10:05				69.6		69.6
RBDA-DS	2020-04-29 14:45				93.5		93.5
RBDA-DS	2020-04-30 9:50				72.7		72.7
RBDA-DS	2020-04-30 13:55				75.3		75.3
RBDA-DS	2020-05-01 10:10				63.3		63.3
RBDA-DS	2020-05-01 15:00				51.7		51.7
RBDA-DS	2020-05-06 13:51				36.9		36.9
RBDA-DS	2020-05-07 9:40				26		26
RBDA-DS	2020-05-07 14:50				24.1		24.1
RBDA-DS	2020-05-08 15:22				61.3		61.3
RBDA-DS	2020-05-09 10:29				62.1		62.1
RBDA-DS	2020-05-09 16:00				77.9		77.9
RBDA-DS	2020-05-10 15:14	7.8		270	65.3		65.3
RBDA-DS	2020-05-12 12:27	8.4		260	41.8		41.8
RBDA-DS	2020-05-12 15:32				58.7		58.7
RBDA-DS	2020-05-13 11:20				42.9		42.9
RBDA-DS	2020-05-15 11:16				31.6		31.6
RBDA-DS	2020-05-15 16:06				33.2		33.2
RBDA-DS	2020-05-16 11:04				32		32
RBDA-DS	2020-05-16 16:14				33.8		33.8
RBDA-DS	2020-05-17 11:32				25.2		25.2
RBDA-DS	2020-05-17 15:45				29.1		29.1
RBDA-DS	2020-05-18 15:22				59.4		59.4
RBDA-DS	2020-05-20 10:10				63.8		63.8
RBDA-DS	2020-05-21 10:40				63.5		63.5
RBDA-DS	2020-05-21 15:35				62.3		62.3
RBDA-DS	2020-05-23 13:45				78		78
RBDA-DS	2020-05-24 9:05				78		78
RBDA-DS	2020-05-24 15:10				67.3		67.3
RBDA-DS	2020-05-25 9:40				85		85
RBDA-DS	2020-05-25 14:35				87.1		87.1
RBDA-DS	2020-05-26 15:15				52.3		52.3
RBDA-DS	2020-05-28 16:00				53.9		53.9
RBDA-DS	2020-05-29 10:44				42.9		42.9
RBDA-DS	2020-05-29 15:51				38.5		38.5
RBDA-DS	2020-05-31 13:40	12.2		270	48.2		48.2
RBDA-DS	2020-05-31 15:53				58.8		58.8
RBDA-DS	2020-06-01 11:40				97.3		97.3
RBDA-DS	2020-06-03 11:32	11.3		270	87.2		87.2
RBDA-DS	2020-06-05 14:37				49.2		49.2
RBDA-DS	2020-06-06 10:56				44.4		44.4
RBDA-DS	2020-06-06 15:47				43.4		43.4
RB-R5B-ACDC	2020-01-01 12:20	2.7	8.5	960	6.8	6.9	6.8

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RB-R5B-ACDC	2020-01-02 15:20	3.9	8.4	945	4.6	4.5	4.6
RB-R5B-ACDC	2020-01-03 11:45	2.4	7.8	985	5.1	4.9	5.1
RB-R5B-ACDC	2020-01-04 13:05	0.6	7.9	960	4.9	4.9	4.9
RB-R5B-ACDC	2020-01-05 11:55	2	8.2	962	3	3	3
RB-R5B-ACDC	2020-01-06 12:05	0	8.1	985	1.6	1.5	1.6
RB-R5B-ACDC	2020-01-07 11:59	0.9	8.1	1009	1.3	1.3	1.3
RB-R5B-ACDC	2020-01-08 12:15	-0.2	8.3	998	2.1	2	2.1
RB-R5B-ACDC	2020-01-09 1:40	0.1	7.9	1006	10.6	10.4	10.6
RB-R5B-ACDC	2020-01-10 12:35	0.5	8.1	961	8.7	8.6	8.7
RB-R5B-ACDC	2020-01-11 10:35	-0.2	8.6	865	5.2	5	5.2
RB-R5B-ACDC	2020-01-12 11:55	0.3	8.3	966	6.7	6.7	6.7
RB-R5B-ACDC	2020-01-13 10:17	-0.2	8.3	990	3.3	3.1	3.3
RB-R5B-ACDC	2020-01-14 10:22	-0.2	8.4	848	6	6	6
RB-R5B-ACDC	2020-01-15 11:39	-0.1	8.4	999	3.6	3.5	3.6
RB-R5B-ACDC	2020-01-16 11:30	0.8	8.6	990	8.2	8.3	8.2
RB-R5B-ACDC	2020-01-17 15:00	0.7	8.5	986	11.7	11.8	11.7
RB-R5B-ACDC	2020-01-18 10:50	-0.1	8.4	996	8.1	8.1	8.1
RB-R5B-ACDC	2020-01-19 12:33	1.2	8.4	979	6.5	6.5	6.5
RB-R5B-ACDC	2020-01-20 11:15	1.2	8.5	980	7.1	7	7.1
RB-R5B-ACDC	2020-01-21 13:15	1.1	8	957	11.7	11.6	11.7
RB-R5B-ACDC	2020-01-22 14:55	1.3	7.9	946	16.3	16.2	16.3
RB-R5B-ACDC	2020-01-23 16:15	1.6	8.2	962	14.5	14.5	14.5
RB-R5B-ACDC	2020-01-24 11:45	2.8	8.2	951	9.5	9.5	9.5
RB-R5B-ACDC	2020-01-25 13:30	2	8	941	7.4	7.4	7.4
RB-R5B-ACDC	2020-01-26 13:00	2.6	8.2	952	5.6	5.7	5.6
RB-R5B-ACDC	2020-01-27 14:50	2.6	8.3	927	9.2	9.2	9.2
RB-R5B-ACDC	2020-01-28 11:42	2.7	8.4	968	5.9	5.9	5.9
RB-R5B-ACDC	2020-01-29 10:25	1.9	8.4	976	4.4	4.4	4.4
RB-R5B-ACDC	2020-01-30 12:05	2.8	8.4	943	16.5	16.3	16.5
RB-R5B-ACDC	2020-01-31 12:13	3.3	8.4	947	5	5	5
RB-R5B-ACDC	2020-02-01 10:26	2.3	8.4	940	10.5	10.3	10.5
RB-R5B-ACDC	2020-02-02 11:50	0.7	8.5	977	3.3	3.4	3.3
RB-R5B-ACDC	2020-02-03 11:15	0	8.5	992	2.1	2	2.1
RB-R5B-ACDC	2020-02-04 11:00	1.2	8.6	971	4.4	4.3	4.4
RB-R5B-ACDC	2020-02-05 12:00	2.1	8.4	951	3.2	3.2	3.2
RB-R5B-ACDC	2020-02-06 11:28	2.3	8.2	968	4.8	4.8	4.8
RB-R5B-ACDC	2020-02-07 12:35	1.6	8.3	957	2.9	2.9	2.9
RB-R5B-ACDC	2020-02-08 11:02	1.5	8.2	967	4	4	4
RB-R5B-ACDC	2020-02-09 12:21	2.4	8.4	954	4	4	4
RB-R5B-ACDC	2020-02-10 11:40	1.4	8.3	965	4.2	4.2	4.2
RB-R5B-ACDC	2020-02-11 14:30	1.2	8	959	3.6	3.6	3.6
RB-R5B-ACDC	2020-02-12 14:30	1	8.1	959	2.3	2.4	2.3
RB-R5B-ACDC	2020-02-13 13:05	3.4	8.2	947	2.3	2.3	2.3
RB-R5B-ACDC	2020-02-14 10:30	1.7	8	947	4.8	4.7	4.8
RB-R5B-ACDC	2020-02-15 10:40	1.6	8	971	3.7	3.7	3.7
RB-R5B-ACDC	2020-02-16 0:00	2.3	8.2	956	22.5	22	22.5
RB-R5B-ACDC	2020-02-17 15:30	1	8.4	920	9.9	9.8	9.9
RB-R5B-ACDC	2020-02-18 11:35	-0.2	8.4	895	61.2	60.9	61.2
RB-R5B-ACDC	2020-02-19 12:40	1.3	8.4	927	5.8	6.1	5.8
RB-R5B-ACDC	2020-02-20 11:39	2.6	8.3	928	10.5	10.3	10.5
RB-R5B-ACDC	2020-02-21 10:57	3.6	8.3	906	11.4	11.2	11.4
RB-R5B-ACDC	2020-02-22 11:21	3.3	8.4	950	12	12.8	12
RB-R5B-ACDC	2020-02-23 10:20	1.5	8.5	964	4.2	4.1	4.2
RB-R5B-ACDC	2020-02-24 12:06	2.9	8.4	904	20.8	21.4	20.8
RB-R5B-ACDC	2020-02-25 11:35	1.7	8.4	979	7.8	7.2	7.8
RB-R5B-ACDC	2020-02-26 10:23	3.3	8.6	998	3.4	3.5	3.4
RB-R5B-ACDC	2020-02-27 15:23	4.2	8.6	917	18.4	18.4	18.4
RB-R5B-ACDC	2020-02-28 12:33	3.6	8.5	952	10.3	10.8	10.3
RB-R5B-ACDC	2020-02-29 11:42	0.1	8.5	983	5.1	5.5	5.1
RB-R5B-ACDC	2020-03-01 10:33	0.5	8.5	1004	3.9	3.8	3.9
RB-R5B-ACDC	2020-03-02 20:05	2.1	7.8	873	17.2	17.1	17.2
RB-R5B-ACDC	2020-03-03 10:45	2.9	7.6	1906	4.4	4.4	4.4
RB-R5B-ACDC	2020-03-04 15:55	2.3	8.2	875	26.7	26.5	26.7
RB-R5B-ACDC	2020-03-05 14:30	3.5	8	857	24.4	24.3	24.4
RB-R5B-ACDC	2020-03-06 0:00	-0.3	8.1	1039	8.9	8.7	8.9
RB-R5B-ACDC	2020-03-07 10:20	0.9	8.3	1026	29.6	29.4	29.6
RB-R5B-ACDC	2020-03-08 13:30	1.8	8.4	900	8.7	8.6	8.7
RB-R5B-ACDC	2020-03-09 13:15	4.5	8.4	973	13.1	13.1	13.1
RB-R5B-ACDC	2020-03-10 10:20	2.9	8.2	989	5.6	5.5	5.6
RB-R5B-ACDC	2020-03-11 12:12	3.1	8.2	824	52.2	52	52.2
RB-R5B-ACDC	2020-03-12 10:08	1.1	8.4	952	11.1	11.2	11.1
RB-R5B-ACDC	2020-03-13 14:30	0.9	8.6	967	15.9	15.9	15.9
RB-R5B-ACDC	2020-03-14 11:10	0.1	8.3	1093	7.3	7.5	7.3
RB-R5B-ACDC	2020-03-15 11:50	-0.2	8.4	965	7.4	7.4	7.4
RB-R5B-ACDC	2020-03-16 11:40	2.1	8.2	981	27.4	27.7	27.4
RB-R5B-ACDC	2020-03-17 11:00	2.2	8.2	983	9.5	9.6	9.5
RB-R5B-ACDC	2020-03-18 10:19	0.7	8.2	1005	39.8	41.6	39.8
RB-R5B-ACDC	2020-03-19 10:25	0.5	8.3	996	19.6	20.8	19.6
RB-R5B-ACDC	2020-03-20 10:42	0.5	8.5	976	27.7	27.6	27.7
RB-R5B-ACDC	2020-03-21 9:47	2.5	8.5	976	21.3	21.3	21.3
RB-R5B-ACDC	2020-03-22 10:00	2.4	8.6	917	17.2	17.5	17.2
RB-R5B-ACDC	2020-03-23 12:16	1.9	8.6	891	15.4	15.4	15.4
RB-R5B-ACDC	2020-03-24 11:40	0.4	8	963	54.1	54.1	54.1
RB-R5B-ACDC	2020-03-25 12:00	2.2	8.1	947	30.5	29.9	30.5
RB-R5B-ACDC	2020-03-26 9:30	3.8	8	721	35.5	29.4	35.5
RB-R5B-ACDC	2020-03-26 12:00	3.6	8.1	758	81.8	81.6	81.8
RB-R5B-ACDC	2020-03-27 9:30	3.8	8	721	35.5	39.4	35.5
RB-R5B-ACDC	2020-03-28 13:05	1.6	8.3	847	8.6	8.6	8.6
RB-R5B-ACDC	2020-03-29 12:50	1.5	8	874	3.3	3.3	3.3

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RB-R5B-ACDC	2020-03-30 16:30	0.7	8.1	908	10.6	10.7	10.6
RB-R5B-ACDC	2020-03-31 10:50	0.5	8.4	912	2.9	2.9	2.9
RB-R5B-ACDC	2020-04-01 10:17	0.8	8.5	907	3.1	3.3	3.1
RB-R5B-ACDC	2020-04-02 11:40	2.4	8.5	881	2.6	2.6	2.6
RB-R5B-ACDC	2020-04-03 9:55	0.5	8.4	919	5.6	5.6	5.6
RB-R5B-ACDC	2020-04-04 10:08	1.1	8.3	902	3	3.1	3
RB-R5B-ACDC	2020-04-05 11:12	2.7	8.5	892	3.8	3.8	3.8
RB-R5B-ACDC	2020-04-06 11:00	4.3	8.5	869	5	4.9	5
RB-R5B-ACDC	2020-04-07 10:23	3.8	8.1	862	8.1	8.1	8.1
RB-R5B-ACDC	2020-04-08 10:20	4.5	8.4	735	15.8	15.9	15.8
RB-R5B-ACDC	2020-04-09 15:45	0.9	7.8	278	2405	2428	2405
RB-R5B-ACDC	2020-04-12 12:53	4.3	8.3	721	20	19.7	20
RB-R5B-ACDC	2020-04-13 11:15	3.2	8.5	776	17.4	17.6	17.4
RB-R5B-ACDC	2020-04-14 17:24	4.9	8.2	750	83	82	83
RB-R5B-ACDC	2020-04-15 12:00	6.8	8.4	974	12.7	12.8	12.7
RB-R5B-ACDC	2020-04-16 11:31	5.8	8.1	754	37.5	37.8	37.5
RB-R5B-ACDC	2020-04-17 12:10	6.8	8.4	892	11.8	11.8	11.8
RB-R5B-ACDC	2020-04-18 9:26	3.5	8.6	914	7.8	7.8	7.8
RB-R5B-ACDC	2020-04-19 14:30	7.9	8.6	937	9.6	9.2	9.6
RB-R5B-ACDC	2020-04-20 16:15	9.1	8.6	1023	11.5	11.6	11.5
RB-R5B-ACDC	2020-04-21 10:10	7.1	8.6	1025	3.3	3.3	3.3
RB-R5B-ACDC	2020-04-22 11:57	7.8	8.3	1012	151	157	151
RB-R5B-ACDC	2020-04-23 13:20	5.2	8.3	1037	4.8	4.9	4.8
RB-R5B-ACDC	2020-04-24 10:13	5.5	8.4	969	2.3	2.2	2.3
RB-R5B-ACDC	2020-04-25 10:10	5.5	8.1	980	1.4	1.5	1.4
RB-R5B-ACDC	2020-04-26 10:44	6.1	8.3	998	1.6	1.6	1.6
RB-R5B-ACDC	2020-04-27 12:12	7	8.4	976	3.1	3.3	3.1
RB-R5B-ACDC	2020-04-28 11:20	7.2	8.4	978	1.4	1.4	1.4
RB-R5B-ACDC	2020-04-29 12:25	8.9	8.2	1004	8.7	8.8	8.7
RB-R5B-ACDC	2020-04-30 13:06	7.4	8.5	988	1.8	1.8	1.8
RB-R5B-ACDC	2020-05-01 12:40	8.2	8.5	971	1.3	1.3	1.3
RB-R5B-ACDC	2020-05-02 13:07	10.8	8.4	978	3.6	3.3	3.6
RB-R5B-ACDC	2020-05-05 14:45	9.6	8.5	1150	3.4	3.3	3.4
RB-R5B-ACDC	2020-05-06 15:10	9.9	8.2	903	5.1	5	5.1
RB-R5B-ACDC	2020-05-07 13:00	8.8	8.2	966	13.8	13.9	13.8
RB-R5B-ACDC	2020-05-08 15:30	12.4	8.3	889	3.7	3.6	3.7
RB-R5B-ACDC	2020-05-09 12:00	8.7	8.2	988	3.2	3.1	3.2
RB-R5B-ACDC	2020-05-10 13:50	7.3	7.8	965	4.8	4.9	4.8
RB-R5B-ACDC	2020-05-11 9:30	11	8.1	1018	3	3.3	3
RB-R5B-ACDC	2020-05-12 10:45	10.4	8.3	913	2.2	2.2	2.2
RB-R5B-ACDC	2020-05-13 10:50	9.9	8.2	962	1.2	1.4	1.2
RB-R5B-ACDC	2020-05-14 10:42	6.6	8.5	966	0.9	0.9	0.9
RB-R5B-ACDC	2020-05-15 12:00	10.4	8.5	972	3.1	3.1	3.1
RB-R5B-ACDC	2020-05-16 10:48	10.8	8.1	940	1.8	1.6	1.8
RB-R5B-ACDC	2020-05-17 9:40	7.1	8.4	746	43	39	43
RB-R5B-ACDC	2020-05-18 11:20	8.4	8.4	977	2.2	2.1	2.2
RB-R5B-ACDC	2020-05-19 11:33	11.4	8.4	964	2	1.7	2
RB-R5B-ACDC	2020-05-20 11:15	11.4	8.3	934	1.1	1.3	1.1
RB-R5B-ACDC	2020-05-21 13:07	8.3	8.2	795	128	128	128
RB-R5B-ACDC	2020-05-22 13:50	7.8	8.5	1118	4.4	4.4	4.4
RB-R5B-ACDC	2020-05-23 15:00	11.2	8.3	1102	4.7	4.4	4.7
RB-R5B-ACDC	2020-05-24 11:12	12	8.1	1068	4	4	4
RB-R5B-ACDC	2020-05-27 16:05	10.3	8.2	949	1.4	1.4	1.4
RB-R5B-ACDC	2020-05-28 16:00	11.9	8.4	963	1.9	2	1.9
RB-R5B-ACDC	2020-05-31 14:50	12.9	8.3	909	3.6	3.6	3.6
RB-R5B-ACDC	2020-06-01 15:35	13.1	8.1	1017	2	1.9	2
RB-R5B-ACDC	2020-06-02 13:00	12	8.2	988	2.7	2.4	2.7
RB-R5B-ACDC	2020-06-02 14:00	18.2	8.2	1011	1.7	1.6	1.7
RB-R5B-ACDC	2020-06-03 14:00	17.6	8.2	1011	1.7	1.6	1.7
RB-R5B-ACDC	2020-06-04 10:32	12.3	8.2	1008	1.2	1.2	1.2
RB-R5B-ACDC	2020-06-05 14:40	15.2	8.3	996	0.9	0.9	0.9
RB-R5B-ACDC	2020-06-06 9:55	10.5	8.3	814	20.3	20.2	20.3
RB-R5B-ACDC	2020-06-07 9:56	11.3	8.3	1025	3.8	3.6	3.8
RB-R5B-ACDC	2020-06-08 11:45	10.5	8.3	1031	2	1.9	2
RB-R5B-ACDC	2020-06-09 16:20	13.8	8.2	1192	4	3.9	4
RB-R5B-ACDC	2020-06-10 15:40	14.6	8.2	1088	1.9	2	1.9
RB-R5B-ACDC	2020-06-11 11:52	14.4	8.1	1118	2.9	2.6	2.9
RB-R5B-ACDC	2020-06-12 11:51	12.6	8.1	1098	1.6	1.5	1.6
RB-R5B-ACDC	2020-06-13 11:35	13.7	8.2	1067	1.5	1.4	1.5
RB-R5B-ACDC	2020-06-14 16:08	13.8	8.2	451	OR		
RB-R5B-ACDC	2020-06-15 18:57	13.8	8	580	1345	1346	1345
RB-R5B-ACDC	2020-06-18 15:20	23	8.2	2080	2.1	2.5	2.1
RB-R5B-ACDC	2020-06-23 17:00	18.4	7.8	930	4.9	5	4.9
RB-R5B-ACDC	2020-06-24 14:35	19.7	7.8	917	5.4	5.3	5.4
RB-R5B-ACDC	2020-06-26 15:55	18.7	7.9	916	3.2	3	3.2
RB-R5B-ACDC	2020-06-28 10:58	14.6	8	944	35.7	35.5	35.7
RB-R5B-ACDC	2020-06-29 14:50	15.8	7.8	1013	7.3	7.2	7.3
RB-R5B-ACDC	2020-06-30 12:20	14.9	7.7	1004	5.5	5.8	5.5
RB-R5B-ACDC	2020-07-01 13:50	13.7	7.9	955	OR		
RB-R5B-ACDC	2020-07-02 15:40	19.1	7.9	849	904	901	904
RB-R5B-ACDC	2020-07-04 14:03	14.7	7.9	894	35.5	35.1	35.5
RB-R5B-ACDC	2020-07-06 11:55	15.7	7.7	876	10.2	9.9	10.2
RB-R5B-ACDC	2020-07-07 13:10	16.6	8.4	908	7.6	7.7	7.6
RB-R5B-ACDC	2020-07-10 11:00	18	8.3	890	4.1	4	4.1
RB-R5B-ACDC	2020-07-13 15:45	17.4	8.2	863	16	15.8	16
RB-R5B-ACDC	2020-07-14 11:55	15.7	7.7	876	10.2	9.9	10.2
RB-R5B-ACDC	2020-07-15 10:50	16.4	7.9	870	7.5	7.7	7.5
RB-R5B-ACDC	2020-07-16 13:20	16.7	7.9	877	5.8	5.8	5.8
RB-R5B-ACDC	2020-07-17 11:50	16.2	7.9	862	5.6	5.5	5.6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RB-R5B-ACDC	2020-07-18 11:03	15.9	7.8	850	5.8	5.7	5.8
RB-R5B-ACDC	2020-07-19 11:40	16.3	7.9	836	4.3	4.4	4.3
RB-R5B-ACDC	2020-07-20 12:00	16.8	7.9	851	4.2	4.2	4.2
RB-R5B-ACDC	2020-07-21 14:55	19	8	835	3165	3166	3165
RB-R5B-ACDC	2020-07-22 15:15	16	7.8	863	4.6	4.6	4.6
RB-R5B-ACDC	2020-07-23 13:05	17.4	7.9	850	4.9	4.9	4.9
RB-R5B-ACDC	2020-07-24 13:45	13.5	7.8	853	11.9	12	11.9
RB-R5B-ACDC	2020-07-25 12:45	17.1	7.8	841	4.5	4.5	4.5
RB-R5B-ACDC	2020-07-26 12:10	17.5	8	846	3.3	3.3	3.3
RB-R5B-ACDC	2020-07-28 16:40	19.8	8.4	798	4.9	4.9	4.9
RB-R5B-ACDC	2020-07-31 16:30	22	7.7	768	4.6	4.5	4.6
RB-R5B-ACDC	2020-08-02 15:30	22.1	8	802	4.7	4.8	4.7
RB-R5B-ACDC	2020-08-04 10:35	17.9	7.8	829	4.9	4.9	4.9
RB-R5B-ACDC	2020-08-05 9:50	17.1	7.7	818	4.1	4.1	4.1
RB-R5B-ACDC	2020-08-07 9:48	16	7.5	825	3.9	3.9	3.9
RB-R5B-ACDC	2020-08-08 10:05	13.5	7.6	846	2.9	2.8	2.9
RB-R5B-ACDC	2020-08-09 12:10	17.1	7.8	836	3.3	3.3	3.3
RB-R5B-ACDC	2020-08-10 11:25	16.9	7.7	835	2.9	2.8	2.9
RB-R5B-ACDC	2020-08-11 10:08	15.6	7.8	838	3	3	3
RB-R5B-ACDC	2020-08-13 10:57	16	7.5	834	2.8	2.9	2.8
RB-R5B-ACDC	2020-08-14 11:20	15.8	7.6	848	3	2.9	3
RB-R5B-ACDC	2020-08-15 11:55	14.3	7.6	854	2.9	2.9	2.9
RB-R5B-ACDC	2020-08-16 10:05	17	7.7	845	3	2.9	3
RB-R5B-ACDC	2020-08-17 9:36	19.6	7.5	845	2.8	2.5	2.8
RB-R5B-ACDC	2020-08-19 16:20	20.1	8.1	790	3.7	3.7	3.7
RB-R5B-ACDC	2020-08-21 15:15	17.1	8	747	4.9	4.6	4.9
RB-R5B-ACDC	2020-08-22 12:35	15.8	8.4	688	9.7	9.5	9.7
RB-R5B-ACDC	2020-08-24 15:05	17.9	8.1	768	3.6	3.5	3.6
RB-R5B-ACDC	2020-08-25 10:10	16.6	7.6	875	11.1	11.1	11.1
RB-R5B-ACDC	2020-08-26 11:50	17.2	7.6	789	7.2	7.1	7.2
RB-R5B-ACDC	2020-08-27 10:35	17	8	874	8.3	8.1	8.3
RB-R5B-ACDC	2020-08-28 11:35	14.7	8	726	4.3	4.3	4.3
RB-R5B-ACDC	2020-08-29 11:50	15.7	7.7	708	8.7	8.6	8.7
RB-R5B-ACDC	2020-08-30 12:32	18.3	8.1	711	6.8	6.8	6.8
RB-R5B-ACDC	2020-09-01 12:10	17.2	8.1	730	4.9	4.7	4.9
RB-R5B-ACDC	2020-09-02 14:45	18	7.9	732	2.9	2.8	2.9
RB-R5B-ACDC	2020-09-04 12:35	15.5	7.8	725	2	1.9	2
RCC-NE-Sump-BT	2020-01-01 13:30	5.7	9.1	1254	24.7	23.8	24.7
RCC-NE-Sump-BT	2020-01-02 16:10	7.7	8.9	1200	17.6	18	17.6
RCC-NE-Sump-BT	2020-01-03 13:40	4.6	7.6	1251	9.7	9.6	9.7
RCC-NE-Sump-BT	2020-01-04 15:15	2.9	7.3	1438	28.8	28.5	28.8
RCC-NE-Sump-BT	2020-01-05 14:45	5	7.2	1392	38.6	38.7	38.6
RCC-NE-Sump-BT	2020-01-06 14:05	1.8	8	1012	39.1	39.9	39.1
RCC-NE-Sump-BT	2020-01-07 14:15	1.9	9.1	998	26.7	26.5	26.7
RCC-NE-Sump-BT	2020-01-08 14:00	2.7	8.9	1196	31.6	31.8	31.6
RCC-NE-Sump-BT	2020-01-09 11:15	3.5	8.7	1173	17.3	17.3	17.3
RCC-NE-Sump-BT	2020-01-10 12:15	4.3	8.9	1231	18.5	18.5	18.5
RCC-NE-Sump-BT	2020-01-11 12:30	5.6	9	1214	22.1	21.8	22.1
RCC-NE-Sump-BT	2020-01-12 11:45	6	8.4	1351	20.3	20.2	20.3
RCC-NE-Sump-BT	2020-01-13 12:22	3.5	8.5	1280	20.9	21	20.9
RCC-NE-Sump-BT	2020-01-14 12:20	5	8.8	1117	12.8	12.7	12.8
RCC-NE-Sump-BT	2020-01-15 13:20	3.9	8.9	1282	15.1	15.2	15.1
RCC-NE-Sump-BT	2020-01-16 14:10	4.9	8.9	1124	10	10.1	10
RCC-NE-Sump-BT	2020-01-17 15:55	4.8	10.1	1371	30	29.6	30
RCC-NE-Sump-BT	2020-01-18 12:10	2.3	9.2	1229	9	9	9
RCC-NE-Sump-BT	2020-01-19 15:33	6.6	7.3	1159	8.8	8.5	8.8
RCC-NE-Sump-BT	2020-01-20 12:05	5.4	7	1242	6.8	6.7	6.8
RCC-NE-Sump-BT	2020-01-21 15:30	5.1	6.8	1343	22.7	22.5	22.7
RCC-NE-Sump-BT	2020-01-22 16:40	8	7.6	1204	12.9	12.8	12.9
RCC-NE-Sump-BT	2020-01-23 15:00	8.8	8.6	1227	12.9	12.4	12.9
RCC-NE-Sump-BT	2020-01-24 10:30	6.2	8.7	1206	8.4	8.4	8.4
RCC-NE-Sump-BT	2020-01-25 11:30	6.7	6.5	1199	8.7	8.7	8.7
RCC-NE-Sump-BT	2020-01-26 21:45	7.5	7.1	1155	8.1	8.1	8.1
RCC-NE-Sump-BT	2020-01-27 15:55	7.6	7.2	1225	8.9	9	8.9
RCC-NE-Sump-BT	2020-01-28 13:30	6.2	7.4	1333	8.6	8.6	8.6
RCC-NE-Sump-BT	2020-01-29 12:05	8	7.5	1292	11.3	11.3	11.3
RCC-NE-Sump-BT	2020-01-30 13:45	10.8	7.3	1029	7.1	7.1	7.1
RCC-NE-Sump-BT	2020-01-31 13:35	9.4	7.6	996	11.7	11.6	11.7
RCC-NE-Sump-BT	2020-02-01 12:05	8.9	7.6	1030	12.2	12	12.2
RCC-NE-Sump-BT	2020-02-02 14:20	5.6	7.6	1215	16.8	16.6	16.8
RCC-NE-Sump-BT	2020-02-03 12:50	4.3	7.1	1268	7	6.9	7
RCC-NE-Sump-BT	2020-02-04 12:20	1.4	8.6	5200	14.7	14.5	14.7
RCC-NE-Sump-BT	2020-02-05 13:35	4.9	7.2	1401	11.2	11.2	11.2
RCC-NE-Sump-BT	2020-02-06 12:30	7.4	7.1	1240	11	11.2	11
RCC-NE-Sump-BT	2020-02-07 11:52	5.1	7.4	1210	65.6	65.7	65.6
RCC-NE-Sump-BT	2020-02-08 12:35	6	7.3	1262	36.7	36.7	36.7
RCC-NE-Sump-BT	2020-02-09 14:10	8.2	7.2	1313	54.4	54.6	54.4
RCC-NE-Sump-BT	2020-02-10 10:32	6.5	9.2	1119	61.8	61.8	61.8
RCC-NE-Sump-BT	2020-02-11 14:00	5.1	7.3	1277	68	67	68
RCC-NE-Sump-BT	2020-02-12 16:00	3.6	6.9	1280	16.2	16.1	16.2
RCC-NE-Sump-BT	2020-02-13 15:00	8.7	7.2	1307	9.4	9.4	9.4
RCC-NE-Sump-BT	2020-02-14 12:00	3.3	7.1	1287	37.2	37.2	37.2
RCC-NE-Sump-BT	2020-02-15 12:50	2.7	7.3	1304	14.5	14.5	14.5
RCC-NE-Sump-BT	2020-02-16 14:50	3.1	9.4	1170	41.8	41.4	41.8
RCC-NE-Sump-BT	2020-02-17 16:30	3.1	7.6	1204	27.2	26.8	27.2
RCC-NE-Sump-BT	2020-02-18 13:15	2.9	7.3	1178	32.8	32.6	32.8
RCC-NE-Sump-BT	2020-02-19 13:10	4.3	6.9	1196	16.1	16.2	16.1
RCC-NE-Sump-BT	2020-02-20 13:05	7.4	7	1250	15.2	15.3	15.2
RCC-NE-Sump-BT	2020-02-21 12:50	8.9	8.2	1218	15.6	15.5	15.6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RCC-NE-Sump-BT	2020-02-22 13:45	8	8	1271	20.9	20.4	20.9
RCC-NE-Sump-BT	2020-02-23 12:35	5.8	8.9	1247	13.5	13.4	13.5
RCC-NE-Sump-BT	2020-02-24 12:17	5.5	9.3	1127	22.5	22.5	22.5
RCC-NE-Sump-BT	2020-02-25 12:15	7.5	7.2	1293	12.1	11.9	12.1
RCC-NE-Sump-BT	2020-02-26 11:40	8.1	7.4	1248	22.3	22.2	22.3
RCC-NE-Sump-BT	2020-02-27 16:30	8.6	7.1	1184	50.2	50.4	50.2
RCC-NE-Sump-BT	2020-02-28 13:00	6.9	7.9	1118	37.8	37.7	37.8
RCC-NE-Sump-BT	2020-02-29 12:50	4.6	7.5	1277	15.9	16.1	15.9
RCC-NE-Sump-BT	2020-03-01 11:15	4.7	8.7	1265	33.7	33	33.7
RCC-NE-Sump-BT	2020-03-03 12:20	5.2	9.2	1026	64.3	64.2	64.3
RCC-NE-Sump-BT	2020-03-04 17:00	6.3	6.8	1129	31.1	31	31.1
RCC-NE-Sump-BT	2020-03-05 16:00	6.8	6.7	1170	38.7	38.9	38.7
RCC-NE-Sump-BT	2020-03-06 11:45	1.5	8.9	1073	18.9	18.8	18.9
RCC-NE-Sump-BT	2020-03-07 11:45	1.3	6.8	1117	18.6	18.6	18.6
RCC-NE-Sump-BT	2020-03-08 15:35	6.9	6.9	1021	3.8	3.7	3.8
RCC-NE-Sump-BT	2020-03-09 15:05	8.7	7.3	1024	69.7	69.7	69.7
RCC-NE-Sump-BT	2020-03-10 11:50	8.1	7.8	1134	21.3	21.8	21.3
RCC-NE-Sump-BT	2020-03-11 13:30	7.1	7.9	1195	78.4	78.7	78.4
RCC-NE-Sump-BT	2020-03-12 11:20	4	8.2	1078	60.7	61	60.7
RCC-NE-Sump-BT	2020-03-13 15:00	4	9	970	26.7	26.7	26.7
RCC-NE-Sump-BT	2020-03-14 13:00	5.5	9	1166	16.2	15.8	16.2
RCC-NE-Sump-BT	2020-03-15 13:40	5.1	7.4	1206	10.3	10	10.3
RCC-NE-Sump-BT	2020-03-16 13:16	7.2	7	1157	8.1	8.2	8.1
RCC-NE-Sump-BT	2020-03-17 12:35	7.7	7.7	1221	17.2	16.9	17.2
RCC-NE-Sump-BT	2020-03-18 12:13	6.8	7.6	1250	33.8	33.9	33.8
RCC-NE-Sump-BT	2020-03-19 13:08	8	7.3	1261	30.7	30.6	30.7
RCC-NE-Sump-BT	2020-03-20 12:42	6.1	7.4	1209	7.6	7.5	7.6
RCC-NE-Sump-BT	2020-03-21 11:55	7.8	7.5	1208	12.1	12.1	12.1
RCC-NE-Sump-BT	2020-03-22 11:44	7.6	7.7	1196	19.7	19.2	19.7
RCC-NE-Sump-BT	2020-03-24 17:50	9	7.7	645	25.4	25.3	25.4
RCC-NE-Sump-BT	2020-03-25 13:20	7.3	7.9	640	8.6	8.6	8.6
RCC-NE-Sump-BT	2020-03-27 12:20	5.9	7.7	578	741	738	741
RCC-NE-Sump-BT	2020-03-28 16:50	4	8	651	10.4	10.4	10.4
RCC-NE-Sump-BT	2020-03-29 13:05	3.7	7.9	647	4.5	4.5	4.5
RCC-NE-Sump-BT	2020-03-30 16:50	4	8.1	643	5.9	5.9	5.9
RCC-NE-Sump-BT	2020-03-31 12:30	6.3	8.3	646	7.3	7.3	7.3
RCC-NE-Sump-BT	2020-04-01 12:40	4.3	8.3	653	4.8	4.8	4.8
RCC-NE-Sump-BT	2020-04-02 12:23	3.3	8.4	661	37.4	37.4	37.4
RCC-NE-Sump-BT	2020-04-03 11:40	3.8	8.4	657	6.5	6.5	6.5
RCC-NE-Sump-BT	2020-04-04 11:55	4.7	8.4	665	5.5	5.5	5.5
RCC-NE-Sump-BT	2020-04-05 12:52	7.2	8.2	654	9.5	9.7	9.5
RCC-NE-Sump-BT	2020-04-06 12:55	7.2	8.5	649	4.7	4.7	4.7
RCC-NE-Sump-BT	2020-04-07 12:30	7.1	8.5	642	6.6	6.6	6.6
RCC-NE-Sump-BT	2020-04-08 12:00	7.1	8.6	556	23.3	23.2	23.3
RCC-NE-Sump-BT	2020-04-10 12:02	5.1	7.8	593	37.2	37.2	37.2
RCC-NE-Sump-BT	2020-04-12 14:22	7.3	8.4	601	45.9	45.9	45.9
RCC-NE-Sump-BT	2020-04-14 18:20	6.9	8.2	979	36.8	36.7	36.8
RCC-NE-Sump-BT	2020-04-15 13:40	9.4	8.6	929	670	664	670
RCC-NE-Sump-BT	2020-04-16 13:02	9	8.7	1063	65	64	65
RCC-NE-Sump-BT	2020-04-18 11:10	7.1	8.2	1156	34.7	34.6	34.7
RCC-NE-Sump-BT	2020-04-19 15:45	14.3	7.8	1162	49.7	49.6	49.7
RCC-NE-Sump-BT	2020-04-20 16:58	15.2	7.6	1165	55.8	55.5	55.8
RCC-NE-Sump-BT	2020-04-21 11:50	10.2	8.1	1239	46.2	46	46.2
RCC-NE-Sump-BT	2020-04-22 12:33	12.6	8.2	1247	54.6	54.3	54.6
RCC-NE-Sump-BT	2020-04-23 14:40	11.4	7.8	1344	39.7	39	39.7
RCC-NE-Sump-BT	2020-04-24 11:55	12.1	7.8	1318	38.9	39.4	38.9
RCC-NE-Sump-BT	2020-04-25 11:59	9.6	8	1276	42.9	42.6	42.9
RCC-NE-Sump-BT	2020-04-26 12:21	7.9	8.4	1274	42	38	42
RCC-NE-Sump-BT	2020-04-28 13:15	10.8	7.1	1252	12.2	12.2	12.2
RCC-NE-Sump-BT	2020-04-30 11:25	7.5	7.2	1270	11.6	11.4	11.6
RCC-NE-Sump-BT	2020-05-02 12:12	11.4	8.7	1264	15.4	15.3	15.4
RCC-NE-Sump-BT	2020-05-05 16:00	14.9	7.1	1339	24.7	24.7	24.7
RCC-NE-Sump-BT	2020-05-06 16:00	17.7	7.1	1196	22.4	22.3	22.4
RCC-NE-Sump-BT	2020-05-07 13:20	11	7.2	1260	21.7	21.6	21.7
RCC-NE-Sump-BT	2020-05-08 16:00	17.8	7.2	1260	18	18	18
RCC-NE-Sump-BT	2020-05-09 13:30	14.5	6.8	1308	11	11	11
RCC-NE-Sump-BT	2020-05-10 15:40	11.3	8.5	1258	19.4	19.2	19.4
RCC-NE-Sump-BT	2020-05-11 11:00		6.7	1228	19.8	19.6	19.8
RCC-NE-Sump-BT	2020-05-12 13:25	15.3	8.7	1223	21.5	21.5	21.5
RCC-NE-Sump-BT	2020-05-13 12:40	20.3	8.5	1210	13.7	13.8	13.7
RCC-NE-Sump-BT	2020-05-14 11:32	8.4	9.1	1351	11.4	11.1	11.4
RCC-NE-Sump-BT	2020-05-15 10:52	9.3	7.8	1266	7.5	7.5	7.5
RCC-NE-Sump-BT	2020-05-16 12:35	14.8	7.9	1307	12.4	12.1	12.4
RCC-NE-Sump-BT	2020-05-17 11:10	9.1	8.8	1312	28.7	28.2	28.7
RCC-NE-Sump-BT	2020-05-18 12:45	11.5	9.5	1313	73.8	73.2	73.8
RCC-NE-Sump-BT	2020-05-19 13:15	16.8	7.9	1355	12.3	12.2	12.3
RCC-NE-Sump-BT	2020-05-20 12:08	14	7.4	1391	8.5	8.5	8.5
RCC-NE-Sump-BT	2020-05-21 14:50	9.5	8.4	1127	88.3	88.5	88.3
RCC-NE-Sump-BT	2020-05-22 15:57	9.6	7.8	1358	31.6	31.4	31.6
RCC-NE-Sump-BT	2020-05-24 11:50	14.4	7	1206	15	14.5	15
RCC-NE-Sump-BT	2020-05-27 16:45	18.9	8.9	1278	16.3	16.4	16.3
RCC-NE-Sump-BT	2020-05-28 15:40	11.9	7.1	1293	14.9	14.1	14.9
RCC-NE-Sump-BT	2020-05-29 14:20	19.5	7.2	1297	11.1	11.2	11.1
RCC-NE-Sump-BT	2020-05-30 14:30	18.6	7.2	1318	13.7	13.7	13.7
RCC-NE-Sump-BT	2020-05-31 14:35	19.1	7.4	1321	24.9	24.8	24.9
RCC-NE-Sump-BT	2020-06-01 15:15	19.4	7.2	1455	13.9	13.9	13.9
RCC-NE-Sump-BT	2020-06-02 13:35	18.8	7.4	1480	28.9	28.9	28.9
RCC-NE-Sump-BT	2020-06-04 11:25	19.1	7.4	1301	11.9	11.4	11.9
RCC-NE-Sump-BT	2020-06-05 15:30	21.1	9.1	1227	32	32	32

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RCC-NE-Sump-BT	2020-06-06 10:40	12.7	9.3	1312	39.4	39.4	39.4
RCC-NE-Sump-BT	2020-06-07 10:53	14.8	7.5	1343	34.4	34.6	34.4
RCC-NE-Sump-BT	2020-06-08 15:01	13	8.3	639	OR		
RCC-NE-Sump-BT	2020-06-09 17:23	18.7	8.6	1566	739	738	739
RCC-NE-Sump-BT	2020-06-10 13:50	24.9	8.4	1526	76.8	76.7	76.8
RCC-NE-Sump-BT	2020-06-11 12:15	19.2	7.8	1624	27.9	27.5	27.9
RCC-NE-Sump-BT	2020-06-12 13:06	18.6	7.8	1403	32.3	32.1	32.3
RCC-NE-Sump-BT	2020-06-13 13:30	19.7	7.7	1787	86.1	85.6	86.1
RCC-NE-Sump-BT	2020-06-14 14:33	14.1	8.9	904	1988	1986	1988
RCC-NE-Sump-BT	2020-06-15 15:56	13.1	8.8	885	120	120	120
RCC-NE-Sump-BT	2020-06-18 15:50	23.8	6.7	1438	22.8	22.6	22.8
RCC-NE-Sump-BT	2020-06-20 14:45	19.8	6.5	1047	5	5	5
RCC-NE-Sump-BT	2020-06-22 16:50	20.9	6.5	782	67.1	64.7	67.1
RCC-NE-Sump-BT	2020-06-24 13:30	21.3	6.9	1053	55.7	55.2	55.7
RCC-NE-Sump-BT	2020-06-25 16:00	21	8.6	451	53.3	53.6	53.3
RCC-NE-Sump-BT	2020-06-26 12:45	18.7	7.2	987	34.5	34.5	34.5
RCC-NE-Sump-BT	2020-06-28 11:50	16.3	7.8	1030	93	94	93
RCC-NE-Sump-BT	2020-06-30 13:10	18.7	6.5	817	49.2	49	49.2
RCC-NE-Sump-BT	2020-07-01 14:01	15.7	7.3	814	87.6	87.7	87.6
RCC-NE-Sump-BT	2020-07-02 14:10	19.5	7.4	1112	697	694	697
RCC-NE-Sump-BT	2020-07-04 14:15	16.6	7.4	1222	100.7	99.1	100.7
RCC-NE-Sump-BT	2020-07-06 13:00	21.8	7.4	1068	73	73	73
RCC-NE-Sump-BT	2020-07-07 16:00	20.1	7.4	1024	24.7	24.8	24.7
RCC-NE-Sump-BT	2020-07-08 15:10	21.3	8	949	4.8	4.9	4.8
RCC-NE-Sump-BT	2020-07-09 15:10	21.3	8	989	4	3.8	4
RCC-NE-Sump-BT	2020-07-12 15:15	17.9	6.7	870	108	109	108
RCC-NE-Sump-BT	2020-07-14 13:00	21.8	7.4	1068	73	73	73
RCC-NE-Sump-BT	2020-07-15 11:55	18.7	7.2	1248	679	679	679
RCC-NE-Sump-BT	2020-07-16 14:50	21.9	8.1	906	22.6	22.4	22.6
RCC-NE-Sump-BT	2020-07-17 13:10	19.2	8.2	885	17.3	17	17.3
RCC-NE-Sump-BT	2020-07-18 12:25	21	8.1	878	11.3	11.2	11.3
RCC-NE-Sump-BT	2020-07-19 13:00	20.5	8.3	877	8.2	8.1	8.2
RCC-NE-Sump-BT	2020-07-23 14:50	21.8	6.7	893	5	5	5
RCC-NE-Sump-BT	2020-07-25 11:40	19.1	7.4	830	17.3	17.2	17.3
RCC-NE-Sump-BT	2020-07-26 13:30	21.3	6.1	876	5.9	5.8	5.9
RCC-NE-Sump-BT	2020-07-29 17:00	23.8	6.6	822	11.9	11.9	11.9
RCC-NE-Sump-BT	2020-07-30 16:15	24.6	6.5	802	18.3	18.1	18.3
RCC-NE-Sump-BT	2020-08-01 12:00	23.7	8	868	6.2	6.2	6.2
RCC-NE-Sump-BT	2020-08-03 12:10	22.3	6.4	911	14.6	14.7	14.6
RCC-NE-Sump-BT	2020-08-05 11:25	20.8	8	894	11.1	11.4	11.1
RCC-NE-Sump-BT	2020-08-07 11:05	18	8	877	7.4	7.3	7.4
RCC-NE-Sump-BT	2020-08-11 11:55	15.6	8	965	12.1	12.2	12.1
RCC-NE-Sump-BT	2020-08-13 12:25	17.4	8.1	848	7.1	7.1	7.1
RCC-NE-Sump-BT	2020-08-15 13:35	17.4	8	903	6.2	6.1	6.2
RCC-NE-Sump-BT	2020-08-19 15:30	20.9	6.5	329	46.5	46	46.5
RCC-NE-Sump-BT	2020-08-21 15:30	17.8	8.1	325	97	96	97
RCC-NE-Sump-BT	2020-08-22 12:00	18.7	8.5	815	1029	1029	1029
RCC-NE-Sump-BT	2020-08-23 16:20	19.6	7.8	1022	71.9	71.9	71.9
RCC-NE-Sump-BT	2020-08-24 14:25	18.2	7.7	1085	106	106	106
RCC-NE-Sump-BT	2020-08-26 12:55	16.2	8.1	824	48.3	48.6	48.3
RCC-NE-Sump-BT	2020-08-28 13:02	15.2	8	705	49.6	49.3	49.6
RCC-NE-Sump-BT	2020-08-30 13:55	14.8	8	683	41.4	41.3	41.4
RCC-NE-Sump-BT	2020-09-01 13:20	17.1	8.4	732	37.6	37.6	37.6
RCC-NE-Sump-BT	2020-09-05 13:05	17.9	8.3	685	24.5	24.4	24.5
RCC-NE-Sump-BT	2020-09-10 13:00	19.7	9	350	87.3	88.1	87.3
RCC-NE-Sump-BT	2020-09-12 14:30	14.5	9.1	446	1718	1717	1718
RCC-NE-Sump-BT	2020-09-14 14:00	11.1	8.1	841	114	114	114
RCC-NE-Sump-BT	2020-09-15 13:50	12.4	8.4	973	66.8	66.5	66.8
RCC-NE-Sump-BT	2020-09-16 16:30	20.5	9.1	741	44.9	44.7	44.9
RCC-NE-Sump-BT	2020-09-17 12:05	12.3	9	813	44.6	44.5	44.6
RCC-NE-Sump-BT	2020-09-19 11:23	13.4	8	952	33.4	33.3	33.4
RCC-NE-Sump-BT	2020-09-20 12:00	17	8.2	954	21.9	21.7	21.9
RCC-NE-Sump-BT	2020-09-22 12:50	12.2	8.6	856	19.2	19.2	19.2
RCC-NE-Sump-BT	2020-09-24 12:50	13.5	8.5	845	40.1	40	40.1
RCC-NE-Sump-BT	2020-09-26 12:15	11.6	8.4	887	12.2	12	12.2
RCC-NE-Sump-BT	2020-09-27 14:55	10.8	8.2	868	11.3	11.1	11.3
RCC-NE-Sump-BT	2020-09-29 15:40	14.1	8.1	908	15.7	15.8	15.7
RCC-NE-Sump-BT	2020-10-01 14:00	15.1	8.1	899	24.6	24.5	24.6
RCC-NE-Sump-BT	2020-10-03 15:00	15.3	8.5	880	19.1	19	19.1
RCC-NE-Sump-BT	2020-10-08 13:50	10.4	8.5	454	56.6	56.5	56.6
RCC-NE-Sump-BT	2020-10-10 12:40	7.2	8.3	600	24.2	24.2	24.2
RCC-NE-Sump-BT	2020-10-11 13:45	8.7	8.4	620	59.3	59.3	59.3
RCC-NE-Sump-BT	2020-10-14 13:40	7.8	8	690	35.6	35.8	35.6
RCC-NE-Sump-BT	2020-10-16 15:15	6	8.2	660	10.7	10.7	10.7
RCC-NE-Sump-BT	2020-10-18 14:35	2.6	8.4	314	87	87	87
RCC-Sunken-BT	2020-05-10 16:00	11.4	8.5	1258	19.4	19.2	19.4
RCC-Zula-Ditch	2020-04-30 11:20	8.5	9.2	1413	19.8	19.7	19.8
RCC-Zula-Ditch	2020-05-02 12:10	14.9	9.1	1401	22.5	22.4	22.5
RCC-Zula-Ditch	2020-05-05 16:05	9.3	8.8	1404	41.6	41.4	41.6
RCC-Zula-Ditch	2020-05-06 16:10	15.3	8.7	1382	49.9	49.5	49.9
RCC-Zula-Ditch	2020-05-07 13:25	11	8.7	1373	60.5	60.3	60.5
RCC-Zula-Ditch	2020-05-08 16:05	14.9	8.7	1341	38.7	38.3	38.7
RCC-Zula-Ditch	2020-05-09 13:40	16.1	6.9	1303	20.5	20.3	20.5
RCC-Zula-Ditch	2020-05-10 15:15	11.4	8.8	1358	29.1	28.8	29.1
RCC-Zula-Ditch	2020-05-11 11:10	13.7	8.7	1087	23.6	23	23.6
RCC-Zula-Ditch	2020-05-12 13:20	15.9	9.1	1372	17	17	17
RCC-Zula-Ditch	2020-05-13 12:25	17.8	8.8	1445	15.4	15.3	15.4
RCC-Zula-Ditch	2020-05-14 11:30	9.7	8.8	1570	15.7	15.6	15.7
RCC-Zula-Ditch	2020-05-15 10:48	11.3	8.8	1438	11.6	11.6	11.6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RCC-Zula-Ditch	2020-05-16 12:25	13.6	8.5	1491	9.1	9	9.1
RCC-Zula-Ditch	2020-05-17 11:03	9.6	9.9	1522	35.8	35.6	35.8
RCC-Zula-Ditch	2020-05-18 12:40	10.9	9.5	1435	31.2	31.2	31.2
RCC-Zula-Ditch	2020-05-19 12:55	17.9	9.1	1540	14.5	14.2	14.5
RCC-Zula-Ditch	2020-05-20 12:05	16.2	8.1	1581	7.7	7.7	7.7
RCC-Zula-Ditch	2020-05-21 14:45	10.2	9.4	1206	99.8	99.8	99.8
RCC-Zula-Ditch	2020-05-24 11:45	16.5	8.9	1475	26.1	25.7	26.1
RCC-Zula-Ditch	2020-05-29 14:30	19.7	8.6	1449	17.4	17.1	17.4
RSEM-L5E-EOP	2020-04-13 12:00	5.5	8.3	662	20.5	20.7	20.5
RSEM-L5E-EOP	2020-04-14 10:45	2.5	8.1	676	22.5	22.5	22.5
RSEM-L5E-EOP	2020-04-15 18:00	6.6	8	551	44.3	44.6	44.3
RSEM-L5E-EOP	2020-04-16 14:35	4.8	7.9	575	61.2	62	61.2
RSEM-L5E-EOP	2020-04-17 12:50	3.2	8.3	561	57.5	58.2	57.5
RSEM-L5E-EOP	2020-04-18 13:10	6.1	8.2	520	29.9	30.2	29.9
RSEM-L5E-EOP	2020-04-19 16:30	7.6	8.3	499	37.4	37.5	37.4
RSEM-L5E-EOP	2020-04-20 14:20	7.5	8.1	552	35.4	36.1	35.4
RSEM-L5E-EOP	2020-04-21 13:10	8.4	8.3	525	45.4	45.4	45.4
RSEM-L5E-EOP	2020-04-22 13:15	11.2	8.2	556	19.2	19.5	19.2
RSEM-L5E-EOP	2020-04-23 11:40	9.1	8.1	572	12.5	12.4	12.5
RSEM-L5E-EOP	2020-04-24 13:30	10.3	8.1	559	10	9.9	10
RSEM-L5E-EOP	2020-04-25 13:30	10	8.3	585	5.7	5.8	5.7
RSEM-L5E-EOP	2020-04-26 14:15	10.6	8.3	601	4.6	4.5	4.6
RSEM-L5E-EOP	2020-04-27 9:55	8.4	8.3	607	3.8	3.8	3.8
RSEM-L5E-EOP	2020-04-28 15:05	10.2	8.4	627	8.8	8.7	8.8
RSEM-L5E-EOP	2020-04-29 13:50	9.7	8.3	645	8.5	8.6	8.5
RSEM-L5E-EOP	2020-04-30 14:10	7.5	8.4	697	4.4	4.5	4.4
RSEM-L5E-EOP	2020-05-01 13:20	13.8	8.6	616	6.6	6.5	6.6
RSEM-L5E-EOP	2020-05-03 9:15	12.7	8.2	644	11.4	11.4	11.4
RSEM-L5E-EOP	2020-05-04 15:30	11.9	8.5	743	11	11.2	11
RSEM-L5E-EOP	2020-05-05 13:15	9.7	8.7	764	9.2	8.9	9.2
RSEM-L5E-EOP	2020-05-06 17:15	13.6	8	670	9	9	9
RSEM-L5E-EOP	2020-05-07 12:20	13.4	7.9	724	11.4	11	11.4
RSEM-L5E-EOP	2020-05-07 14:35	11.6	8	743	12.3	12.2	12.3
RSEM-L5E-EOP	2020-05-08 12:20	13.4	7.9	724	11.4	11	11.4
RSEM-L5E-EOP	2020-05-09 14:10	13	7	810	11.7	11.5	11.7
RSEM-L5E-EOP	2020-05-10 12:00	10.4	8.2	813	11.2	11.1	11.2
RSEM-L5E-EOP	2020-05-11 11:45	11.7	8.1	869	12	12.1	12
RSEM-L5E-EOP	2020-05-12 14:45	14.8	8.4	900	11.1	11.1	11.1
RSEM-L5E-EOP	2020-05-13 14:45	6.1	8	970	30.8	30.6	30.8
RSEM-L5E-EOP	2020-05-14 13:40	11.9	7.6	980	16.1	16.8	16.1
RSEM-L5E-EOP	2020-05-15 10:15	9.6	8	980	14.5	14.8	14.5
RSEM-L5E-EOP	2020-05-16 14:40	3.5	8	963	6.9	6.8	6.9
RSEM-L5E-EOP	2020-05-17 13:10	11.1	8.2	954	2	2.1	2
RSEM-L5E-EOP	2020-05-18 14:35	10.9	8.5	902	1.8	1.8	1.8
RSEM-L5E-EOP	2020-05-19 15:30	14.2	8.6	926	13.6	13.3	13.6
RSEM-L5E-EOP	2020-05-20 14:05	16.8	8.3	919	2.3	2.3	2.3
RSEM-L5E-EOP	2020-05-21 16:00	12.1	8.5	941	11.7	12	11.7
RSEM-L5E-EOP	2020-05-22 17:05	10.6	8.6	948	4.1	4.1	4.1
RSEM-L5E-EOP	2020-05-23 15:40	15	8.5	879	5.5	5.8	5.5
RSEM-L5E-EOP	2020-05-24 13:45	15.4	8.1	932	4.5	4.5	4.5
RSEM-L5E-EOP	2020-06-09 12:30	16.2	8.2	1170	64.1	65.7	64.1
RSEM-L5E-EOP	2020-06-10 11:55	17.5	8	1245	15.4	15.3	15.4
RSEM-L5E-EOP	2020-06-11 14:35	21	8.2	1236	8.4	8.1	8.4
RSEM-L5E-EOP	2020-06-12 14:55	19.4	8.2	1170	2.6	2.6	2.6
RSEM-L5E-EOP	2020-06-13 16:15	18.8	8.3	1138	7	6.8	7
RSEM-L5E-EOP	2020-06-14 13:00	17.1	8.4	1220	28.5	27.9	28.5
RSEM-L5E-EOP	2020-06-15 19:45	14.5	7.8	1512	17.6	17.5	17.6
RSEM-L5E-EOP	2020-06-16 12:40	15	7.5	1711	8.4	8.3	8.4
RSEM-L5E-EOP	2020-06-17 17:30	17.7	7.7	1690	22.7	22.6	22.7
RSEM-L5E-EOP	2020-06-19 10:45	20.1	8	1757	26	25	26
RSEM-L5E-EOP	2020-06-20 12:45	20	8	1242	48.9	48.9	48.9
RSEM-L5E-EOP	2020-06-21 11:00	19.8	8.2	993	60.1	59.9	60.1
RSEM-L5E-EOP	2020-06-22 17:10	20.7	8.4	959	33.1	32.9	33.1
RSEM-L5E-EOP	2020-06-23 17:30	21.9	8.4	986	23.9	23.9	23.9
RSEM-L5E-EOP	2020-06-24 11:40	19.2	8.3	1156	22.5	22.5	22.5
RSEM-L5E-EOP	2020-06-25 18:10	19.5	8.2	1282	21.6	21.7	21.6
RSEM-L5E-EOP	2020-07-02 16:30	18	8.3	1371	11.5	11.2	11.5
RSEM-L5E-EOP	2020-07-03 11:00	18.2	8	1108	60.8	61.3	60.8
RSEM-L5E-EOP	2020-07-04 16:05	17.4	8	1198	48	47.8	48
RSEM-L5E-EOP	2020-07-05 13:10	18	8	2030	52.8	53	52.8
RSEM-L5E-EOP	2020-07-06 13:25	22.8	8.2	1753	23	23.2	23
RSEM-L5E-EOP	2020-07-07 16:20	19.3	8.3	1849	15.3	15.2	15.3
RSEM-L5E-EOP	2020-07-22 12:30	21.9	8	2030	4.4	4.2	4.4
RSEM-L5E-EOP	2020-07-23 11:05	20.8	8.2	2610	6.2	6.1	6.2
RSEM-L5E-EOP	2020-07-24 11:35	20.4	7.2	2610	4	4	4
RSEM-L5E-EOP	2020-07-25 10:30	18.9	7.2	2600	5.1	5	5.1
RSEM-L5E-EOP	2020-07-26 11:05	21.2	7.2	2430	4.6	4.7	4.6
RSEM-L5E-EOP	2020-07-27 11:50	21.8	7.8	2440	4.8	4.8	4.8
RSEM-L5E-EOP	2020-07-29 13:00	22.5	8.4	2430	16.4	16.3	16.4
RSEM-L5E-EOP	2020-07-30 17:00	25.2	8.5	2470	4.9	4.9	4.9
RSEM-L5E-EOP	2020-07-31 12:00	24.6	8.5	2400	29	23	29
RSEM-L5E-EOP	2020-08-29 13:25	15.2	8.7	1532	12.6	12.6	12.6
RSEM-L5E-EOP	2020-08-30 10:45	14.8	8.7	1548	7.6	7.6	7.6
RSEM-L5E-EOP	2020-08-31 11:45	17.2	8.5	1599	11.8	11.7	11.8
RSEM-L5E-EOP	2020-09-01 10:25	15.3	8.6	1682	25.9	25.7	25.9
RSEM-L5E-EOP	2020-09-02 12:10	16.3	8.4	1661	15.6	15.6	15.6
RSEM-L5E-EOP	2020-09-03 13:35	17.3	8.5	1660	11.1	10.5	11.1
RSEM-L5E-SP	2020-02-28 17:10	1.8	8.6	693	14.7	14.8	14.7
RSEM-L5E-SP	2020-02-29 14:30	2.2	8.2	727	10.1	10.1	10.1

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-L5E-SP	2020-05-02 10:45	14.3	8.6	614	6.1	6	6.1
RSEM-L5E-SP	2020-05-26 16:30	15.1	8.4	872	4.6	4.8	4.6
RSEM-L5E-SP	2020-05-27 14:30	16.2	8.6	885	3.9	3.8	3.9
RSEM-L5E-SP	2020-05-30 17:45	18.9	8.3	855	4.5	4.4	4.5
RSEM-L5E-SP	2020-06-01 16:30	18.3	8.4	977	4.7	4.7	4.7
RSEM-L5E-SP	2020-06-30 16:03	19.8	8.6	1212	9.6	9.5	9.6
RSEM-L5E-SP	2020-07-21 9:00	21.1	8.4	2210	12	12	12
RSEM-L5E-SP	2020-07-28 11:45	22.7	7.5	2430	3.3	3.3	3.3
RSEM-L5W-EOP	2020-04-19 16:45	11	9.4	954	23.9	23.9	23.9
RSEM-L5W-EOP	2020-07-04 16:15	18.4	8	1288	14.6	14.5	14.6
RSEM-L5W-EOP	2020-07-05 13:20	20	8.2	1302	8.2	8.3	8.2
RSEM-L5W-EOP	2020-07-07 16:30	21.1	8.9	1201	24.7	24.7	24.7
RSEM-L5W-EOP	2020-07-08 16:00	21.1	8.6	1238	20.5	20.7	20.5
RSEM-L5W-SP	2020-06-30 16:05	20.7	8.6	1959	5.7	5.7	5.7
RSEM-L5W-SP	2020-07-03 11:20	17.5	8.1	1378	31.4	31.2	31.4
RSEM-L6-EOP	2020-06-17 17:45	19.4	8.2	980	8.5	8.5	8.5
RSEM-L6-EOP	2020-06-18 13:00	22.5	8.2	1020	4.9	4.9	4.9
RSEM-L6-EOP	2020-06-19 11:00	21.5	8.2	1034	3.2	3.2	3.2
RSEM-L6-EOP	2020-06-20 13:40	21.3	8.3	1058	2.1	2.1	2.1
RSEM-L6-EOP	2020-06-21 11:45	20.1	8.3	1121	3.8	3.7	3.8
RSEM-L6-EOP	2020-06-22 16:30	18.4	8.3	1219	3.2	3.3	3.2
RSEM-L6-EOP	2020-06-23 14:30	21.9	8.4	1227	4.2	5.4	4.2
RSEM-L6-EOP	2020-06-27 19:15	18.5	8.5	1259	4.6	4.5	4.6
RSEM-L6-SP	2020-05-29 12:30	18.1	8.5	858	2.3	2.3	2.3
RSEM-L6-SP	2020-06-15 19:07	15.4	8.2	949	10.2	10.2	10.2
RSEM-L6-SP	2020-06-16 10:25	15.9	8.2	953	8.4	8.6	8.4
RSEM-L6-SP	2020-06-24 12:20	21.4	8.4	1207	3.2	3.2	3.2
RSEM-L6-SP	2020-06-25 17:30	19.8	8.5	1216	4	4.1	4
RSEM-L6-SP	2020-07-04 15:20	17.5	8.3	1400	12	12.1	12
RSEM-L6-SP	2020-07-05 9:25	16.1	8.5	1434	6	5.9	6
RSEM-L6-SP	2020-07-07 12:00	21.7	8.5	1534	3	3	3
RSEM-L6-SP	2020-08-29 9:20	14.1	9	3090	2.3	2.3	2.3
RSEM-L6-SP	2020-10-26 13:50	5	8	4150	4.3	4.3	4.3
RSEM-R5a-A-EOP	2020-06-30 11:55	20.2	7.8	1268	25.1	25.2	25.1
RSEM-R5a-A-EOP	2020-07-01 9:20	19.4	8.3	1201	20.9	20.7	20.9
RSEM-R5a-A-EOP	2020-07-04 13:55	17.8	8.4	1162	79.7	79.2	79.7
RSEM-R5a-A-EOP	2020-07-05 11:45	19.4	8.3	1674	53.3	53.2	53.3
RSEM-R5A-A-SP	2020-03-29 13:50	1.2	8	273	26	27	26
RSEM-R5A-A-SP	2020-04-12 11:25	6.1	7.4	253	83.6	83.7	83.6
RSEM-R5A-A-SP	2020-06-16 11:35	15.4	8.1	679	68.7	69.1	68.7
RSEM-R5A-A-SP	2020-06-27 18:05	19.7	9	866	14.8	14.8	14.8
RSEM-R5A-A-SP	2020-07-03 14:30	15.9	8.2	895	73	77	73
RSEM-R5A-B-SP	2020-03-29 14:00	0.9	8.5	253	97.3	92.2	97.3
RSEM-R5A-B-SP	2020-04-12 11:35	3.8	7.8	293	1428	1429	1428
RSEM-R5A-B-SP	2020-06-16 11:45	15.9	8.1	671	45.5	45.6	45.5
RSEM-R5A-B-SP	2020-06-27 18:07	19.7	8.6	2270	93.7	92.5	93.7
RSEM-R5A-B-SP	2020-07-03 14:20	15.9	8.5	647	102	103	102
RSEM-R5A-C-SP	2020-03-29 14:30	4.6	8.2	446	31.5	31.5	31.5
RSEM-R5A-C-SP	2020-04-12 12:15	6.8	8.3	356	839	839	839
RSEM-R5A-C-SP	2020-06-16 12:00	16.1	8.1	3200	64.6	65.2	64.6
RSEM-R5A-C-SP	2020-06-27 17:52	19.5	8.2	9200	66.8	67	66.8
RSEM-R5A-C-SP	2020-07-03 12:50	16.2	8.4	2640	67.6	68.1	67.6
RSEM-R5A-D-SP	2020-03-29 14:40	0.8	8	291	75.6	75.6	75.6
RSEM-R5A-D-SP	2020-04-12 12:25	5.5	8.6	375	918	919	918
RSEM-R5A-D-SP	2020-06-16 12:10	16.3	8.1	3050	68.6	68.5	68.6
RSEM-R5A-D-SP	2020-06-27 17:55	19.7	8.3	3950	18.6	18.5	18.6
RSEM-R5A-D-SP	2020-07-03 12:45	16	8.3	2000	78.8	78.4	78.8
RSEM-R5B-EOP	2020-01-01 13:10	3.5	8.3	1389	1.3	1.2	1.3
RSEM-R5B-EOP	2020-01-02 11:20	4.2	8.2	1353	1.4	1.3	1.4
RSEM-R5B-EOP	2020-01-03 12:40	2.9	8	1363	2	2	2
RSEM-R5B-EOP	2020-01-04 14:20	1.1	8.1	1263	2.1	2	2.1
RSEM-R5B-EOP	2020-01-05 13:10	0.4	8.1	1222	2.1	2.1	2.1
RSEM-R5B-EOP	2020-01-06 12:50	0.7	7.9	1248	1.3	1.3	1.3
RSEM-R5B-EOP	2020-01-07 13:40	1.5	8	1385	1.4	1.4	1.4
RSEM-R5B-EOP	2020-01-08 13:30	0.2	8.2	1379	1.8	1.8	1.8
RSEM-R5B-EOP	2020-01-09 11:50	0.2	7.9	1284	2	2	2
RSEM-R5B-EOP	2020-01-10 14:00	1.2	7.9	1182	1.6	1.6	1.6
RSEM-R5B-EOP	2020-01-11 11:40	0.5	8.5	1404	1.9	1.9	1.9
RSEM-R5B-EOP	2020-01-12 12:40	-0.4	8.2	1209	1.5	1.5	1.5
RSEM-R5B-EOP	2020-01-13 11:25	2.6	8.5	1261	1.6	1.6	1.6
RSEM-R5B-EOP	2020-01-14 11:40	0.6	8.3	1392	1.6	1.7	1.6
RSEM-R5B-EOP	2020-01-15 12:35	0.2	8.2	563	1.7	1.7	1.7
RSEM-R5B-EOP	2020-01-16 13:00	0.6	8.4	1412	1.7	1.6	1.7
RSEM-R5B-EOP	2020-01-17 12:25	2.5	8	1316	1.8	1.8	1.8
RSEM-R5B-EOP	2020-01-18 11:40	3.4	8.5	1416	2	1.9	2
RSEM-R5B-EOP	2020-01-19 14:45	3	8.3	1462	2.3	2.3	2.3
RSEM-R5B-EOP	2020-01-20 11:50	0.8	8.4	1663	3.2	3.2	3.2
RSEM-R5B-EOP	2020-01-21 14:10	2.4	8	1555	2.6	2.5	2.6
RSEM-R5B-EOP	2020-01-22 15:50	3.2	8	1595	3.2	3.2	3.2
RSEM-R5B-EOP	2020-01-23 15:20	2.4	7.7	1850	1.8	1.8	1.8
RSEM-R5B-EOP	2020-01-24 11:10	1.7	7.7	1557	2.5	2.5	2.5
RSEM-R5B-EOP	2020-01-25 12:00	2.1	8	1572	2.3	2.3	2.3
RSEM-R5B-EOP	2020-01-26 13:40	3.8	7.8	1598	2.1	2.1	2.1
RSEM-R5B-EOP	2020-01-27 14:10	2.6	7.9	1530	2.3	2.3	2.3
RSEM-R5B-EOP	2020-01-28 12:45	1.9	8.2	1425	2.7	2.6	2.7
RSEM-R5B-EOP	2020-01-29 11:40	1.6	8.2	1446	3.1	3.1	3.1
RSEM-R5B-EOP	2020-01-30 13:15	1.7	8.1	1440	3.7	3.7	3.7
RSEM-R5B-EOP	2020-01-31 13:05	1.3	8.1	1448	4.5	4.5	4.5
RSEM-R5B-EOP	2020-02-01 11:30	1.2	8.2	1491	2.9	2.8	2.9

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R5B-EOP	2020-02-02 13:50	1.3	8.3	1500	2.7	2.7	2.7
RSEM-R5B-EOP	2020-02-03 12:20	0.5	8.3	1571	3	3	3
RSEM-R5B-EOP	2020-02-04 11:50	1.2	8.3	1268	2.6	2.7	2.6
RSEM-R5B-EOP	2020-02-05 12:55	0.8	8.2	1614	2.6	2.6	2.6
RSEM-R5B-EOP	2020-02-06 12:00	1.5	8.2	1635	2.7	2.6	2.7
RSEM-R5B-EOP	2020-02-07 12:10	0.5	8.1	1669	2.9	2.9	2.9
RSEM-R5B-EOP	2020-02-08 11:50	1.8	8.1	1648	3.2	3.2	3.2
RSEM-R5B-EOP	2020-02-09 13:10	1.5	8	1534	4.6	4.6	4.6
RSEM-R5B-EOP	2020-02-10 11:10	1.5	8.2	1560	5.2	5.2	5.2
RSEM-R5B-EOP	2020-02-11 15:30	2.1	8	1430	5.6	5.6	5.6
RSEM-R5B-EOP	2020-02-12 15:20	0.5	7.9	1434	5.9	5.9	5.9
RSEM-R5B-EOP	2020-02-13 14:20	3.5	7.8	1408	5.3	5.3	5.3
RSEM-R5B-EOP	2020-02-14 11:30	1.2	8	1414	5.6	5.5	5.6
RSEM-R5B-EOP	2020-02-15 12:10	0.7	7.8	1441	6.2	6.2	6.2
RSEM-R5B-EOP	2020-02-16 14:00	1.3	7.9	1399	5.8	5.8	5.8
RSEM-R5B-EOP	2020-02-17 16:20	0.3	8.1	1433	5.3	5.3	5.3
RSEM-R5B-EOP	2020-02-18 12:40	0.3	8.3	1576	5.2	5.2	5.2
RSEM-R5B-EOP	2020-02-19 11:35	1	8.3	1608	3.9	3.8	3.9
RSEM-R5B-EOP	2020-02-20 12:30	1.6	8.3	1618	3.2	3.2	3.2
RSEM-R5B-EOP	2020-02-21 11:40	4.4	8.2	1456	2.5	2.5	2.5
RSEM-R5B-EOP	2020-02-23 11:40	2.9	8.3	1393	1.9	1.9	1.9
RSEM-R5B-EOP	2020-02-24 11:35	1	8.4	1502	2.1	2.1	2.1
RSEM-R5B-EOP	2020-02-25 11:00	3.8	8.4	1427	3.7	3.6	3.7
RSEM-R5B-EOP	2020-02-26 10:50	3.5	8.2	1325	3	3	3
RSEM-R5B-EOP	2020-02-27 11:35	6	8.2	1326	4	4	4
RSEM-R5B-EOP	2020-02-28 12:00	7.2	8.4	1342	5.8	5.8	5.8
RSEM-R5B-EOP	2020-02-29 12:25	2.6	8.3	1292	8.7	8.7	8.7
RSEM-R5B-EOP	2020-03-01 10:55	2	8.3	1331	6.7	6.7	6.7
RSEM-R5B-EOP	2020-03-02 19:30	2.1	7.8	1331	7.7	7.7	7.7
RSEM-R5B-EOP	2020-03-03 11:50	2.7	8.1	1397	9	8.9	9
RSEM-R5B-EOP	2020-03-04 16:20	2.4	8	1373	9	9.1	9
RSEM-R5B-EOP	2020-03-05 15:20	2.6	8.1	1376	7.9	7.9	7.9
RSEM-R5B-EOP	2020-03-06 11:20	0.1	8	1387	7	7	7
RSEM-R5B-EOP	2020-03-07 11:20	1.7	8.1	1363	7.4	7.4	7.4
RSEM-R5B-EOP	2020-03-08 11:30	0.8	8.2	1279	5.3	5.3	5.3
RSEM-R5B-EOP	2020-03-09 14:40	3.5	8	1332	6.8	6.8	6.8
RSEM-R5B-EOP	2020-03-10 11:05	3.1	8	1266	6.8	6.8	6.8
RSEM-R5B-EOP	2020-03-11 13:10	3	8.1	1096	13.9	13.9	13.9
RSEM-R5B-EOP	2020-03-12 10:55	1.5	8.4	983	11.1	11.2	11.1
RSEM-R5B-EOP	2020-03-13 12:30	2.1	8.2	987	7.9	8	7.9
RSEM-R5B-EOP	2020-03-14 12:25	2.5	8.3	987	6.1	6.2	6.1
RSEM-R5B-EOP	2020-03-15 13:00	2.2	8.4	1055	4.1	4	4.1
RSEM-R5B-EOP	2020-03-16 12:50	3.7	8.3	1117	3.2	3.3	3.2
RSEM-R5B-EOP	2020-03-17 12:05	2.4	8.4	1156	2.8	2.8	2.8
RSEM-R5B-EOP	2020-03-18 11:40	4	8.3	1167	3.3	3.3	3.3
RSEM-R5B-EOP	2020-03-19 11:30	2.5	8.3	1126	7.6	7.6	7.6
RSEM-R5B-EOP	2020-03-20 12:15	3.1	8.4	1088	8.5	8.5	8.5
RSEM-R5B-EOP	2020-03-21 11:30	1.2	8.4	1215	8.4	8.4	8.4
RSEM-R5B-EOP	2020-03-22 11:20	3.8	8.4	1058	11.9	11.9	11.9
RSEM-R5B-EOP	2020-03-23 12:00	2	8.5	1148	8.7	8.7	8.7
RSEM-R5B-EOP	2020-03-24 13:10	1	8	1085	6.3	6.3	6.3
RSEM-R5B-EOP	2020-03-25 12:50	3.3	8	1076	8.2	8.2	8.2
RSEM-R5B-EOP	2020-03-26 14:10	3.3	8.2	942	25	25.2	25
RSEM-R5B-EOP	2020-03-27 10:50	2.6	8.3	1005	18.2	18.2	18.2
RSEM-R5B-EOP	2020-03-28 14:10	1.6	8.3	1035	12.5	12.5	12.5
RSEM-R5B-EOP	2020-03-29 15:30	1.7	8.2	1133	7.5	7.5	7.5
RSEM-R5B-EOP	2020-03-30 15:00	3.3	8.3	1274	7.8	8.1	7.8
RSEM-R5B-EOP	2020-03-31 12:00	2.1	8.4	1307	6.2	6.3	6.2
RSEM-R5B-EOP	2020-04-01 12:10	3.9	8.4	1296	5.2	5.2	5.2
RSEM-R5B-EOP	2020-04-02 11:00	2.3	8.6	1290	5	5	5
RSEM-R5B-EOP	2020-04-03 11:10	0.4	8.4	1433	5.1	5.2	5.1
RSEM-R5B-EOP	2020-04-04 11:30	0.8	8.5	1377	4.4	4.4	4.4
RSEM-R5B-EOP	2020-04-05 12:20	1.5	8.4	1481	4.6	4.5	4.6
RSEM-R5B-EOP	2020-04-06 12:25	4.2	8.3	1287	5.3	5.4	5.3
RSEM-R5B-EOP	2020-04-07 11:50	2.1	8.4	1362	8.5	8.5	8.5
RSEM-R5B-EOP	2020-04-08 11:30	0.8	8.5	1123	18.5	18.6	18.5
RSEM-R5B-EOP	2020-04-09 12:20	4.8	8	942	23	23.1	23
RSEM-R5B-EOP	2020-04-10 11:30	1.4	8.4	806	34.6	34.5	34.6
RSEM-R5B-EOP	2020-04-11 18:50	1.4	8.4	1034	11.3	11.4	11.3
RSEM-R5B-EOP	2020-04-12 13:35	2.2	8.2	1074	8.8	8.7	8.8
RSEM-R5B-EOP	2020-04-13 10:55	2	8.4	1042	7.5	7.6	7.5
RSEM-R5B-EOP	2020-04-14 18:05	2	8.4	952	10.3	10.3	10.3
RSEM-R5B-EOP	2020-04-15 13:05	2.5	8.4	1030	12.6	12.9	12.6
RSEM-R5B-EOP	2020-04-16 12:30	3.5	8.4	1009	13.7	14	13.7
RSEM-R5B-EOP	2020-04-17 11:25	3.9	8	1057	12.3	12.4	12.3
RSEM-R5B-EOP	2020-04-18 10:30	5	8.6	1069	11.7	11.5	11.7
RSEM-R5B-EOP	2020-04-19 14:45	8.1	8.3	1032	9.3	9.3	9.3
RSEM-R5B-EOP	2020-04-20 16:40	6.9	8.5	1149	6.2	6	6.2
RSEM-R5B-EOP	2020-04-21 11:20	6.5	8.6	1174	6.5	6.5	6.5
RSEM-R5B-EOP	2020-04-22 11:30	9.6	8.1	1188	6.1	5.9	6.1
RSEM-R5B-EOP	2020-04-23 14:05	9.9	8.3	1296	3.4	3.6	3.4
RSEM-R5B-EOP	2020-04-24 11:05	10	8.3	1431	2.9	2.8	2.9
RSEM-R5B-EOP	2020-04-25 11:05	10.8	8.2	1551	2.5	2.5	2.5
RSEM-R5B-EOP	2020-04-26 11:50	10.8	8.5	1630	1.7	1.7	1.7
RSEM-R5B-EOP	2020-04-27 13:05	11	8.5	1697	2.1	2.2	2.1
RSEM-R5B-EOP	2020-04-28 14:10	13.4	8.5	1634	2.2	2.1	2.2
RSEM-R5B-EOP	2020-04-29 11:45	11.8	8.6	1778	1.9	1.9	1.9
RSEM-R5B-EOP	2020-04-30 11:45	10.9	8.6	1792	2.5	2.5	2.5
RSEM-R5B-EOP	2020-05-01 12:00	13	8.6	1800	2.5	2.5	2.5

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R5B-EOP	2020-05-02 12:35	16.1	8.6	1649	2.9	2.9	2.9
RSEM-R5B-EOP	2020-05-04 14:30	9.1	7	1984	4.7	4.7	4.7
RSEM-R5B-EOP	2020-05-07 12:00	11.5	7.7	1657	5.1	4.9	5.1
RSEM-R5B-EOP	2020-05-08 13:00	14.7	7.6	1643	5.1	4.8	5.1
RSEM-R5B-EOP	2020-05-09 12:40	13.7	6.8	1614	4.2	4.3	4.2
RSEM-R5B-EOP	2020-05-10 13:30	12.5	7.1	1585	6.4	6.3	6.4
RSEM-R5B-EOP	2020-05-11 9:45	11.7	8.4	1565	9.3	9.1	9.3
RSEM-R5B-EOP	2020-05-12 11:40	15.7	8.5	1502.5	2.1	2.2	2.1
RSEM-R5B-EOP	2020-05-16 12:00	15.5	8.7	1549	1.7	1.7	1.7
RSEM-R5B-EOP	2020-05-17 10:40	12.8	8.2	1641	2.5	2.5	2.5
RSEM-R5B-EOP	2020-05-18 12:10	12.6	8	1625	1.2	1.2	1.2
RSEM-R5B-EOP	2020-05-21 14:30	12.7	8.3	1577	3.4	3.3	3.4
RSEM-R5B-EOP	2020-05-22 15:40	11.3	8.5	1556	2.3	2.1	2.3
RSEM-R5B-EOP	2020-06-09 17:10	20.8	8.5	1355	18.1	18.3	18.1
RSEM-R5B-EOP	2020-06-14 15:25	16.1	8.4	1159	35.9	35.7	35.9
RSEM-R5B-EOP	2020-06-15 16:30	14.6	8.2	866	14.4	14.4	14.4
RSEM-R5B-EOP	2020-06-16 11:25	15.8	8.2	902	8.7	8.5	8.7
RSEM-R5B-EOP	2020-06-17 13:20	17.6	8.1	982	6.2	6.1	6.2
RSEM-R5B-EOP	2020-06-18 14:30	22.6	8.1	1090	4.2	4.3	4.2
RSEM-R5B-EOP	2020-06-19 12:00	21.5	8.2	1118	3.6	3.4	3.6
RSEM-R5B-EOP	2020-06-21 14:45	22.1	8.4	1188	5.7	5.1	5.7
RSEM-R5B-EOP	2020-06-22 12:30	21.1	8.4	1293	4.8	4.8	4.8
RSEM-R5B-EOP	2020-06-23 16:40	22.6	8.4	1257	4	4	4
RSEM-R5B-EOP	2020-06-24 13:50	23.6	8.4	1264	6.3	6.2	6.3
RSEM-R5B-EOP	2020-06-25 16:30	20.3	8.5	1279	7.3	7.4	7.3
RSEM-R5B-EOP	2020-06-26 15:20	22.3	8.5	1302	5.2	5.2	5.2
RSEM-R5B-EOP	2020-06-27 18:20	19.2	8.7	1288	5.8	5.8	5.8
RSEM-R5B-EOP	2020-06-28 11:15	18.3	8.7	1399	6.4	6.8	6.4
RSEM-R5B-EOP	2020-06-29 15:00	20.1	8.6	1420	6.8	6.9	6.8
RSEM-R5B-EOP	2020-06-30 12:35	20.4	8.6	1320	7.6	7.6	7.6
RSEM-R5B-EOP	2020-07-01 12:30	17.8	8.5	1116	24.5	24.5	24.5
RSEM-R5B-EOP	2020-07-02 14:25	19.5	8.5	874	27.4	27.3	27.4
RSEM-R5B-EOP	2020-07-03 16:35	15.7	8.3	610	56.5	56.9	56.5
RSEM-R5B-EOP	2020-07-04 12:45	15.4	8.2	582	35.6	35.5	35.6
RSEM-R5B-EOP	2020-07-05 10:50	17	8.1	727	14.7	14.6	14.7
RSEM-R5B-EOP	2020-07-06 11:45	21	8.2	845	7.4	7.4	7.4
RSEM-R5B-EOP	2020-07-06 12:45	20.6	8.4	791	6.3	6.3	6.3
RSEM-R5B-EOP	2020-07-07 13:00	20	8.3	974	6.3	6.2	6.3
RSEM-R5B-EOP	2020-07-08 15:30	21.9	8.2	1031	5.3	5.2	5.3
RSEM-R5B-EOP	2020-07-09 15:30	20.9	8.3	989	4	3.9	4
RSEM-R5B-EOP	2020-07-10 10:45	19.4	8.6	957	4.9	4.8	4.9
RSEM-R5B-EOP	2020-07-11 16:00	21.8	8.3	901	5.8	5.7	5.8
RSEM-R5B-EOP	2020-07-12 15:40	19.8	8.3	870	7.6	7.6	7.6
RSEM-R5B-EOP	2020-07-13 15:30	19.6	8.3	803	7.4	7.2	7.4
RSEM-R5B-EOP	2020-07-14 12:45	20.6	8.4	791	6.3	6.3	6.3
RSEM-R5B-EOP	2020-07-15 11:35	20.1	8.3	854	4.2	4.2	4.2
RSEM-R5B-EOP	2020-07-16 14:20	21.9	8.4	792	4.4	4.5	4.4
RSEM-R5B-EOP	2020-07-17 12:45	20.2	8.3	836	4.3	4.3	4.3
RSEM-R5B-EOP	2020-07-18 12:05	21.3	8.3	819	3.8	3.8	3.8
RSEM-R5B-EOP	2020-07-19 12:30	21.4	8.4	806	3.8	3.7	3.8
RSEM-R5B-EOP	2020-07-20 12:30	21.9	8.3	796	7.9	8	7.9
RSEM-R5B-EOP	2020-07-21 15:20	21.2	8.3	784	6.8	6.8	6.8
RSEM-R5B-EOP	2020-07-22 14:20	22.4	8.4	730	4	4.1	4
RSEM-R5B-EOP	2020-07-23 14:20	21.7	8.3	759	3.5	3.7	3.5
RSEM-R5B-EOP	2020-07-24 14:05	19.3	8.4	749	5.5	5.5	5.5
RSEM-R5B-EOP	2020-07-25 12:00	20.4	8.2	748	4.5	4.4	4.5
RSEM-R5B-EOP	2020-07-26 13:15	21.9	8.5	734	3.6	3.6	3.6
RSEM-R5B-EOP	2020-07-27 11:00	21.5	8.4	727	3.4	3.5	3.4
RSEM-R5B-EOP	2020-07-28 13:45	23	8.4	663	3.6	3.6	3.6
RSEM-R5B-EOP	2020-07-29 14:30	24.6	8.5	681	3.6	3.6	3.6
RSEM-R5B-EOP	2020-07-30 0:00	23.9	7.9	671	4	3.7	4
RSEM-R5B-EOP	2020-07-31 11:30	23.4	7.8	653	3.9	4	3.9
RSEM-R5B-EOP	2020-08-01 11:30	23.8	8.3	661	5	4.7	5
RSEM-R5B-EOP	2020-08-02 13:45	24.2	8.3	658	4.3	4.2	4.3
RSEM-R5B-EOP	2020-08-03 11:40	23.3	8.3	659	8.3	8.3	8.3
RSEM-R5B-EOP	2020-08-04 11:20	21.3	8.4	710	4.6	4.8	4.6
RSEM-R5B-EOP	2020-08-05 11:05	22.3	8.4	698	4.1	4.1	4.1
RSEM-R5B-EOP	2020-08-06 12:40	22.5	8.4	701	4	4	4
RSEM-R5B-EOP	2020-08-07 10:45	20.2	8.4	699	4.4	4.4	4.4
RSEM-R5B-EOP	2020-08-08 11:15	19.5	8.4	693	3.7	3.6	3.7
RSEM-R5B-EOP	2020-08-09 13:20	21.4	8.6	675	4.2	4.4	4.2
RSEM-R5B-EOP	2020-08-10 11:00	18.9	8.5	697	3.8	4.1	3.8
RSEM-R5B-EOP	2020-08-11 11:35	18.4	8.5	687	3.8	3.9	3.8
RSEM-R5B-EOP	2020-08-12 16:10	19.8	8.6	695	4.4	4.3	4.4
RSEM-R5B-EOP	2020-08-13 11:50	18	8.4	691	3.8	3.8	3.8
RSEM-R5B-EOP	2020-08-14 12:00	17.8	8.4	690	4.6	4.6	4.6
RSEM-R5B-EOP	2020-08-15 13:20	17.4	8.3	690	4.3	4.3	4.3
RSEM-R5B-EOP	2020-08-16 11:00	19.7	8.4	693	4.8	4.7	4.8
RSEM-R5B-EOP	2020-08-17 10:10	19.4	8.4	691	4	3.9	4
RSEM-R5B-EOP	2020-08-18 15:45	21.9	8.3	643	4.8	4.6	4.8
RSEM-R5B-EOP	2020-08-19 16:00	21	8.3	658	7.6	7.4	7.6
RSEM-R5B-EOP	2020-08-23 15:30	20.1	8.1	642	36.7	36.7	36.7
RSEM-R5B-EOP	2020-08-24 14:40	18.6	8.3	633	25.7	25.1	25.7
RSEM-R5B-EOP	2020-08-25 11:30	17.8	7.9	727	16.4	16.4	16.4
RSEM-R5B-EOP	2020-08-26 12:35	16.5	8.2	694	10.3	10.3	10.3
RSEM-R5B-EOP	2020-08-27 11:30	17.5	8.2	701	9.3	9.3	9.3
RSEM-R5B-EOP	2020-08-28 12:40	16.1	8.5	629	6	5.7	6
RSEM-R5B-EOP	2020-08-29 11:15	14.9	8.4	635	4.8	4.8	4.8
RSEM-R5B-EOP	2020-08-30 13:35	15.5	8.6	642	4.4	4.4	4.4

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R5B-EOP	2020-08-31 17:25	14.5	8.3	647	6	6.1	6
RSEM-R5B-EOP	2020-09-01 12:55	15	8.3	649	4.6	4.5	4.6
RSEM-R5B-EOP	2020-09-02 15:35	17.1	8.4	644	4	4	4
RSEM-R5B-EOP	2020-09-03 15:15	16.2	8.4	624	7.3	7	7.3
RSEM-R5B-EOP	2020-09-04 13:30	16.2	8.6	641	8.1	7.9	8.1
RSEM-R5B-SP	2020-02-22 13:20	3.9	8.4	1430	3.3	3.3	3.3
RSEM-R5B-SP	2020-05-03 8:20	12	8.5	1648	2.8	2.8	2.8
RSEM-R5B-SP	2020-05-05 14:20	14.6	9	1953	5.7	5.7	5.7
RSEM-R5B-SP	2020-05-06 14:50	10.7	7.5	1649	5.4	5.5	5.4
RSEM-R5B-SP	2020-05-13 11:35	16.2	8.9	1551	2.6	2.6	2.6
RSEM-R5B-SP	2020-05-15 9:35	12.6	8.1	1554	2.2	2.2	2.2
RSEM-R5B-SP	2020-05-23 14:20	17.9	8.2	1463	1.7	1.8	1.7
RSEM-R5B-SP	2020-05-27 16:30	17.5	8.9	1407	2.8	2.8	2.8
RSEM-R5B-SP	2020-05-29 12:15	18.3	8.5	1390	2.6	2.5	2.6
RSEM-R5B-SP	2020-05-30 14:45	18.7	8.5	1382	3	3.1	3
RSEM-R5B-SP	2020-06-01 15:30	19.6	8.5	1565	4.9	4.9	4.9
RSEM-R5B-SP	2020-06-02 13:30	18.7	8.5	1562	6.7	6.8	6.7
RSEM-R5B-SP	2020-06-02 14:50	17.4	8.4	1551	5.7	5.6	5.7
RSEM-R5B-SP	2020-06-03 14:50	17.4	8.4	1551	5.7	5.6	5.7
RSEM-R5B-SP	2020-06-10 14:30	23.3	8.5	1348	15.1	15.2	15.1
RSEM-R5B-SP	2020-08-22 12:20	17.7	8.2	619	56.3	56.5	56.3
RSEM-R5B-W	2020-03-26 12:10	1.5	7.7	490	80.3	80.1	80.3
RSEM-R5B-W	2020-04-04 16:10	3.3	8.6	383	OR		
RSEM-R5B-W	2020-04-07 11:05	4.3	8.4	413	OR		
RSEM-R5B-W	2020-04-08 14:20	3.8	8.6	374	OR		
RSEM-R5B-W	2020-04-09 11:50	5.2	7.8	430	858	852	858
RSEM-R5B-W	2020-04-10 10:52	2	8.3	623	52.3	52.2	52.3
RSEM-R5B-W	2020-04-12 13:05	5.4	8.4	493	24.9	24.5	24.9
RSEM-R5B-W	2020-04-13 10:33	3.9	8.2	673	7.8	7.8	7.8
RSEM-R5B-W	2020-04-14 17:51	6.2	8.4	624	105.4	106.1	105.4
RSEM-R5B-W	2020-04-15 12:42	12.3	8.3	566	244	245	244
RSEM-R5B-W	2020-04-16 12:03	12.5	8.3	661	43	43.1	43
RSEM-R5B-W	2020-04-18 9:58	5.8	8.6	895	11	11	11
RSEM-R5B-W	2020-04-20 16:23	21	8.7	834	9.7	9.6	9.7
RSEM-R5B-W	2020-04-26 11:15	13.3	8.6	815	4.5	4.4	4.5
RSEM-R5B-W	2020-05-11 9:40	8.5	8.4	925	10.2	9.9	10.2
RSEM-R5B-W	2020-05-21 14:01	10.1	8.4	1306	122	124	122
RSEM-R5B-W	2020-05-22 15:15	11.4	8.6	1707	60.7	60.6	60.7
RSEM-R5B-W	2020-06-08 14:50	13.3	8.4	606	OR		
RSEM-R5B-W	2020-06-09 16:48	23.5	8.7	1323	5.2	5.2	5.2
RSEM-R5B-W	2020-06-12 12:50	10.8	8.6	1451	2.7	2.6	2.7
RSEM-R5B-W	2020-06-14 15:37	14.2	8.4	572	OR		
RSEM-R5B-W	2020-06-15 16:42	13.5	7.9	1145	1306	1303	1306
RSEM-R5B-W	2020-06-18 14:25	26.3	8.4	1398	23	23.1	23
RSEM-R5B-W	2020-06-28 11:32	18.3	8.6	1216	15.8	15.1	15.8
RSEM-R5B-W	2020-06-29 15:25	24.1	8.5	1088	13.1	13	13.1
RSEM-R5B-W	2020-07-02 14:45	22.9	8.5	940	2649	2651	2649
RSEM-R5B-W	2020-07-04 13:10	17.8	8.3	1075	620	620	620
RSEM-R5B-W	2020-07-07 14:45	23.5	8.6	1284	48.8	48.4	48.8
RSEM-R5B-W	2020-07-13 15:20	20.3	8.3	1133	50	53	50
RSEM-R5B-W	2020-07-16 14:00	26.5	8.5	1098	11.5	11.5	11.5
RSEM-R5B-W	2020-07-17 12:20	21.4	8.5	1144	9.8	9.8	9.8
RSEM-R5B-W	2020-07-21 15:05	24.4	8.6	907	133	134	133
RSEM-R5B-W	2020-08-02 13:30	25	8	930	31.1	30.9	31.1
RSEM-R5B-W	2020-08-03 11:00	23.8	8.2	867	48.6	48.3	48.6
RSEM-R5B-W	2020-08-04 11:02	20.9	8.6	862	13.1	13	13.1
RSEM-R5B-W	2020-08-05 10:45	24	8.4	861	5.9	5.9	5.9
RSEM-R5B-W	2020-08-07 10:25	19.1	8.4	963	9.9	9.9	9.9
RSEM-R5B-W	2020-08-09 12:48	24.2	8.7	1208	15.4	15.3	15.4
RSEM-R5B-W	2020-08-11 11:05	19.5	8.7	1121	13.1	12.3	13.1
RSEM-R5B-W	2020-08-15 12:41	17.6	8.5	1388	11.9	12.2	11.9
RSEM-R5B-W	2020-08-17 10:00	19.1	8.6	1244	100	91	100
RSEM-R5B-W	2020-08-18 15:30	22	8.8	1132	96.3	95.4	96.3
RSEM-R5B-W	2020-08-19 15:55	21.5	8.8	1147	63.9	63.7	63.9
RSEM-R5B-W	2020-08-20 15:30	17.1	8.7	1192	66	65.2	66
RSEM-R5B-W	2020-08-22 12:30	17.3		1551	61.5	58.7	61.5
RSEM-R5B-W	2020-08-24 10:30	14.1	8.6	1148	84.8	84.6	84.8
RSEM-R5B-W	2020-08-25 10:58	20.2	8.2	1238	18.6	18.5	18.6
RSEM-R5B-W	2020-09-14 12:00	10.5	8	1286	110	113	110
RSEM-R6E-EOP	2020-01-01 13:45	3.5	8.4	1113	3.7	3.7	3.7
RSEM-R6E-EOP	2020-01-02 10:55	4.9	8.2	1128	3.4	3.5	3.4
RSEM-R6E-EOP	2020-01-03 14:05	1.3	7.6	1125	4.4	4.4	4.4
RSEM-R6E-EOP	2020-01-04 15:30	1.3	8.1	1124	4	3.9	4
RSEM-R6E-EOP	2020-01-05 15:00	0.2	8.1	1126	5.1	5.1	5.1
RSEM-R6E-EOP	2020-01-06 13:40	1.4	8	1139	3.2	3.1	3.2
RSEM-R6E-EOP	2020-01-07 15:00	1.6	8.2	1126	4.8	4.8	4.8
RSEM-R6E-EOP	2020-01-08 14:45	1.4	8.2	1165	6.4	6.4	6.4
RSEM-R6E-EOP	2020-01-09 13:50	2.4	7.7	1143	4.6	4.6	4.6
RSEM-R6E-EOP	2020-01-10 11:50	3.3	7.8	1113	4.1	4.2	4.1
RSEM-R6E-EOP	2020-01-11 13:15	0.9	8.5	1247	3.6	3.6	3.6
RSEM-R6E-EOP	2020-01-12 14:30	2.3	8.1	1137	3	2.9	3
RSEM-R6E-EOP	2020-01-13 13:00	1.7	8.3	1211	3.1	3.1	3.1
RSEM-R6E-EOP	2020-01-14 13:05	1.4	8.4	1205	2.8	2.8	2.8
RSEM-R6E-EOP	2020-01-15 14:00	2.7	8.4	1113	2.4	2.4	2.4
RSEM-R6E-EOP	2020-01-16 15:20	1.4	8.3	1224	3	3	3
RSEM-R6E-EOP	2020-01-17 10:20	1.9	8.1	1174	2.8	2.7	2.8
RSEM-R6E-EOP	2020-01-18 13:15	1.9	8.4	1139	2.8	2.7	2.8
RSEM-R6E-EOP	2020-01-19 16:40	2.5	8.4	1165	2.4	2.4	2.4
RSEM-R6E-EOP	2020-01-20 10:15	2.7	8.4	1227	3.8	3.8	3.8

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6E-EOP	2020-01-21 15:00	2.5	7.9	1232	4.9	4.9	4.9
RSEM-R6E-EOP	2020-01-22 17:00	3.3	8.1	1242	5.5	5.5	5.5
RSEM-R6E-EOP	2020-01-23 17:00	1.5	8.2	1235	3.1	3.1	3.1
RSEM-R6E-EOP	2020-01-24 10:20	3.6	7.7	1254	4	3.9	4
RSEM-R6E-EOP	2020-01-25 11:00	3.6	8	1244	3.5	3.5	3.5
RSEM-R6E-EOP	2020-01-26 12:30	3.7	7.9	1256	3.2	3.2	3.2
RSEM-R6E-EOP	2020-01-27 16:30	10.4	8.1	840	3.6	3.6	3.6
RSEM-R6E-EOP	2020-01-28 14:05	0.9	8	1346	3	3	3
RSEM-R6E-EOP	2020-01-29 12:25	1.4	8.2	1360	2.6	2.6	2.6
RSEM-R6E-EOP	2020-01-30 14:15	1.9	8.2	1345	2.8	2.8	2.8
RSEM-R6E-EOP	2020-01-31 14:40	1.9	8	1293	2.7	2.7	2.7
RSEM-R6E-EOP	2020-02-01 12:30	1.4	8.2	1326	2.6	2.6	2.6
RSEM-R6E-EOP	2020-02-02 15:05	0.8	8.3	1300	2.6	2.7	2.6
RSEM-R6E-EOP	2020-02-03 13:10	1.4	8.3	1301	3.4	3.1	3.4
RSEM-R6E-EOP	2020-02-04 12:55	1	8.2	1286	3	2.9	3
RSEM-R6E-EOP	2020-02-05 14:15	0.9	8.1	1288	2.8	2.8	2.8
RSEM-R6E-EOP	2020-02-06 13:05	1.5	8	1291	2.9	2.9	2.9
RSEM-R6E-EOP	2020-02-07 11:15	1.3	8.2	1293	3.3	3.3	3.3
RSEM-R6E-EOP	2020-02-08 13:00	2.5	8.1	1150	2.7	2.6	2.7
RSEM-R6E-EOP	2020-02-09 14:30	4.8	8.1	1122	3.3	3.3	3.3
RSEM-R6E-EOP	2020-02-10 10:05	0.7	8.3	1254	2.4	2.4	2.4
RSEM-R6E-EOP	2020-02-11 13:15	3.5	7.7	1156	2.5	2.5	2.5
RSEM-R6E-EOP	2020-02-12 13:50	2.9	8.1	1198	2.9	2.8	2.9
RSEM-R6E-EOP	2020-02-22 14:35	2.8	8.2	1156	1.7	1.6	1.7
RSEM-R6E-EOP	2020-02-23 13:00	1.8	8.1	1270	2.4	2.4	2.4
RSEM-R6E-EOP	2020-02-24 10:30	1.3	8.4	1274	1.8	1.8	1.8
RSEM-R6E-EOP	2020-02-25 12:50	1.1	7.9	1287	2.2	2.2	2.2
RSEM-R6E-EOP	2020-02-26 12:15	0.9	8	1286	2.2	2.2	2.2
RSEM-R6E-EOP	2020-02-27 10:40	1.8	8.1	1272	3.7	3.7	3.7
RSEM-R6E-EOP	2020-02-28 11:10	2.7	8.1	1232	18.2	18.3	18.2
RSEM-R6E-EOP	2020-02-29 13:30	1.5	8.2	1134	14.8	14.9	14.8
RSEM-R6E-EOP	2020-03-01 11:50	1.4	8.3	1145	11.9	11.9	11.9
RSEM-R6E-EOP	2020-03-02 18:45	1.9	7.5	1075	19.1	19	19.1
RSEM-R6E-EOP	2020-03-03 12:40	2.5	8.2	972	15	14.9	15
RSEM-R6E-EOP	2020-03-04 14:30	4.6	7.7	951	11.2	11.1	11.2
RSEM-R6E-EOP	2020-03-05 13:45	3.9	7.8	914	7.2	7.2	7.2
RSEM-R6E-EOP	2020-03-10 12:45	3.9	8.1	862	11.2	11.3	11.2
RSEM-R6E-EOP	2020-03-11 14:25	1.7	8.2	972	15.3	15.4	15.3
RSEM-R6E-EOP	2020-03-12 12:00	0.5	8.4	948	10.5	10.4	10.5
RSEM-R6E-EOP	2020-03-13 11:30	0.7	8.4	962	8.6	8.7	8.6
RSEM-R6E-EOP	2020-03-16 13:45	1.4	8.2	954	7.6	7.6	7.6
RSEM-R6E-EOP	2020-03-17 13:15	2	8.1	982	6.5	6.7	6.5
RSEM-R6E-EOP	2020-03-18 12:50	2.1	8.3	1025	10	10	10
RSEM-R6E-EOP	2020-03-21 12:05	5.6	8.4	909	5.6	5.6	5.6
RSEM-R6E-EOP	2020-03-22 12:10	2	8.3	1030	9.4	9.4	9.4
RSEM-R6E-EOP	2020-03-23 11:05	2	8.5	1027	8.8	8.7	8.8
RSEM-R6E-EOP	2020-03-24 11:00	3	7.7	890	6.4	6.3	6.4
RSEM-R6E-EOP	2020-03-25 11:00	3.6	8	829	7	6.9	7
RSEM-R6E-EOP	2020-03-26 0:00	3.6	8	829	7	6.9	7
RSEM-R6E-EOP	2020-03-26 17:50	4.1	7.9	954	13.5	13.5	13.5
RSEM-R6E-EOP	2020-03-27 10:15	3.6	7.7	853	13.5	13.7	13.5
RSEM-R6E-EOP	2020-03-28 11:45	3.4	8.1	684	11.3	11.5	11.3
RSEM-R6E-EOP	2020-04-07 13:30	4.5	8.3	913	10.8	10.7	10.8
RSEM-R6E-EOP	2020-04-08 12:30	2.7	8.5	911	12.5	12.6	12.5
RSEM-R6E-EOP	2020-04-09 11:00	3.1	7.9	864	17.9	17.9	17.9
RSEM-R6E-EOP	2020-04-10 12:35	2.4	8	758	22.9	22.9	22.9
RSEM-R6E-EOP	2020-04-11 18:10	2.4	8.4	713	15.5	15.5	15.5
RSEM-R6E-EOP	2020-04-12 15:15	4.6	8.4	693	13.6	13.7	13.6
RSEM-R6E-EOP	2020-04-13 10:10	2.5	8.4	638	12.2	12.2	12.2
RSEM-R6E-EOP	2020-04-14 18:55	3.7	8.4	715	11.6	11.6	11.6
RSEM-R6E-EOP	2020-04-15 11:36	6.3	8.4	699	39	37.3	39
RSEM-R6E-EOP	2020-04-15 14:25	5.7	8.2	711	14.4	14.3	14.4
RSEM-R6E-EOP	2020-04-16 13:35	6.2	8.5	711	7.9	7.9	7.9
RSEM-R6E-EOP	2020-04-17 10:30	5.2	8.3	678	5.9	6	5.9
RSEM-R6E-EOP	2020-04-18 11:40	5.4	8.6	622	4.6	4.5	4.6
RSEM-R6E-EOP	2020-04-19 12:30	9.9	8.1	627	6.5	6.6	6.5
RSEM-R6E-EOP	2020-04-20 17:30	7.2	8.4	662	11.9	11.8	11.9
RSEM-R6E-EOP	2020-04-21 12:25	7.1	8.3	636	9.7	9.6	9.7
RSEM-R6E-EOP	2020-04-22 13:05	7.9	8.2	589	15.4	15.4	15.4
RSEM-R6E-EOP	2020-04-23 15:05	8.2	8.2	547	11.2	11.2	11.2
RSEM-R6E-EOP	2020-04-24 12:40	8.9	8.2	546	9.8	9.8	9.8
RSEM-R6E-EOP	2020-04-25 12:35	8.9	8.3	527	9.4	9.5	9.4
RSEM-R6E-EOP	2020-04-26 13:25	10.4	8.3	527	10.4	10.4	10.4
RSEM-R6E-EOP	2020-04-27 14:00	12.6	8.4	494	12.4	12.5	12.4
RSEM-R6E-EOP	2020-04-28 12:15	11.5	8.5	501	9.7	9.6	9.7
RSEM-R6E-EOP	2020-04-29 11:00	9.2	8.4	546	9	8.9	9
RSEM-R6E-EOP	2020-04-30 11:10	9.3	8.4	508	8.4	8.4	8.4
RSEM-R6E-EOP	2020-05-12 12:05	4.2	8.1	1290	5.4	5.4	5.4
RSEM-R6E-EOP	2020-05-22 12:50	11.6	8.5	792	2.8	2.9	2.8
RSEM-R6E-EOP	2020-05-23 14:10	14.9	8.2	986	2.4	2.4	2.4
RSEM-R6E-EOP	2020-05-24 12:50	17	8.2	982	1.7	1.6	1.7
RSEM-R6E-EOP	2020-05-26 15:00	14.9	8	1022	1.9	2.1	1.9
RSEM-R6E-EOP	2020-05-27 15:10	15.9	8.6	993	1.8	1.7	1.8
RSEM-R6E-EOP	2020-05-28 14:30	17.8	8.5	1028	1.7	1.5	1.7
RSEM-R6E-EOP	2020-05-29 11:40	18.7	8	1025	2.8	2.6	2.8
RSEM-R6E-EOP	2020-05-30 14:00	19.1	8.3	953	2.6	2.6	2.6
RSEM-R6E-EOP	2020-05-31 12:30	19.8	8.3	1010	3.3	3.1	3.3
RSEM-R6E-EOP	2020-06-01 14:45	19.5	8.4	1144	2	1.9	2
RSEM-R6E-EOP	2020-06-02 11:45	18.9	8.4	1099	2.9	2.9	2.9

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6E-EOP	2020-06-02 13:00	16.9	8.5	1103	2.3	2.3	2.3
RSEM-R6E-EOP	2020-06-03 13:00	16.9	8.5	1103	2.3	2.3	2.3
RSEM-R6E-EOP	2020-06-04 12:50	18.1	8.5	1113	1.2	1.2	1.2
RSEM-R6E-EOP	2020-06-05 16:30	20.3	8.6	1050	1.5	1.5	1.5
RSEM-R6E-EOP	2020-06-06 11:30	15.6	8.3	1006	2.3	2.3	2.3
RSEM-R6E-EOP	2020-06-07 12:10	16.6	8.6	995	1.5	1.6	1.5
RSEM-R6E-EOP	2020-06-08 15:40	15.3	8.4	983	13.8	13.8	13.8
RSEM-R6E-EOP	2020-06-09 15:20	7.6	8.4	1233	6.7	6.4	6.7
RSEM-R6E-EOP	2020-06-10 13:20	18.1	8.3	1197	2.6	2.6	2.6
RSEM-R6E-EOP	2020-06-11 13:30	22	8.3	1129	1.3	1.3	1.3
RSEM-R6E-EOP	2020-06-12 13:55	21	8.3	1082	1.1	1.2	1.1
RSEM-R6E-EOP	2020-06-13 14:35	21	8.4	1051	1	1	1
RSEM-R6E-EOP	2020-06-14 14:00	17.5	8.3	977	11.9	11.8	11.9
RSEM-R6E-EOP	2020-06-15 14:45	14.7	8.2	951	9.6	9.5	9.6
RSEM-R6E-EOP	2020-06-16 10:45	14.8	8.1	992	6.8	6.8	6.8
RSEM-R6E-EOP	2020-06-17 15:30	17.1	8.2	983	4.8	5	4.8
RSEM-R6E-EOP	2020-06-18 16:20	20.4	8.3	982	3.6	3.5	3.6
RSEM-R6E-EOP	2020-06-19 11:30	20.4	8.4	962	2.1	2.1	2.1
RSEM-R6E-EOP	2020-06-20 14:00	21	8.4	920	2.2	2.2	2.2
RSEM-R6E-EOP	2020-06-21 15:15	21.5	8.5	899	2.9	2.8	2.9
RSEM-R6E-EOP	2020-06-22 13:00	20.2	8.4	863	3.4	3.2	3.4
RSEM-R6E-EOP	2020-06-23 16:00	22	8.4	823	3.8	3.8	3.8
RSEM-R6E-EOP	2020-06-24 13:00	20.7	8.5	796	2.1	2.2	2.1
RSEM-R6E-EOP	2020-06-25 15:20	20.1	8.6	802	1.8	1.8	1.8
RSEM-R6E-EOP	2020-06-26 12:20	19.8	8.5	742	2	2	2
RSEM-R6E-EOP	2020-06-27 19:00	18.4	8.4	727	1.8	1.8	1.8
RSEM-R6E-EOP	2020-06-28 12:40	18.1	8.5	760	2.3	2.3	2.3
RSEM-R6E-EOP	2020-06-29 15:55	20.2	8.6	728	2.6	2.7	2.6
RSEM-R6E-EOP	2020-06-30 13:50	19.5	8.3	768	2.4	2.4	2.4
RSEM-R6E-EOP	2020-07-01 11:30	18.1	8.5	700	7.8	8	7.8
RSEM-R6E-EOP	2020-07-02 13:30	16.7	8.4	846	14.5	14.6	14.5
RSEM-R6E-EOP	2020-07-03 16:10	16.5	8.3	759	23.3	23.1	23.3
RSEM-R6E-EOP	2020-07-04 15:05	16.3	8.4	740	11.7	11.9	11.7
RSEM-R6E-EOP	2020-07-05 10:05	16	8.2	801	7.6	7.6	7.6
RSEM-R6E-EOP	2020-07-06 11:20	17.9	8.4	843	5	5.1	5
RSEM-R6E-EOP	2020-07-06 14:30	20.4	8.4	698	4.6	4.6	4.6
RSEM-R6E-EOP	2020-07-07 12:30	19.2	8.5	795	4.8	4.7	4.8
RSEM-R6E-EOP	2020-07-08 12:30	19.3	8.2	783	5.5	5.4	5.5
RSEM-R6E-EOP	2020-07-09 14:00	19.6	8.3	766	4.4	4.4	4.4
RSEM-R6E-EOP	2020-07-10 10:00	18.7	8.4	754	5.5	5.4	5.5
RSEM-R6E-EOP	2020-07-11 15:00	19.8	8.2	737	5.9	5.7	5.9
RSEM-R6E-EOP	2020-07-12 14:00	16.8	8.3	728	4.3	4.1	4.3
RSEM-R6E-EOP	2020-07-13 14:30	18.6	8.3	752	4.5	4.4	4.5
RSEM-R6E-EOP	2020-07-14 14:30	20.4	8.4	698	4.6	4.6	4.6
RSEM-R6E-EOP	2020-07-15 12:45	19.6	8.2	756	3.3	3.4	3.3
RSEM-R6E-EOP	2020-07-16 15:30	21.2	8.4	696	4.1	4.4	4.1
RSEM-R6E-EOP	2020-07-17 13:55	19.9	8.3	731	3.4	3.3	3.4
RSEM-R6E-EOP	2020-07-18 13:05	21.8	8.3	752	3.2	3.2	3.2
RSEM-R6E-EOP	2020-07-19 13:30	21.8	8.4	675	3.3	3.3	3.3
RSEM-R6E-EOP	2020-07-20 10:40	19.9	8.5	667	3.4	3.4	3.4
RSEM-R6E-EOP	2020-07-21 13:55	19.4	8.4	747	3.4	3.4	3.4
RSEM-R6E-EOP	2020-07-22 13:30	22.2	8.4	706	3.5	3.5	3.5
RSEM-R6E-EOP	2020-07-23 11:55	20.1	8.3	758	3.7	3.7	3.7
RSEM-R6E-EOP	2020-07-24 15:20	18.7	8.5	671	5.6	5.7	5.6
RSEM-R6E-EOP	2020-07-25 11:05	19.6	8.4	753	3.9	3.9	3.9
RSEM-R6E-EOP	2020-07-26 14:15	22.1	8.2	693	3.2	3.2	3.2
RSEM-R6E-EOP	2020-07-27 10:30	20.5	8.4	726	2.7	2.7	2.7
RSEM-R6E-EOP	2020-07-28 12:30	22.2	8.4	658	3.3	3.3	3.3
RSEM-R6E-EOP	2020-07-29 12:30	21.7	8.4	653	3	2.9	3
RSEM-R6E-EOP	2020-07-30 16:30	22.8	7.8	635	3.2	3.2	3.2
RSEM-R6E-EOP	2020-07-31 11:00	22.8	7.8	627	4	4.1	4
RSEM-R6E-EOP	2020-08-01 12:15	23.7	8.2	647	4.2	4	4.2
RSEM-R6E-EOP	2020-08-02 12:40	24.2	7.9	676	5.2	5.1	5.2
RSEM-R6E-EOP	2020-08-03 0:00	23.1	8.2	640	5	4.9	5
RSEM-R6E-EOP	2020-08-04 12:50	21.4	8.3	661	3.6	3.6	3.6
RSEM-R6E-EOP	2020-08-05 12:20	23.4	8.1	688	3	3	3
RSEM-R6E-EOP	2020-08-06 11:20	20.6	8.1	759	3.7	4	3.7
RSEM-R6E-EOP	2020-08-07 11:55	20.2	8.1	760	3.2	3.3	3.2
RSEM-R6E-EOP	2020-08-08 12:40	19.6	8.2	623	2.9	2.8	2.9
RSEM-R6E-EOP	2020-08-09 14:10	20.6	8.4	622	3	2.9	3
RSEM-R6E-EOP	2020-08-10 12:50	19.2	8.4	600	3.3	3.3	3.3
RSEM-R6E-EOP	2020-08-11 13:10	19.6	8.4	650	3	3	3
RSEM-R6E-EOP	2020-08-12 17:30	18.8	8.4	595	3.2	3.2	3.2
RSEM-R6E-EOP	2020-08-13 13:20	18.2	8.3	625	2.6	2.6	2.6
RSEM-R6E-EOP	2020-08-14 12:45	18.2	8.4	595	2.7	2.7	2.7
RSEM-R6E-EOP	2020-08-15 14:45	17.5	8.4	640	3.1	3.1	3.1
RSEM-R6E-EOP	2020-08-16 11:40	20.8	8.4	616	2.7	2.7	2.7
RSEM-R6E-EOP	2020-08-17 9:20	19.1	8.2	593	2.7	2.9	2.7
RSEM-R6E-EOP	2020-08-18 16:30	20.9	8.5	579	2.8	2.8	2.8
RSEM-R6E-EOP	2020-08-19 15:00	21.5	8.5	592	5.4	5.6	5.4
RSEM-R6E-EOP	2020-08-20 14:50	18.6	8.3	590	3.1	3.2	3.1
RSEM-R6E-EOP	2020-08-21 11:10	17.7	8.4	565	11.2	11.1	11.2
RSEM-R6E-EOP	2020-08-22 11:30	17.5	8.1	918	7.7	7.6	7.7
RSEM-R6E-EOP	2020-08-23 14:50	18.6	8.2	945	1.4	1.4	1.4
RSEM-R6E-EOP	2020-08-24 13:40	18.7	8.2	930	2.3	2.3	2.3
RSEM-R6E-EOP	2020-08-25 12:20	18.3	7.8	960	4.5	4.5	4.5
RSEM-R6E-EOP	2020-08-26 13:50	18.2	8.2	898	4.3	4.3	4.3
RSEM-R6E-EOP	2020-08-27 12:40	18.4	8.1	868	4.4	4.4	4.4
RSEM-R6E-EOP	2020-08-28 13:45	17.4	8.5	717	1.5	1.5	1.5

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6E-EOP	2020-08-29 10:35	15.5	8.1	743	1.2	1.1	1.2
RSEM-R6E-EOP	2020-08-30 11:50	15.8	8.2	690	1.3	1.3	1.3
RSEM-R6E-EOP	2020-08-31 17:00	15.4	8.4	665	1.7	1.6	1.7
RSEM-R6E-EOP	2020-09-01 14:10	16.6	8.5	736	1.2	1.1	1.2
RSEM-R6E-EOP	2020-09-02 13:45	18.3	8.3	659	2.9	2.8	2.9
RSEM-R6E-EOP	2020-09-03 14:20	17.1	8.6	712	1.4	1.3	1.4
RSEM-R6E-EOP	2020-09-04 11:50	16.1	8.4	642	1.6	1.7	1.6
RSEM-R6E-EOP	2020-09-05 12:20	17.3	8.4	613	1.5	1.5	1.5
RSEM-R6E-EOP	2020-09-06 10:50	16.6	8.3	640	1.5	1.5	1.5
RSEM-R6E-EOP	2020-09-07 10:15	14.4	8.3	605	3	3	3
RSEM-R6E-EOP	2020-09-08 10:45	16.3	8.7	608	2.2	2.2	2.2
RSEM-R6E-EOP	2020-09-08 14:30	18.2	8.4	717	2.7	2.7	2.7
RSEM-R6E-EOP	2020-09-09 14:30	18.2	8.4	717	2.7	2.7	2.7
RSEM-R6E-EOP	2020-09-10 11:40	17.8	8.3	718	13.6	13.6	13.6
RSEM-R6E-EOP	2020-09-11 11:30	16.7	8.4	707	4.1	4.1	4.1
RSEM-R6E-EOP	2020-09-12 14:10	15.6	8.4	708	3.3	3.3	3.3
RSEM-R6E-EOP	2020-09-13 12:50	14	8.4	710	6.3	6.3	6.3
RSEM-R6E-EOP	2020-09-14 12:30	12.5	8.2	716	6.9	6.9	6.9
RSEM-R6E-EOP	2020-09-15 14:40	13.7	8.1	979	5.8	5.8	5.8
RSEM-R6E-EOP	2020-09-16 13:20	13.3	8	884	3.5	3.5	3.5
RSEM-R6E-EOP	2020-09-17 12:50	14.5	8.2	885	4.3	4.3	4.3
RSEM-R6E-EOP	2020-09-18 9:40	13.8	8.2	902	4.1	4.1	4.1
RSEM-R6E-EOP	2020-09-19 12:30	13.9	8	819	3	3	3
RSEM-R6E-EOP	2020-09-20 11:30	14.4	8.3	822	2.8	2.8	2.8
RSEM-R6E-EOP	2020-09-21 12:30	14.9	8.2	834	2.6	2.6	2.6
RSEM-R6E-EOP	2020-09-22 13:45	14.5	8.4	798	2.6	2.6	2.6
RSEM-R6E-EOP	2020-09-23 15:20	14.1	8	848	2.8	2.8	2.8
RSEM-R6E-EOP	2020-09-24 13:50	14.9	8.4	770	2.4	2.3	2.4
RSEM-R6E-EOP	2020-09-25 13:10	13.4	8.8	777	2.3	2.3	2.3
RSEM-R6E-EOP	2020-09-26 13:00	13.3	8.3	758	3	3	3
RSEM-R6E-EOP	2020-09-27 16:00	11.9	8.5	747	2.4	2.4	2.4
RSEM-R6E-EOP	2020-09-28 9:30	12.6	8.4	803	2.3	2.3	2.3
RSEM-R6E-EOP	2020-09-29 16:00	12.6	8.7	720	2.7	2.6	2.7
RSEM-R6E-EOP	2020-09-30 13:00	11.6	8.4	727	2.3	2.3	2.3
RSEM-R6E-EOP	2020-10-01 11:55	12.3	8.2	713	2.7	2.7	2.7
RSEM-R6E-EOP	2020-10-02 11:20	12.4	8.4	712	2.7	2.6	2.7
RSEM-R6E-EOP	2020-10-03 16:00	15.3	8.1	697	3.3	3.4	3.3
RSEM-R6E-EOP	2020-10-04 16:00	13.6	8.4	691	3.1	3.1	3.1
RSEM-R6E-EOP	2020-10-05 17:00	13.8	8.1	684	4	3.9	4
RSEM-R6E-EOP	2020-10-06 14:50	13.2	8.3	704	3.2	3.1	3.2
RSEM-R6E-EOP	2020-10-07 14:10	10.3	8	692	3.6	3.7	3.6
RSEM-R6E-EOP	2020-10-08 11:10	11.8	7.9	764	3	3	3
RSEM-R6E-EOP	2020-10-09 11:10	11.7	8	778	3.6	3.7	3.6
RSEM-R6E-EOP	2020-10-10 11:50	10.9	8	940	3.6	3.6	3.6
RSEM-R6E-EOP	2020-10-11 11:30	10.9	8.1	1680	5.2	5.1	5.2
RSEM-R6E-EOP	2020-10-12 13:30	10.1	8	1941	4.5	4.5	4.5
RSEM-R6E-EOP	2020-10-13 13:50	10.9	7.6	1176	12.4	12.4	12.4
RSEM-R6E-EOP	2020-10-14 14:50	10.9	8.2	1189	6.7	6.6	6.7
RSEM-R6E-EOP	2020-10-15 11:45	10.8	7.9	1235	11.2	11.2	11.2
RSEM-R6E-EOP	2020-10-16 11:50	8.2	7.8	1060	5.9	5.9	5.9
RSEM-R6E-EOP	2020-10-17 10:20	6.5	8.1	1051	8.2	8	8.2
RSEM-R6E-EOP	2020-10-18 12:45	5	8.4	1294	6.1	6.2	6.1
RSEM-R6E-EOP	2020-10-19 10:10	5	8.1	1255	7.7	7.7	7.7
RSEM-R6E-EOP	2020-10-20 14:40	5.5	8	1161	8.5	8.5	8.5
RSEM-R6E-EOP	2020-10-21 16:00	4.4	8.1	1096	7.1	7.1	7.1
RSEM-R6E-EOP	2020-10-22 12:20	5.7	8.1	1091	6.1	6.1	6.1
RSEM-R6E-EOP	2020-10-23 10:20	5.7	8.3	1129	5.2	5.2	5.2
RSEM-R6E-EOP	2020-10-24 13:40	6.1	8.2	1076	5.6	5.6	5.6
RSEM-R6E-EOP	2020-10-24 15:20	5.8	8	1045	5.8	6	5.8
RSEM-R6E-EOP	2020-10-25 13:40	6.1	8.2	1070	5.6	5.6	5.6
RSEM-R6E-EOP	2020-10-26 14:25	4.9	8	1019	3.2	3.2	3.2
RSEM-R6E-EOP	2020-10-27 12:30	6.5	8	1025	3.8	3.9	3.8
RSEM-R6E-EOP	2020-10-28 14:10	8.1	8	1051	6	6	6
RSEM-R6E-EOP	2020-10-29 14:15	4.4	8	1018	6.2	6.2	6.2
RSEM-R6E-EOP	2020-10-30 12:00	6	8	1008	5.6	5.7	5.6
RSEM-R6E-EOP	2020-10-31 14:20	4.3	8.2	958	3.7	3.7	3.7
RSEM-R6E-EOP	2020-11-01 13:10	7.7	8.1	979	6	6.1	6
RSEM-R6E-EOP	2020-11-02 13:40	6.8	7.9	1121	14.9	14.7	14.9
RSEM-R6E-EOP	2020-11-03 14:10	5.3	7.6	1183	13.2	13.1	13.2
RSEM-R6E-EOP	2020-11-04 14:25	2.5	8	1354	9	9	9
RSEM-R6E-EOP	2020-11-05 13:20	2.9	8	1378	12.3	12.3	12.3
RSEM-R6E-EOP	2020-11-06 13:10	1.7	8.3	1464	11.6	11.6	11.6
RSEM-R6E-EOP	2020-11-07 13:10	3.7	8	1409	8.6	8.6	8.6
RSEM-R6E-EOP	2020-11-08 10:30	3.4	8.3	1396	7.9	7.8	7.9
RSEM-R6E-EOP	2020-11-09 10:30	4.2	8.1	1344	8.2	8.2	8.2
RSEM-R6E-EOP	2020-11-10 13:30	4.9	8.4	1403	14.9	15	14.9
RSEM-R6E-EOP	2020-11-11 12:50	3.8	7.8	1299	7.6	7.6	7.6
RSEM-R6E-EOP	2020-11-12 10:35	3.6	8.2	1299	5.5	5.5	5.5
RSEM-R6E-EOP	2020-11-13 9:40	3.4	8	1293	5	5	5
RSEM-R6E-EOP	2020-11-15 12:30	3.9	8.1	1269	5	5	5
RSEM-R6E-EOP	2020-11-16 10:20	4.6	8.1	1235	5	5	5
RSEM-R6E-EOP	2020-11-17 12:45	2.8	8	1206	3.9	3.9	3.9
RSEM-R6E-EOP	2020-11-18 16:00	2.6	8.2	1191	5.9	6	5.9
RSEM-R6E-EOP	2020-11-19 13:30	4.1	8.2	1189	4.4	4.4	4.4
RSEM-R6E-EOP	2020-11-20 11:30	2.6	8.3	1163	3.8	3.8	3.8
RSEM-R6E-EOP	2020-11-21 13:30	3.1	7.9	1092	8.4	8.3	8.4
RSEM-R6E-EOP	2020-11-22 13:45	4.8	8.3	1118	6.9	6.7	6.9
RSEM-R6E-EOP	2020-11-23 13:30	4.8	7.9	1057	5.2	5.2	5.2
RSEM-R6E-EOP	2020-11-24 13:45	4.2	7.9	1045	1.9	1.9	1.9

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6E-EOP	2020-11-25 14:00	4.2	8.4	1057	4.3	4.3	4.3
RSEM-R6E-EOP	2020-11-26 11:40	5.4	8.4	1044	2.4	2.5	2.4
RSEM-R6E-EOP	2020-11-27 11:20	6.2	8.4	1120	3.3	3.3	3.3
RSEM-R6E-EOP	2020-11-28 12:50	2.3	8.5	1014	3.5	3.5	3.5
RSEM-R6E-EOP	2020-11-29 12:35	5.1	8.4	978	3.5	3.5	3.5
RSEM-R6E-EOP	2020-11-30 14:00	5.8	8.3	982	3.2	3.3	3.2
RSEM-R6E-EOP	2020-12-01 13:45	5.7	8.2	952	3.6	3.5	3.6
RSEM-R6E-EOP	2020-12-02 13:00	5.1	8.3	955	4.1	4.1	4.1
RSEM-R6E-EOP	2020-12-03 12:40	4.3	8.2	948	8.2	8.3	8.2
RSEM-R6E-EOP	2020-12-04 13:20	5.8	8.4	964	3.2	3.2	3.2
RSEM-R6E-EOP	2020-12-05 13:20	4.2	8	920	4.1	4.1	4.1
RSEM-R6E-EOP	2020-12-06 12:50	5.1	8.3	915	3.6	3.6	3.6
RSEM-R6E-EOP	2020-12-07 10:05	5.5	7.8	980	5.7	5.6	5.7
RSEM-R6E-EOP	2020-12-08 15:10	4	8.6	993	6.4	6.6	6.4
RSEM-R6E-EOP	2020-12-09 15:30	5.1	7.7	1031	6.6	6.6	6.6
RSEM-R6E-EOP	2020-12-10 14:30	3.7	7.7	1032	4.6	4.6	4.6
RSEM-R6E-EOP	2020-12-11 11:40	3.2	7.7	1032	8.3	8.4	8.3
RSEM-R6E-EOP	2020-12-12 16:50	1.6	8.2	1025	3	3	3
RSEM-R6E-EOP	2020-12-13 15:10	0.5	7.7	1061	2.9	2.9	2.9
RSEM-R6E-EOP	2020-12-15 15:10	3.8	7.8	1030	2.4	2.4	2.4
RSEM-R6E-EOP	2020-12-16 14:10	1.9	8.4	1045	2.2	2.2	2.2
RSEM-R6E-EOP	2020-12-17 14:30	2.6	8.2	1032	2.7	2.7	2.7
RSEM-R6E-EOP	2020-12-18 13:25	2.8	8.2	1050	2.5	2.5	2.5
RSEM-R6E-EOP	2020-12-19 12:50	2.6	8	790	3.2	3.2	3.2
RSEM-R6E-EOP	2020-12-20 12:45	4.6	8.1	1040	3.7	3.7	3.7
RSEM-R6E-EOP	2020-12-21 10:40	3.3	8.1	1115	3.1	3.2	3.1
RSEM-R6E-EOP	2020-12-22 11:30	3.4	8.3	1036	3.6	3.7	3.6
RSEM-R6E-EOP	2020-12-23 13:00	4	8.3	1037	3.3	3.3	3.3
RSEM-R6E-EOP	2020-12-24 9:30	4.3	8.3	1015	3.4	3.4	3.4
RSEM-R6E-EOP	2020-12-25 15:00	3.5	8.3	1007	3	3	3
RSEM-R6E-EOP	2020-12-26 16:00	2.3	8	961	3.5	3.5	3.5
RSEM-R6E-EOP	2020-12-27 16:10	2.4	7.8	972	3.4	3.5	3.4
RSEM-R6E-EOP	2020-12-28 9:30	3.8	7.7	983	3.7	3.7	3.7
RSEM-R6E-EOP	2020-12-29 14:05	3.8	7.6	1053	3.8	3.8	3.8
RSEM-R6E-EOP	2020-12-30 15:08	0.4	7.2	988	4.1	4.1	4.1
RSEM-R6E-EOP	2020-12-31 14:55	1	7.2	985	4.2	4.2	4.2
RSEM-R6-EP-US-SD	2020-01-01 10:50	7	9	1536	OR		
RSEM-R6-EP-US-SD	2020-01-02 13:56	5.4	8.9	1285	63.3	62.9	63.3
RSEM-R6-EP-US-SD	2020-01-03 11:05	3.2	7.7	1062	15.3	15.2	15.3
RSEM-R6-EP-US-SD	2020-01-04 13:30	2.4	7.9	1276	35.8	35.7	35.8
RSEM-R6-EP-US-SD	2020-01-09 11:05	2.5	7.5	746	10.5	10.6	10.5
RSEM-R6-EP-US-SD	2020-01-21 12:50	4	7.2	1243	45.1	44.1	45.1
RSEM-R6-EP-US-SD	2020-02-18 10:54	1.8	7.6	1254	40.3	40.2	40.3
RSEM-R6-EP-US-SD	2020-02-27 14:50	3.9	8.7	526	657	657	657
RSEM-R6-EP-US-SD	2020-02-28 13:15	2.3	8.6	648	82.4	81.9	82.4
RSEM-R6-EP-US-SD	2020-03-02 19:05	1.9	9.1	518	78.3	78.2	78.3
RSEM-R6-EP-US-SD	2020-03-03 14:15	2.1	7.9	542	245	245	245
RSEM-R6-EP-US-SD	2020-03-04 14:50	2.3	8.3	489	625	627	625
RSEM-R6-EP-US-SD	2020-03-05 14:10	2.6	8.3	821	75.8	75	75.8
RSEM-R6-EP-US-SD	2020-03-10 15:15	2.7	8.1	540	2062	2057	2062
RSEM-R6-EP-US-SD	2020-03-11 11:05	4.1	7.7	1084	34.8	34.9	34.8
RSEM-R6-EP-US-SD	2020-03-27 15:00	3.4	8.4	806	56.1	56	56.1
RSEM-R6-EP-US-SD	2020-04-02 12:10	0.8	8.5	1836	22.1	22.1	22.1
RSEM-R6-EP-US-SD	2020-04-04 15:10	2.4	8.4	1291	129	127	129
RSEM-R6-EP-US-SD	2020-04-07 14:55	1	8.6	792	104	102	104
RSEM-R6-EP-US-SD	2020-04-08 14:40	3.8	8.5	492	604	605	604
RSEM-R6-EP-US-SD	2020-04-09 14:52	1.4	8.7	465	OR		
RSEM-R6-EP-US-SD	2020-04-10 9:25	2.9	8.2	736	65.7	64.7	65.7
RSEM-R6-EP-US-SD	2020-04-14 17:02	4.6	8.7	586	63.3	61	63.3
RSEM-R6-EP-US-SD	2020-04-16 10:16	4.1	8.6	852	77.1	74.2	77.1
RSEM-R6-EP-US-SD	2020-04-19 13:15	9.4	8.4	670	25	19	25
RSEM-R6-EP-US-SD	2020-04-20 17:45	11.1	8.5	572	63.7	63.5	63.7
RSEM-R6-EP-US-SD	2020-04-21 9:35	7.8	8.5	646	48.6	47.7	48.6
RSEM-R6-EP-US-SD	2020-04-22 13:20	12.6	8.3	688	44.1	43.6	44.1
RSEM-R6-EP-US-SD	2020-04-23 12:50	9.4	8.4	833	18.4	18.3	18.4
RSEM-R6-EP-US-SD	2020-04-24 9:44	10.4	8.3	851	18.7	18	18.7
RSEM-R6-EP-US-SD	2020-04-25 9:34	9.5	7.8	685	27.4	27.8	27.4
RSEM-R6-EP-US-SD	2020-04-26 10:15	10.8	8.3	988	30.2	28.3	30.2
RSEM-R6-EP-US-SD	2020-04-27 11:45	12.3	8.6	864	16.9	16.7	16.9
RSEM-R6-EP-US-SD	2020-04-28 10:36	13.1	8.5	831	7.8	8.1	7.8
RSEM-R6-EP-US-SD	2020-04-30 12:30	11.7	8.4	792	2.2	2.1	2.2
RSEM-R6-EP-US-SD	2020-05-17 9:12	9.4	8.4	884	28.6	28.2	28.6
RSEM-R6-EP-US-SD	2020-05-18 10:12	10.1	8.3	739	136	132	136
RSEM-R6-EP-US-SD	2020-05-19 11:00	15.8	8.2	940	17.3	17	17.3
RSEM-R6-EP-US-SD	2020-05-20 10:47	19	8.3	891	2.2	2.3	2.2
RSEM-R6-EP-US-SD	2020-05-21 12:20	8.9	8.2	1606	OR		
RSEM-R6-EP-US-SD	2020-05-22 12:55	8.5	8.6	1306	75	74	75
RSEM-R6-EP-US-SD	2020-05-24 10:35	17.7	8.2	1048	8.7	8.5	8.7
RSEM-R6-EP-US-SD	2020-05-27 15:40	18.5	8.6	930	2.2	2.1	2.2
RSEM-R6-EP-US-SD	2020-05-29 14:40	21	8.4	1879	1.2	1.1	1.2
RSEM-R6-EP-US-SD	2020-05-31 15:30	20.3	8.4	916	3.2	3.2	3.2
RSEM-R6-EP-US-SD	2020-06-01 16:00	19.2	8.4	960	2.4	2.3	2.4
RSEM-R6-EP-US-SD	2020-06-02 12:20	19.5	8.4	955	3	2.9	3
RSEM-R6-EP-US-SD	2020-06-02 15:15	19.6	8.4	937	1.2	1.2	1.2
RSEM-R6-EP-US-SD	2020-06-03 15:15	19.6	8.4	937	1.2	1.2	1.2
RSEM-R6-EP-US-SD	2020-06-04 10:00	17.2	8.4	939	4.2	4.1	4.2
RSEM-R6-EP-US-SD	2020-06-05 13:32	22.6	8.4	906	4.5	4.6	4.5
RSEM-R6-EP-US-SD	2020-06-06 9:18	12.7	8.5	941	9.6	9.7	9.6
RSEM-R6-EP-US-SD	2020-06-07 8:50	12.1	8.6	1094	87	85	87

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EP-US-SD	2020-06-08 9:52	14.1	8.2	1188	51.3	51.1	51.3
RSEM-R6-EP-US-SD	2020-06-09 16:02	21.1	8.4	1173	43.5	42.5	43.5
RSEM-R6-EP-US-SD	2020-06-12 11:25	17.6	8.3	997	35.6	35.7	35.6
RSEM-R6-EP-US-SD	2020-06-13 10:45	20.3	8.3	976	29	28.2	29
RSEM-R6-EP-US-SD	2020-06-14 14:45	13.3	8.2	799	127	127	127
RSEM-R6-EP-US-SD	2020-06-15 15:20	13.1	8	1691	OR		
RSEM-R6-EP-US-SD	2020-06-18 16:00	21.2	8.4	703	10.2	10.3	10.2
RSEM-R6-EP-US-SD	2020-06-21 15:45	19.8	8.5	706	5.3	5.2	5.3
RSEM-R6-EP-US-SD	2020-06-24 10:25	19.1	8.4	893	4.3	4.3	4.3
RSEM-R6-EP-US-SD	2020-06-25 10:40	17	8.4	755	2.6	2.7	2.6
RSEM-R6-EP-US-SD	2020-06-28 13:05	16.7	8.6	796	7.4	7.7	7.4
RSEM-R6-EP-US-SD	2020-06-30 14:30	18.3	8.5	641	7.3	6.8	7.3
RSEM-R6-EP-US-SD	2020-07-01 14:20	14.4	8.3	1127	OR		
RSEM-R6-EP-US-SD	2020-07-04 14:38	16.9	8.4	740	60	59.1	60
RSEM-R6-EP-US-SD	2020-07-06 11:00	17.4	8.4	680	5.8	6	5.8
RSEM-R6-EP-US-SD	2020-07-07 12:40	20.4	8.5	976	18.4	18.6	18.4
RSEM-R6-EP-US-SD	2020-07-09 14:30	10.1	8.4	850	8	8	8
RSEM-R6-EP-US-SD	2020-07-12 14:30	16.4	8.4	722	5.5	5.5	5.5
RSEM-R6-EP-US-SD	2020-07-13 16:00	17.9	8.4	671	7.4	7	7.4
RSEM-R6-EP-US-SD	2020-07-14 11:00	17.4	8.4	680	5.8	6	5.8
RSEM-R6-EP-US-SD	2020-07-15 10:10	14.9	8.4	761	3.9	4	3.9
RSEM-R6-EP-US-SD	2020-07-16 12:25	19.2	8.4	716	6.8	6.6	6.8
RSEM-R6-EP-US-SD	2020-07-17 11:25	18.5	8.4	867	4.5	4.3	4.5
RSEM-R6-EP-US-SD	2020-07-19 11:05	17.6	8.4	756	2.5	2.5	2.5
RSEM-R6-EP-US-SD	2020-07-20 11:42	20	8.5	769	3.8	4	3.8
RSEM-R6-EP-US-SD	2020-07-21 14:00	15.6	8.5	687	22.2	21.2	22.2
RSEM-R6-EP-US-SD	2020-07-23 12:40	21.4	8.4	834	9.8	9.8	9.8
RSEM-R6-EP-US-SD	2020-07-25 13:10	19.3	8.4	746	3.4	3.4	3.4
RSEM-R6-EP-US-SD	2020-07-26 11:50	21	8.4	807	3	3	3
RSEM-R6-EP-US-SD	2020-07-28 16:45	19.2	8.4	643	4.9	4.9	4.9
RSEM-R6-EP-US-SD	2020-08-01 12:40	22.7	8.3	667	4.5	4.4	4.5
RSEM-R6-EP-US-SD	2020-08-03 12:30	20.5	8.2	639	6.9	6.8	6.9
RSEM-R6-EP-US-SD	2020-08-04 10:15	17.3	8.4	630	4.5	4.5	4.5
RSEM-R6-EP-US-SD	2020-08-05 9:20	17	8.4	650	5.1	5.1	5.1
RSEM-R6-EP-US-SD	2020-08-07 9:25	15.4	8.3	661	3.6	3.6	3.6
RSEM-R6-EP-US-SD	2020-08-09 11:25	18.4	8.3	822	2.9	2.9	2.9
RSEM-R6-EP-US-SD	2020-08-11 9:50	15.5	8.3	833	2.8	2.8	2.8
RSEM-R6-EP-US-SD	2020-08-13 10:30	16.8	8.3	885	3.7	3.6	3.7
RSEM-R6-EP-US-SD	2020-08-15 11:20	15.9	8.1	810	2.9	2.9	2.9
RSEM-R6-EP-US-SD	2020-08-18 17:10	20.4	8.2	830	1.6	1.6	1.6
RSEM-R6-EP-US-SD	2020-08-21 14:40	17.2	8.3	758	3.8	3.7	3.8
RSEM-R6-EP-US-SD	2020-08-22 9:20	15.7	8.4	897	10.9	10.9	10.9
RSEM-R6-EP-US-SD	2020-08-24 15:30	18.7	8.3	810	2	1.9	2
RSEM-R6-EP-US-SD	2020-08-25 9:40	16	7.9	894	6.8	6.7	6.8
RSEM-R6-EP-US-SD	2020-08-26 11:22	16.2	8.3	798	6.3	6.2	6.3
RSEM-R6-EP-US-SD	2020-08-28 11:20	14.8	8.4	708	1.8	1.8	1.8
RSEM-R6-EP-US-SD	2020-08-30 12:10	17.3	8.2	674	2.9	2.8	2.9
RSEM-R6-EP-US-SD	2020-09-02 14:15	20	8.1	653	3.8	3.7	3.8
RSEM-R6-EP-US-SD	2020-09-04 12:15	16.5	8.6	640	5.8	5.8	5.8
RSEM-R6-EP-US-SD	2020-09-06 11:30	13.9	8.3	661	1.4	1.4	1.4
RSEM-R6-EP-US-SD	2020-09-08 14:45	20.9	8.3	767	1.4	1.5	1.4
RSEM-R6-EP-US-SD	2020-09-09 14:45	20.9	8.3	767	1.4	1.5	1.4
RSEM-R6-EP-US-SD	2020-09-13 17:00	11.7	8.1	842	3.5	3.5	3.5
RSEM-R6-EP-US-SD	2020-09-14 13:00	10.4	8.4	647	54.1	53.8	54.1
RSEM-R6-EP-US-SD	2020-09-15 12:00	13.7	8.3	856	8.5	8.3	8.5
RSEM-R6-EP-US-SD	2020-09-16 16:00	16	8.4	959	3.8	3.8	3.8
RSEM-R6-EP-US-SD	2020-09-17 10:50	13.7	8.2	776	11.6	11.6	11.6
RSEM-R6-EP-US-SD	2020-09-18 10:20	12.7	8.5	734	12.9	12.8	12.9
RSEM-R6-EP-US-SD	2020-09-20 10:35	13.8	8.1	887	4	4	4
RSEM-R6-EP-US-SD	2020-09-21 9:40	13.4	8.2	944	4	4	4
RSEM-R6-EP-US-SD	2020-09-22 11:20	12.7	8.8	867	2.8	2.7	2.8
RSEM-R6-EP-US-SD	2020-09-24 11:10	13.4	8.3	895	12.3	12.2	12.3
RSEM-R6-EP-US-SD	2020-09-26 10:50	12.5	8.2	881	2.4	2.4	2.4
RSEM-R6-EP-US-SD	2020-09-27 13:40	12.1	8.5	838	2.6	2.6	2.6
RSEM-R6-EP-US-SD	2020-09-29 15:50	13.8	8.3	971	2.9	2.8	2.9
RSEM-R6-EP-US-SD	2020-09-30 13:45	13.4	8.5	833	3.7	3.5	3.7
RSEM-R6-EP-US-SD	2020-10-03 15:20	17.4	8.5	804	3.7	3.7	3.7
RSEM-R6-EP-US-SD	2020-10-05 15:20	14.5	8.2	822	2.2	2.4	2.2
RSEM-R6-EP-US-SD	2020-10-08 11:50	11.1	8.2	967	34.5	34.2	34.5
RSEM-R6-EP-US-SD	2020-10-09 11:42	8.8	8.3	901	5.6	5.6	5.6
RSEM-R6-EP-US-SD	2020-10-10 11:25	9.2	8.3	943	6.9	6.9	6.9
RSEM-R6-EP-US-SD	2020-10-11 11:05	10	8.1	1059	21.2	21.4	21.2
RSEM-R6-EP-US-SD	2020-10-12 14:05	9.6	8.2	966	6.9	7	6.9
RSEM-R6-EP-US-SD	2020-10-13 11:15	7.6	8.4	979	7.9	8	7.9
RSEM-R6-EP-US-SD	2020-10-14 14:05	9.2	8.2	964	14.4	14.6	14.4
RSEM-R6-EP-US-SD	2020-10-16 13:50	7.7	8.4	1039	4.1	4	4.1
RSEM-R6-EP-US-SD	2020-10-18 13:30	3.1	8.8	719	20.2	20.1	20.2
RSEM-R6-EP-US-SD	2020-10-20 16:50	4.9	8.2	936	7.2	7.2	7.2
RSEM-R6-EP-US-SD	2020-10-21 15:15	3.7	8.4	944	4	4	4
RSEM-R6-EP-US-SD	2020-10-22 12:20	4	8.1	920	4.3	4.3	4.3
RSEM-R6-EP-US-SD	2020-10-24 15:40	2.3	8	914	1.9	1.9	1.9
RSEM-R6-EP-US-SD	2020-10-25 15:15	4.5	8.4	932	5.6	5.5	5.6
RSEM-R6-EP-US-SD	2020-10-26 15:00	3.3	8.1	936	7.2	7.1	7.2
RSEM-R6-EP-US-SD	2020-10-28 14:40	5	8	983	8.3	8.2	8.3
RSEM-R6-EP-US-SD	2020-10-30 15:00	4.4	8	987	7	7.1	7
RSEM-R6-EP-US-SD	2020-11-01 13:34	6	8	1532	34	33	34
RSEM-R6-EP-US-SD	2020-11-03 11:35	4.1	8	1086	15.9	15.7	15.9
RSEM-R6-EP-US-SD	2020-11-04 12:15	1.4	8.5	939	20.1	20.1	20.1
RSEM-R6-EP-US-SD	2020-11-05 11:00	3.1	8.4	927	13	13	13

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EP-US-SD	2020-11-06 12:40	2.9	8	918	12.8	12.8	12.8
RSEM-R6-EP-US-SD	2020-11-07 13:50	2.4	8.5	884	16.5	16.6	16.5
RSEM-R6-EP-US-SD	2020-11-08 11:15	0.5	8.2	889	13.9	14.1	13.9
RSEM-R6-EP-US-SD	2020-11-09 10:55	2.9	8.6	792	18.1	18.1	18.1
RSEM-R6-EP-US-SD	2020-11-10 11:10	0.4	8.8	981	9.4	9.4	9.4
RSEM-R6-EP-US-SD	2020-11-11 10:52	1.1	8.3	959	47.3	47.2	47.3
RSEM-R6-EP-US-SD	2020-11-12 10:07	2.5	8.2	949	17.5	17.5	17.5
RSEM-R6-EP-US-SD	2020-11-13 10:17	1.6	8.1	839	12.9	12.7	12.9
RSEM-R6-EP-US-SD	2020-11-14 10:25	2.4	8.2	972	47.8	47.6	47.8
RSEM-R6-EP-US-SD	2020-11-15 10:30	1.2	8.5	998	28.7	28.7	28.7
RSEM-R6-EP-US-SD	2020-11-16 10:55	1	8.1	989	9.5	9.6	9.5
RSEM-R6-EP-US-SD	2020-11-17 14:30	0.7	7.9	993	4.9	4.9	4.9
RSEM-R6-EP-US-SD	2020-11-19 14:45	2	8.3	991	5.6	5.6	5.6
RSEM-R6-EP-US-SD	2020-11-22 14:30	2.2	7.8	931	9.4	9.4	9.4
RSEM-R6-EP-US-SD	2020-11-24 11:25	4	7.9	737	43	42.2	43
RSEM-R6-EP-US-SD	2020-11-25 12:00	1.3	8.6	866	22.6	22.3	22.6
RSEM-R6-EP-US-SD	2020-11-26 12:16	2.7	8.4	770	39	38	39
RSEM-R6-EP-US-SD	2020-11-28 10:55	1.4	8.6	688	38.2	38.2	38.2
RSEM-R6-EP-US-SD	2020-11-29 11:05	2.7	8.5	903	28.6	28.6	28.6
RSEM-R6-EP-US-SD	2020-11-30 12:00	2.4	8.4	976	37.3	36.9	37.3
RSEM-R6-EP-US-SD	2020-12-01 11:25	3.4	8.3	859	58.2	57.9	58.2
RSEM-R6-EP-US-SD	2020-12-02 10:55	2.5	8.4	942	13.6	13.6	13.6
RSEM-R6-EP-US-SD	2020-12-03 11:00	0.5	8.5	954	12.4	12.4	12.4
RSEM-R6-EP-US-SD	2020-12-04 11:25	2.8	8.6	920	10.1	10.1	10.1
RSEM-R6-EP-US-SD	2020-12-05 11:30	3.3	8	942	14.8	14.6	14.8
RSEM-R6-EP-US-SD	2020-12-06 10:02	4.2	7.5	948	9.3	9.2	9.3
RSEM-R6-EP-US-SD	2020-12-07 10:35	3.1	8.1	1247	24.7	24.6	24.7
RSEM-R6-EP-US-SD	2020-12-08 15:40	1.5	9.5	3034	20.5	20.4	20.5
RSEM-R6-EP-US-SD	2020-12-10 15:00	0.2	8	1137	15.8	15.7	15.8
RSEM-R6-EP-US-SD	2020-12-12 15:00	1.9	8	1125	11.6	11.6	11.6
RSEM-R6-EP-US-SD	2020-12-15 11:55	1.9	7.5	593	23.3	23.3	23.3
RSEM-R6-EP-US-SD	2020-12-16 11:58	0.4	8	591	18.5	18.4	18.5
RSEM-R6-EP-US-SD	2020-12-17 12:00	0.1	8.2	609	13.8	13.8	13.8
RSEM-R6-EP-US-SD	2020-12-19 10:52	0.8	8.4	586	13.9	13.9	13.9
RSEM-R6-EP-US-SD	2020-12-20 13:20	1.9	8.3	621	15.9	15.8	15.9
RSEM-R6E-SP-US	2020-07-08 14:30	10.1	8.4	850	8	8	8
RSEM-R6W-EOP	2020-04-27 14:10	11	8.6	803	30.6	30.8	30.6
RSEM-R6W-EOP	2020-04-28 12:45	10.3	8.6	845	24.8	24.9	24.8
RSEM-R6W-EOP	2020-04-29 11:30	10.8	8.5	856	22.8	22.8	22.8
RSEM-R6W-EOP	2020-04-30 10:40	10.7	8.4	788	20.2	20.1	20.2
RSEM-R6W-EOP	2020-05-01 11:25	11.6	8.6	858	18.8	18.8	18.8
RSEM-R6W-EOP	2020-05-02 11:40	12.7	8.4	879	18.8	18.8	18.8
RSEM-R6W-EOP	2020-05-03 7:40	10.4	8	824	16.8	17	16.8
RSEM-R6W-EOP	2020-05-04 13:00	12.6	8.7	988	14.2	14.2	14.2
RSEM-R6W-EOP	2020-05-05 16:45	13.5	7.5	983	12.4	12.4	12.4
RSEM-R6W-EOP	2020-05-06 13:15	15.1	7.9	838	13.5	13.9	13.5
RSEM-R6W-EOP	2020-05-07 11:30	12.1	8.5	836	11.6	11.2	11.6
RSEM-R6W-EOP	2020-05-08 12:45	14.9	8.5	839	12.6	12.6	12.6
RSEM-R6W-EOP	2020-05-09 11:15	13.8	8.1	878	6.9	6.8	6.9
RSEM-R6W-EOP	2020-05-10 15:30	13.2	8.3	986	7.3	7.2	7.3
RSEM-R6W-EOP	2020-05-11 11:30	11.7	8.1	1104	14.4	14.4	14.4
RSEM-R6W-EOP	2020-05-12 12:55	14.2	8.6	1296	3.7	3.6	3.7
RSEM-R6W-EOP	2020-05-13 13:20	15.8	8.6	1322	4	3.9	4
RSEM-R6W-EOP	2020-05-14 12:40	13.4	8.3	1458	4.1	3.9	4.1
RSEM-R6W-EOP	2020-05-15 9:05	12.4	8.6	1500	3.3	3.3	3.3
RSEM-R6W-EOP	2020-05-16 13:30	15.1	8.6	1556	3.2	3.2	3.2
RSEM-R6W-EOP	2020-05-17 12:10	13.2	8.6	1584	2.3	2.3	2.3
RSEM-R6W-EOP	2020-05-18 13:50	13.9	8.6	1664	1.9	1.9	1.9
RSEM-R6W-EOP	2020-05-19 14:20	15.1	8.6	1707	2.1	2.2	2.1
RSEM-R6W-EOP	2020-05-20 12:50	15.7	8.6	1693	1.5	1.5	1.5
RSEM-R6W-EOP	2020-05-21 11:55	13.2	8.3	1703	2.5	2.6	2.5
RSEM-R6W-EOP	2020-05-22 12:20	11.7	8.6	1716	5	5	5
RSEM-R6W-EOP	2020-05-23 13:40	18.8	8.1	1599	5.3	5.3	5.3
RSEM-R6W-EOP	2020-05-24 13:00	15	8.5	1786	4.8	4.7	4.8
RSEM-R6W-EOP	2020-05-26 15:10	15	8	1759	4.4	4.4	4.4
RSEM-R6W-EOP	2020-05-27 15:00	17.8	8.8	1837	3.4	3.3	3.4
RSEM-R6W-EOP	2020-05-28 14:45	18	8.1	1885	1.9	2	1.9
RSEM-R6W-EOP	2020-05-29 11:30	17.7	7.7	1820	1.6	1.6	1.6
RSEM-R6W-EOP	2020-05-30 13:45	18.2	8.5	1844	2	2	2
RSEM-R6W-EOP	2020-05-31 12:45	19.5	8.6	1904	2.9	2.8	2.9
RSEM-R6W-EOP	2020-06-01 15:00	18.7	8.5	2000	9.4	8	9.4
RSEM-R6W-EOP	2020-06-02 12:00	17.7	8.7	2170	3.1	3	3.1
RSEM-R6W-EOP	2020-06-02 12:45	16	8.7	2180	2.2	2.1	2.2
RSEM-R6W-EOP	2020-06-03 12:45	16	8.7	2180	2.2	2.1	2.2
RSEM-R6W-EOP	2020-06-04 12:20	18.9	8.6	2250	1.8	1.9	1.8
RSEM-R6W-EOP	2020-06-05 16:40	19.1	8.7	2350	1.9	1.9	1.9
RSEM-R6W-EOP	2020-06-06 11:40	16.3	8.7	2180	2.9	2.8	2.9
RSEM-R6W-EOP	2020-06-07 12:20	16.8	8.6	2310	6.3	6.1	6.3
RSEM-R6W-EOP	2020-06-08 16:00	15.2	8.6	2270	9.9	10	9.9
RSEM-R6W-EOP	2020-06-09 15:40	19.1	8.5	2060	11.7	11.8	11.7
RSEM-R6W-EOP	2020-06-10 13:30	21.1	8.5	2050	11.4	11.2	11.4
RSEM-R6W-EOP	2020-06-11 13:50	21.3	8.4	2030	7.1	7	7.1
RSEM-R6W-EOP	2020-06-12 14:15	20.4	8.5	2220	5.6	5.8	5.6
RSEM-R6W-EOP	2020-06-13 14:55	20.7	8.5	2230	5.2	5.4	5.2
RSEM-R6W-EOP	2020-06-14 14:10	17.4	8.5	2200	16.6	16.5	16.6
RSEM-R6W-EOP	2020-06-15 14:55	15.2	8.3	1962	55.6	55.7	55.6
RSEM-R6W-EOP	2020-06-16 10:55	15.7	8.1	1924	69.8	71.7	69.8
RSEM-R6W-EOP	2020-06-17 15:15	19.4	8.3	1926	28.1	28	28.1
RSEM-R6W-EOP	2020-06-18 16:15	23.2	8	1793	5.6	5.6	5.6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6W-EOP	2020-06-19 11:40	20.7	8.3	1990	18	17.9	18
RSEM-R6W-EOP	2020-06-20 14:15	20.9	8.5	2070	8.5	8.5	8.5
RSEM-R6W-EOP	2020-06-21 15:30	21.7	8.5	2300	7	7.1	7
RSEM-R6W-EOP	2020-06-22 13:10	20	7.9	2360	5.4	5.4	5.4
RSEM-R6W-EOP	2020-06-23 16:10	21.4	7.8	2470	5.9	5.8	5.9
RSEM-R6W-EOP	2020-06-24 12:50	20.8	8	2440	4.1	4	4.1
RSEM-R6W-EOP	2020-06-25 15:40	20.6	8.2	2390	3.1	3.1	3.1
RSEM-R6W-EOP	2020-06-26 12:40	19.5	8	2600	3.1	3.1	3.1
RSEM-R6W-EOP	2020-06-27 18:50	18.9	8	2580	3	3.1	3
RSEM-R6W-EOP	2020-06-28 12:30	18.8	8	2410	4	4	4
RSEM-R6W-EOP	2020-06-29 16:05	19.7	8	2590	4.2	4.1	4.2
RSEM-R6W-EOP	2020-06-30 14:20	19.7	7.8	2580	2.7	2.6	2.7
RSEM-R6W-EOP	2020-07-01 11:50	18.4	8.2	2550	5.8	5.7	5.8
RSEM-R6W-EOP	2020-07-03 16:20	16.6	8.2	2140	17.6	17.5	17.6
RSEM-R6W-EOP	2020-07-04 15:15	17.7	8.3	1857	21.6	21.6	21.6
RSEM-R6W-EOP	2020-07-05 10:25	16.8	8	1860	10	9.6	10
RSEM-R6W-EOP	2020-07-06 11:40	20.2	7.9	1785	4.5	4.4	4.5
RSEM-R6W-EOP	2020-07-06 14:10	20.7	8.2	1980	5.8	5.9	5.8
RSEM-R6W-EOP	2020-07-07 12:15	19.7	8	1877	6.4	6.4	6.4
RSEM-R6W-EOP	2020-07-08 12:40	19.9	8	1901	6.9	6.8	6.9
RSEM-R6W-EOP	2020-07-09 14:20	21.6	8.2	1846	5.7	5.6	5.7
RSEM-R6W-EOP	2020-07-10 10:10	19.4	8.3	1832	6.4	6.1	6.4
RSEM-R6W-EOP	2020-07-11 15:00	19.9	8.4	1839	4.9	4.8	4.9
RSEM-R6W-EOP	2020-07-12 14:10	18.5	8.4	1840	4.7	4.8	4.7
RSEM-R6W-EOP	2020-07-13 14:45	19.2	8.3	1834	7.4	7.4	7.4
RSEM-R6W-EOP	2020-07-14 14:10	20.7	8.2	1980	5.8	5.9	5.8
RSEM-R6W-EOP	2020-07-15 12:55	19.7	8.3	1966	3.7	3.6	3.7
RSEM-R6W-EOP	2020-07-16 15:40	21.2	8.4	1954	3.7	3.7	3.7
RSEM-R6W-EOP	2020-07-17 14:05	20.1	8.4	1946	2.7	2.7	2.7
RSEM-R6W-EOP	2020-07-18 13:15	21.7	8.4	1956	2.8	2.9	2.8
RSEM-R6W-EOP	2020-07-19 13:40	21.6	8.6	2080	2.8	2.8	2.8
RSEM-R6W-EOP	2020-07-20 10:50	21	8.5	2080	2.2	2.2	2.2
RSEM-R6W-EOP	2020-07-21 13:35	20.6	8.5	2070	2.5	2.4	2.5
RSEM-R6W-EOP	2020-07-22 13:40	22.4	8.5	1909	2.4	2.4	2.4
RSEM-R6W-EOP	2020-07-23 11:55	20.9	8.4	2040	2.4	2.4	2.4
RSEM-R6W-EOP	2020-07-24 15:30	19.3	8.6	1884	4.7	4.7	4.7
RSEM-R6W-EOP	2020-07-25 11:15	19.7	8.2	2010	3.4	3.4	3.4
RSEM-R6W-EOP	2020-07-26 14:25	22.1	8.4	1870	3.4	3.2	3.4
RSEM-R6W-EOP	2020-07-27 10:20	21	8.3	2030	2.8	2.8	2.8
RSEM-R6W-EOP	2020-07-28 12:20	22.8	8.5	1874	3.4	3.6	3.4
RSEM-R6W-EOP	2020-07-29 12:20	22.5	8.4	1884	4.6	4.5	4.6
RSEM-R6W-EOP	2020-07-30 16:20	23.6	7.9	1859	4.8	4.9	4.8
RSEM-R6W-EOP	2020-07-31 11:10	22.3	7.9	1819	4.4	4.3	4.4
RSEM-R6W-EOP	2020-08-01 12:30	23.8	8.4	1853	3.7	3.5	3.7
RSEM-R6W-EOP	2020-08-02 12:50	24	8.3	1855	7	6.9	7
RSEM-R6W-EOP	2020-08-03 13:10	23.4	8.5	1821	6.4	6.4	6.4
RSEM-R6W-EOP	2020-08-04 13:10	21.5	8.6	1955	4.5	4.6	4.5
RSEM-R6W-EOP	2020-08-05 12:40	22.4	8.5	1937	5.6	5.7	5.6
RSEM-R6W-EOP	2020-08-06 11:30	21.3	8.5	1941	5	4.7	5
RSEM-R6W-EOP	2020-08-07 12:15	21	8.5	1938	5	5.1	5
RSEM-R6W-EOP	2020-08-08 12:50	19.6	8.4	1942	5.6	5.5	5.6
RSEM-R6W-EOP	2020-08-09 14:20	19.3	8.6	1976	5.5	5.4	5.5
RSEM-R6W-EOP	2020-08-10 13:00	18.7	8.5	1994	5.5	5.7	5.5
RSEM-R6W-EOP	2020-08-11 13:20	18.5	8.4	2000	5.5	5.7	5.5
RSEM-R6W-EOP	2020-08-12 17:40	19.4	8.4	1886	4.7	4.6	4.7
RSEM-R6W-EOP	2020-08-13 13:40	17.3	8.3	2050	4.1	4.2	4.1
RSEM-R6W-EOP	2020-08-14 12:55	17.5	8.4	2040	4	3.6	4
RSEM-R6W-EOP	2020-08-15 14:55	17.2	8.4	2040	3.2	3.2	3.2
RSEM-R6W-EOP	2020-08-16 11:50	19.4	8.4	2030	3.7	3.7	3.7
RSEM-R6W-EOP	2020-08-17 9:30	18.9	8.4	2000	2.4	2.4	2.4
RSEM-R6W-EOP	2020-08-18 16:20	21.3	8.5	1840	2.8	2.7	2.8
RSEM-R6W-EOP	2020-08-19 14:50	22.3	8.3	1826	4.2	4.4	4.2
RSEM-R6W-EOP	2020-08-20 14:40	18.6	8.3	1714	4	4	4
RSEM-R6W-EOP	2020-08-21 12:00	17.6	8.1	1497	13	12.9	13
RSEM-R6W-EOP	2020-08-22 11:20		8.1	1277	31.4	31.4	31.4
RSEM-R6W-EOP	2020-08-23 14:50	20.2	8.1	1243	18.9	18.9	18.9
RSEM-R6W-EOP	2020-08-24 13:50	20.2	8.2	1254	5.9	5.8	5.9
RSEM-R6W-EOP	2020-08-25 12:30	17.1	7.9	1399	6.4	6.3	6.4
RSEM-R6W-EOP	2020-08-26 14:00	17.1	8	1379	5	4.9	5
RSEM-R6W-EOP	2020-08-27 12:50	17.1	8.3	1474	4.6	4.6	4.6
RSEM-R6W-EOP	2020-08-28 13:55	16.7	8.2	1332	1.2	1.2	1.2
RSEM-R6W-EOP	2020-08-29 10:55	15.1	8.2	1370	1.2	1.2	1.2
RSEM-R6W-EOP	2020-08-30 12:00	15.1	8.4	1400	1.2	1.2	1.2
RSEM-R6W-EOP	2020-08-31 17:20	14.3	8.5	1461	2	2	2
RSEM-R6W-EOP	2020-09-01 14:20	14.7	8.1	1512	1.1	1	1.1
RSEM-R6W-EOP	2020-09-02 13:55	16.1	8.5	1560	1.4	1.4	1.4
RSEM-R6W-EOP	2020-09-03 14:30	15.7	8.2	1568	1	1.1	1
RSEM-R6W-EOP	2020-09-04 12:00	15.3	8.6	1602	1.1	1	1.1
RSEM-R6W-EOP	2020-09-05 12:40	16.2	8.6	1595	0.8	0.8	0.8
RSEM-R6W-EOP	2020-09-06 11:10	15.1	8.6	1600	0.9	1.1	0.9
RSEM-R6W-EOP	2020-09-07 10:25	14.7	8.6	1586	0.9	1	0.9
RSEM-R6W-EOP	2020-09-08 11:00	15.6	8.6	1430	1.3	1.3	1.3
RSEM-R6W-EOP	2020-09-08 14:15	18.6	8.3	1692	1.9	2	1.9
RSEM-R6W-EOP	2020-09-09 14:15	18.6	8.3	1692	1.9	2	1.9
RSEM-R6W-EOP	2020-09-10 11:50	17.4	8.3	1633	2.1	2.1	2.1
RSEM-R6W-EOP	2020-09-11 11:40	16.3	8.3	1563	5.1	5.2	5.1
RSEM-R6W-EOP	2020-09-12 14:20	16.4	8.4	1574	5.6	5.6	5.6
RSEM-R6W-EOP	2020-09-13 12:40	14.1	8.2	1527	15	14.8	15
RSEM-R6W-EOP	2020-09-14 12:40	12.2	8.2	1495	9.6	9.7	9.6

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6W-EOP	2020-09-15 15:00	14	8	1486	11.6	11.4	11.6
RSEM-R6W-EOP	2020-09-16 13:30	15	8.2	1553	8.6	8.6	8.6
RSEM-R6W-EOP	2020-09-17 13:10	13.1	8	1665	8.4	8.9	8.4
RSEM-R6W-EOP	2020-09-18 9:50	12.4	8.1	1675	5.8	5.8	5.8
RSEM-R6W-EOP	2020-09-19 12:50	13.2	8.4	1713	4.3	4.2	4.3
RSEM-R6W-EOP	2020-09-20 11:40	13.4	8.2	1690	3.9	3.9	3.9
RSEM-R6W-EOP	2020-09-21 12:50	13.4	8.2	1654	3.6	3.5	3.6
RSEM-R6W-EOP	2020-09-22 13:55	12.9	8.7	1633	3.8	3.7	3.8
RSEM-R6W-EOP	2020-09-23 15:40	12.8	8.6	1620	3.8	3.9	3.8
RSEM-R6W-EOP	2020-09-24 14:00	13.1	8.7	1610	3.3	3.4	3.3
RSEM-R6W-EOP	2020-09-25 13:30	11.8	8.4	1560	3.7	3.6	3.7
RSEM-R6W-EOP	2020-09-26 13:10	12.1	8.1	1500	4.2	4.1	4.2
RSEM-R6W-EOP	2020-09-27 16:20	10.8	8.6	1459	3.4	3.4	3.4
RSEM-R6W-EOP	2020-09-28 9:40	10.6	8.2	1435	3.7	3.8	3.7
RSEM-R6W-EOP	2020-09-29 16:10	11.8	8.4	1282	5.4	5.3	5.4
RSEM-R6W-EOP	2020-09-30 13:10	11.4	8.3	1284	4.4	4	4.4
RSEM-R6W-EOP	2020-10-01 12:15	11.7	8.6	1293	4.8	4.6	4.8
RSEM-R6W-EOP	2020-10-02 11:30	11.3	8.5	1301	3.4	3.4	3.4
RSEM-R6W-EOP	2020-10-03 16:10	13.8	8.4	1299	6	6	6
RSEM-R6W-EOP	2020-10-04 16:20	12.5	8.1	1302	5.1	4.9	5.1
RSEM-R6W-EOP	2020-10-05 17:10	12.6	8.3	1321	4.8	5	4.8
RSEM-R6W-EOP	2020-10-06 15:10	11.9	8.4	1423	4.5	4.6	4.5
RSEM-R6W-EOP	2020-10-07 14:20	10.3	8.4	1304	4.9	4.9	4.9
RSEM-R6W-EOP	2020-10-08 11:30	10	8.3	1410	4.4	4.5	4.4
RSEM-R6W-EOP	2020-10-09 11:20	9.4	8.3	1414	4.1	4	4.1
RSEM-R6W-EOP	2020-10-10 12:10	9.2	8.2	1299	10.8	10.7	10.8
RSEM-R6W-EOP	2020-10-11 11:40	8.7	7.9	1382	10	10	10
RSEM-R6W-EOP	2020-10-12 13:50	8.3	8.4	1448	11.3	11.2	11.3
RSEM-R6W-EOP	2020-10-13 14:00	7.3	8.1	1480	10.8	10.8	10.8
RSEM-R6W-EOP	2020-10-14 15:00	7.7	8	1500	9.5	9.3	9.5
RSEM-R6W-EOP	2020-10-15 11:55	6.8	7.7	1548	8.2	8.2	8.2
RSEM-R6W-EOP	2020-10-16 12:10	5.7	8	1584	5.8	5.6	5.8
RSEM-R6W-EOP	2020-10-17 10:30	3.7	8.2	1680	6.1	6.1	6.1
RSEM-R6W-EOP	2020-10-18 12:55	3.2	8.2	1725	6.1	6.1	6.1
RSEM-R6W-EOP	2020-10-19 10:20	1.7	8.3	1793	5.2	5.2	5.2
RSEM-R6W-EOP	2020-10-20 14:50	3.2	8.1	1685	5.4	5.4	5.4
RSEM-R6W-EOP	2020-10-21 16:10	2.6	8.3	1733	3.9	3.9	3.9
RSEM-R6W-EOP	2020-10-22 12:40	3.3	8.3	1788	4.9	4.9	4.9
RSEM-R6W-EOP	2020-10-23 10:30	3.1	8	1848	4.2	4.2	4.2
RSEM-R6W-EOP	2020-10-24 15:10	3.6	8.1	1877	4.1	4.2	4.1
RSEM-R6W-EOP	2020-10-25 13:50	3.9	8	1870	6	6	6
RSEM-R6W-EOP	2020-10-26 14:45	3.2	8	1831	4.5	4.5	4.5
RSEM-R6W-EOP	2020-10-27 12:40	4.1	8	1728	9.8	9.8	9.8
RSEM-R6W-EOP	2020-10-28 14:20	4.8	7.8	1687	9	9	9
RSEM-R6W-EOP	2020-10-29 17:00	7.6	7.8	1015	9.1	9.2	9.1
RSEM-R6W-EOP	2020-10-30 12:10	3.3	7.8	1571	8.9	8.9	8.9
RSEM-R6W-EOP	2020-10-31 14:40	4.1	7.6	1508	5.1	5.1	5.1
RSEM-R6W-EOP	2020-11-01 13:00	5.3	7.5	1491	7	7	7
RSEM-R6W-EOP	2020-11-15 13:00	0.7	7.6	1745	6	6	6
RSEM-R6W-EOP	2020-11-16 10:30	2.4	8	1753	5.6	5.6	5.6
RSEM-R6W-EOP	2020-11-17 13:00	1.8	7.9	1775	5.2	5.1	5.2
RSEM-R6W-EOP	2020-11-18 16:10	1	7.8	1821	5.2	5.2	5.2
RSEM-R6W-EOP	2020-11-19 13:50	1.4	7.9	1869	4.6	4.5	4.6
RSEM-R6W-EOP	2020-11-20 11:40	4.3	7.9	1815	4	4	4
RSEM-R6W-EOP	2020-11-21 13:40	1.2	7.9	1836	4.5	4.5	4.5
RSEM-R6W-EOP	2020-11-22 14:05	2.5	7.8	1849	7.2	7.3	7.2
RSEM-R6W-EOP	2020-11-23 13:40	2	7.9	1847	5.3	5.4	5.3
RSEM-R6W-EOP	2020-11-24 14:05	1.5	7.8	1982	2.7	2.7	2.7
RSEM-R6W-EOP	2020-11-25 14:10	1.4	7.8	1944	5.4	5.4	5.4
RSEM-R6W-EOP	2020-11-26 12:10	1.8	8.2	1911	3.7	3.8	3.7
RSEM-R6W-EOP	2020-11-27 11:30	2	8.5	1910	3.4	3.4	3.4
RSEM-R6W-EOP	2020-11-28 13:10	1.2	8	1813	2.8	2.8	2.8
RSEM-R6W-EOP	2020-11-29 12:45	1.8	7.9	1810	2.6	2.6	2.6
RSEM-R6W-EOP	2020-11-30 14:20	2.4	7.8	1820	3	3	3
RSEM-R6W-EOP	2020-12-01 13:55	2.2	8.2	1843	2.8	2.9	2.8
RSEM-R6W-EOP	2020-12-02 13:20	2.4	7.7	1839	3.1	3.1	3.1
RSEM-R6W-EOP	2020-12-03 12:50	1.9	7.6	1939	7.5	7.5	7.5
RSEM-R6W-EOP	2020-12-04 13:40	2.3	7.8	1990	2.8	2.8	2.8
RSEM-R6W-EOP	2020-12-05 13:30	2.2	8.2	2030	2.8	2.8	2.8
RSEM-R6W-EOP	2020-12-06 13:10	2.2	7.9	2020	3.7	3.7	3.7
RSEM-R6W-EOP	2020-12-07 10:15	2.2	8	2080	4.6	4.6	4.6
RSEM-R6W-EOP	2020-12-08 15:20	2	8.7	1874	7.2	7.7	7.2
RSEM-R6W-EOP	2020-12-09 15:40	3	7.7	1928	9.9	9.9	9.9
RSEM-R6W-EOP	2020-12-10 14:40	1.6	8	1959	4.7	4.8	4.7
RSEM-R6W-EOP	2020-12-11 11:50	1.8	7.4	1968	4.7	4.8	4.7
RSEM-R6W-EOP	2020-12-12 17:00	1.1	8	2000	3.3	3.3	3.3
RSEM-R6W-EOP	2020-12-13 15:20	1.8	7.9	2090	4.4	4.4	4.4
RSEM-R6W-EOP	2020-12-15 15:30	1	7.6	2320	4.3	4.3	4.3
RSEM-R6W-EOP	2020-12-16 14:20	-0.1	7.2	2320	3.5	3.6	3.5
RSEM-R6W-EOP	2020-12-17 14:50	0.1	7.6	2310	4.6	4.7	4.6
RSEM-R6W-EOP	2020-12-18 13:35	1.5	7.8	1965	3.7	3.6	3.7
RSEM-R6W-EOP	2020-12-19 13:00	0.5	7.8	2190	4.5	4.3	4.5
RSEM-R6W-EOP	2020-12-20 13:05	1	7.3	1990	5.3	5.4	5.3
RSEM-R6W-EOP	2020-12-21 10:50	0.7	7.7	1964	5	5.1	5
RSEM-R6W-EOP	2020-12-22 11:40	1	7.6	1703	6.1	6.1	6.1
RSEM-R6W-EOP	2020-12-23 13:10	1.6	7.5	1669	7	7	7
RSEM-R6W-EOP	2020-12-24 9:50	1.4	7.6	1637	6.2	6	6.2
RSEM-R6W-EOP	2020-12-25 15:10	1.2	7.7	1569	5.6	5.6	5.6
RSEM-R6W-EOP	2020-12-26 16:10	0.7	7.6	1499	5	5	5

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6W-EOP	2020-12-27 16:30	0.6	7.7	1522	5.2	5.2	5.2
RSEM-R6W-EOP	2020-12-28 9:40	1	7.8	1551	5.6	5.6	5.6
RSEM-R6W-EOP	2020-12-29 14:15	0.2	8	1584	4.6	4.5	4.6
RSEM-R6W-EOP	2020-12-30 15:03	2.1	7.2	1558	5.2	5.2	5.2
RSEM-R6W-EOP	2020-12-31 14:50	2.8	7.2	1583	4.4	4.4	4.4
RSEM-R6W-SP	2020-04-22 15:05	9.5	8.3	587	29.1	29	29.1
RSEM-R6W-SP	2020-04-26 13:05	13.9	8.4	718	19.6	19.6	19.6
US_Debris_Boom	2020-07-10 21:00				231		231
US_Debris_Boom	2020-07-11 4:00				215		215
US_Debris_Boom	2020-07-11 20:30				149		149
US_Debris_Boom	2020-07-12 4:00				152		152
US_Debris_Boom	2020-07-12 20:30				115		115
US_Debris_Boom	2020-07-13 4:00				87		87
US_Debris_Boom	2020-07-13 11:00				113		113
US_Debris_Boom	2020-07-13 15:00				128		128
US_Debris_Boom	2020-07-13 20:30				144		144
US_Debris_Boom	2020-07-14 4:00				179		179
US_Debris_Boom	2020-07-14 11:00				131		131
US_Debris_Boom	2020-07-14 15:00				110		110
US_Debris_Boom	2020-07-14 20:30				156		156
US_Debris_Boom	2020-07-15 4:00				111		111
US_Debris_Boom	2020-07-15 11:00				84		84
US_Debris_Boom	2020-07-15 15:00				103		103
US_Debris_Boom	2020-07-15 20:30				82		82
US_Debris_Boom	2020-07-16 4:00				81		81
US_Debris_Boom	2020-07-16 11:00				93		93
US_Debris_Boom	2020-07-16 15:00				86		86
US_Debris_Boom	2020-07-16 20:30				74		74
US_Debris_Boom	2020-07-17 4:00				66		66
US_Debris_Boom	2020-07-17 11:00				82		82
US_Debris_Boom	2020-07-17 15:00				84		84
US_Debris_Boom	2020-07-17 20:30				88		88
US_Debris_Boom	2020-07-18 4:00				90		90
US_Debris_Boom	2020-07-18 11:00				83		83
US_Debris_Boom	2020-07-18 15:00				78		78
US_Debris_Boom	2020-07-18 20:30				82		82
US_Debris_Boom	2020-07-19 4:00				84		84
US_Debris_Boom	2020-07-19 11:00				65		65
US_Debris_Boom	2020-07-19 15:00				64		64
US_Debris_Boom	2020-07-19 20:30				62		62
US_Debris_Boom	2020-07-20 4:00				45		45
US_Debris_Boom	2020-07-20 20:30				46		46
US_Debris_Boom	2020-07-21 0:00				39		39
US_Debris_Boom	2020-07-21 10:00				150		150
US_Debris_Boom	2020-07-21 14:30				150		150
US_Debris_Boom	2020-07-21 20:30				33		33
US_Debris_Boom	2020-07-22 4:00				39		39
US_Debris_Boom	2020-07-22 9:30				51		51
US_Debris_Boom	2020-07-22 14:30				65		65
US_Debris_Boom	2020-07-22 20:30				39		39
US_Debris_Boom	2020-07-23 4:00				47		47
US_Debris_Boom	2020-07-23 9:00				59		59
US_Debris_Boom	2020-07-23 14:50				52		52
US_Debris_Boom	2020-07-23 20:30				41		41
US_Debris_Boom	2020-07-24 9:10				34		34
US_Debris_Boom	2020-07-24 14:40				39		39
US_Debris_Boom	2020-07-24 20:30				90		90
US_Debris_Boom	2020-07-25 4:00				239		239
US_Debris_Boom	2020-07-25 9:30				55		55
US_Debris_Boom	2020-07-25 14:00				61		61
US_Debris_Boom	2020-07-25 20:30				36		36
US_Debris_Boom	2020-07-26 9:10				84		84
US_Debris_Boom	2020-07-26 14:00				104		104
US_Debris_Boom	2020-07-26 20:30				57		57
US_Debris_Boom	2020-07-27 4:00				59		59
US_Debris_Boom	2020-07-27 9:30				66		66
US_Debris_Boom	2020-07-27 14:00				76		76
US_Debris_Boom	2020-07-27 20:30				53		53
US_Debris_Boom	2020-07-28 4:30				59		59
US_Debris_Boom	2020-07-28 9:00				48		48
US_Debris_Boom	2020-07-28 14:20				27		27
US_Debris_Boom	2020-07-28 20:30				31		31
US_Debris_Boom	2020-07-29 4:30				36		36
US_Debris_Boom	2020-07-29 9:00				36		36
US_Debris_Boom	2020-07-29 14:20				30		30
US_Debris_Boom	2020-07-29 20:30				25		25
US_Debris_Boom	2020-07-30 4:30				28		28
US_Debris_Boom	2020-07-30 10:15				21		21
US_Debris_Boom	2020-07-30 20:30				27		27
US_Debris_Boom	2020-07-31 4:30				29		29
US_Debris_Boom	2020-07-31 9:20				29		29
US_Debris_Boom	2020-07-31 15:10				28		28
US_Debris_Boom	2020-07-31 20:30				22		22
US_Debris_Boom	2020-08-01 4:30				29		29
US_Debris_Boom	2020-08-01 20:30				22		22
US_Debris_Boom	2020-08-02 4:30				21		21
US_Debris_Boom	2020-08-02 11:00				51.5		51.5
US_Debris_Boom	2020-08-02 15:00				26.7		26.7
US_Debris_Boom	2020-08-02 20:30				21		21

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
US_Debris_Boom	2020-08-03 4:30				24		24
US_Debris_Boom	2020-08-03 11:00				33.3		33.3
US_Debris_Boom	2020-08-03 15:00				33.5		33.5
US_Debris_Boom	2020-08-03 20:30				20		20
US_Debris_Boom	2020-08-04 4:30				23		23
US_Debris_Boom	2020-08-04 11:00				25.9		25.9
US_Debris_Boom	2020-08-04 15:00				32.4		32.4
US_Debris_Boom	2020-08-04 20:30				19		19
US_Debris_Boom	2020-08-05 4:00				15		15
US_Debris_Boom	2020-08-05 11:00				18.1		18.1
US_Debris_Boom	2020-08-05 15:00				18.1		18.1
US_Debris_Boom	2020-08-05 20:30				18		18
US_Debris_Boom	2020-08-06 4:00				27		27
US_Debris_Boom	2020-08-06 11:00				22.4		22.4
US_Debris_Boom	2020-08-06 15:00				20.3		20.3
US_Debris_Boom	2020-08-06 20:30				25		25
US_Debris_Boom	2020-08-07 4:30				17		17
US_Debris_Boom	2020-08-07 11:00				19.4		19.4
US_Debris_Boom	2020-08-07 15:00				23.4		23.4
US_Debris_Boom	2020-08-07 20:30				23		23
US_Debris_Boom	2020-08-08 4:30				19		19
US_Debris_Boom	2020-08-08 11:00				19.6		19.6
US_Debris_Boom	2020-08-08 15:00				23.8		23.8
US_Debris_Boom	2020-08-08 20:30				23		23
US_Debris_Boom	2020-08-09 4:30				22		22
US_Debris_Boom	2020-08-09 20:30				36		36
US_Debris_Boom	2020-08-10 4:30				19		19
US_Debris_Boom	2020-08-10 20:30				26		26
US_Debris_Boom	2020-08-11 4:30				27		27
US_Debris_Boom	2020-08-11 9:30				19		19
US_Debris_Boom	2020-08-11 14:20				28		28
US_Debris_Boom	2020-08-11 20:30				31		31
US_Debris_Boom	2020-08-12 4:30				22		22
US_Debris_Boom	2020-08-12 9:50				20		20
US_Debris_Boom	2020-08-12 15:15				21		21
US_Debris_Boom	2020-08-12 20:30				29		29
US_Debris_Boom	2020-08-13 4:30				20		20
US_Debris_Boom	2020-08-13 13:45				15		15
US_Debris_Boom	2020-08-13 20:30				20		20
US_Debris_Boom	2020-08-14 4:30				18		18
US_Debris_Boom	2020-08-14 9:15				12		12
US_Debris_Boom	2020-08-14 15:45				14		14
US_Debris_Boom	2020-08-15 5:00				21		21
US_Debris_Boom	2020-08-15 8:45				15		15
US_Debris_Boom	2020-08-15 14:30				12		12
US_Debris_Boom	2020-08-15 20:30				22		22
US_Debris_Boom	2020-08-16 5:00				21		21
US_Debris_Boom	2020-08-16 14:30				14		14
US_Debris_Boom	2020-08-16 20:30				17		17
US_Debris_Boom	2020-08-17 5:00				16		16
US_Debris_Boom	2020-08-17 9:20				11		11
US_Debris_Boom	2020-08-17 14:30				14		14
US_Debris_Boom	2020-08-17 20:30				12		12
US_Debris_Boom	2020-08-18 2:30				14		14
US_Debris_Boom	2020-08-18 4:30				13		13
US_Debris_Boom	2020-08-19 5:00				15		15
US_Debris_Boom	2020-08-19 20:30				10		10
US_Debris_Boom	2020-08-20 5:00				6		6
US_Debris_Boom	2020-08-20 20:30				9		9
US_Debris_Boom	2020-08-21 5:00				9		9
US_Debris_Boom	2020-08-21 19:30				6		6
US_Debris_Boom	2020-08-22 5:00				27		27
US_Debris_Boom	2020-08-22 19:30				45		45
US_Debris_Boom	2020-08-23 5:00				49		49
US_Debris_Boom	2020-08-23 19:30				234		234
US_Debris_Boom	2020-08-24 5:00				185		185
US_Debris_Boom	2020-08-24 11:00				150.7		150.7
US_Debris_Boom	2020-08-24 16:00				122.9		122.9
US_Debris_Boom	2020-08-24 20:30				63		63
US_Debris_Boom	2020-08-25 5:30				74		74
US_Debris_Boom	2020-08-25 11:00				55.7		55.7
US_Debris_Boom	2020-08-25 16:00				51.9		51.9
US_Debris_Boom	2020-08-25 20:30				24		24
US_Debris_Boom	2020-08-26 5:30				14		14
US_Debris_Boom	2020-08-26 11:00				35.2		35.2
US_Debris_Boom	2020-08-26 16:00				34.2		34.2
US_Debris_Boom	2020-08-26 20:30				19		19
US_Debris_Boom	2020-08-27 5:30				28		28
US_Debris_Boom	2020-08-27 20:30				12		12
US_Debris_Boom	2020-08-28 20:30				10		10
US_Debris_Boom	2020-08-29 20:30				7		7
US_Debris_Boom	2020-08-30 5:30				12		12
US_Debris_Boom	2020-08-30 11:00				10.6		10.6
US_Debris_Boom	2020-08-30 16:00				11.4		11.4
US_Debris_Boom	2020-08-30 20:30				5		5
US_Debris_Boom	2020-08-31 5:30				9		9
US_Debris_Boom	2020-09-01 9:30				10		10
US_Debris_Boom	2020-09-01 14:45				9		9
US_Debris_Boom	2020-09-01 20:30				5		5

Appendix 3-B: 2020 *In Situ* Field Measurement Water Quality Data

Station	Collect Date/Time	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
US_Debris_Boom	2020-09-02 5:30				9		9
US_Debris_Boom	2020-09-02 9:00				16		16
US_Debris_Boom	2020-09-02 15:15				14		14
US_Debris_Boom	2020-09-02 20:30				9		9
US_Debris_Boom	2020-09-03 9:00				29		29
US_Debris_Boom	2020-09-03 15:00				24		24
US_Debris_Boom	2020-09-03 20:30				12		12
US_Debris_Boom	2020-09-04 5:30				15		15
US_Debris_Boom	2020-09-04 9:00				24		24
US_Debris_Boom	2020-09-04 15:30				16		16
US_Debris_Boom	2020-09-04 20:30				14		14
US_Debris_Boom	2020-09-05 5:30				15		15
US_Debris_Boom	2020-09-05 20:00				12		12
US_Debris_Boom	2020-09-06 5:30				13		13
US_Debris_Boom	2020-09-06 9:00				12		12
US_Debris_Boom	2020-09-06 15:15				12		12
US_Debris_Boom	2020-09-06 20:00				7		7
US_Debris_Boom	2020-09-07 13:15				18		18
US_Debris_Boom	2020-09-07 20:00				9		9
US_Debris_Boom	2020-09-08 5:45				7		7
US_Debris_Boom	2020-09-08 8:45				10		10
US_Debris_Boom	2020-09-08 14:45				14		14
US_Debris_Boom	2020-09-08 20:00				14		14
US_Debris_Boom	2020-09-09 5:45				10		10
US_Debris_Boom	2020-09-09 9:45				10		10
US_Debris_Boom	2020-09-09 14:15				9		9
US_Debris_Boom	2020-09-09 20:00				8		8
US_Debris_Boom	2020-09-10 5:45				9		9
US_Debris_Boom	2020-09-10 9:00				7		7
US_Debris_Boom	2020-09-10 14:00				8		8
US_Debris_Boom	2020-09-10 20:00				7		7
US_Debris_Boom	2020-09-11 5:45				10		10
US_Debris_Boom	2020-09-11 10:00				8		8
US_Debris_Boom	2020-09-11 15:15				7		7
US_Debris_Boom	2020-09-11 20:00				7		7
US_Debris_Boom	2020-09-12 5:45				10		10
US_Debris_Boom	2020-09-12 20:00				10		10
US_Debris_Boom	2020-09-13 6:00				8		8
US_Debris_Boom	2020-09-13 10:00				9		9
US_Debris_Boom	2020-09-13 13:15				9		9
US_Debris_Boom	2020-09-13 20:00				8		8
US_Debris_Boom	2020-09-14 20:00				21		21
US_Debris_Boom	2020-09-15 11:00				24.3		24.3
US_Debris_Boom	2020-09-15 15:30				65.3		65.3
US_Debris_Boom	2020-09-15 20:00				53		53
US_Debris_Boom	2020-09-16 14:00				17.9		17.9
US_Debris_Boom	2020-09-16 19:30				19		19
US_Debris_Boom	2020-09-17 12:45				16.2		16.2
US_Debris_Boom	2020-09-17 15:00				16.6		16.6
US_Debris_Boom	2020-09-17 19:30				19		19
US_Debris_Boom	2020-09-18 19:30				12		12
US_Debris_Boom	2020-09-19 10:45				21.7		21.7
US_Debris_Boom	2020-09-19 15:30				17.4		17.4
US_Debris_Boom	2020-09-19 19:30				13		13
US_Debris_Boom	2020-09-20 11:00				12.6		12.6
US_Debris_Boom	2020-09-20 15:00				10		10
US_Debris_Boom	2020-09-20 19:30				10		10
US_Debris_Boom	2020-09-21 19:30				10		10
US_Debris_Boom	2020-09-22 9:15				10		10
US_Debris_Boom	2020-09-22 15:15				12		12
US_Debris_Boom	2020-09-23 9:00				9		9
US_Debris_Boom	2020-09-23 15:30				8		8
US_Debris_Boom	2020-09-23 23:00				6		6
US_Debris_Boom	2020-09-24 9:15				7		7
US_Debris_Boom	2020-09-24 14:00				6		6
US_Debris_Boom	2020-09-24 18:30				6		6
US_Debris_Boom	2020-09-25 9:00				11		11
US_Debris_Boom	2020-09-25 14:00				6		6
US_Debris_Boom	2020-09-25 18:30				5		5
US_Debris_Boom	2020-09-26 9:15				7		7
US_Debris_Boom	2020-09-26 14:15				9		9
US_Debris_Boom	2020-09-27 18:30				6		6
US_Debris_Boom	2020-09-28 11:30				8		8
US_Debris_Boom	2020-09-28 14:15				10		10
US_Debris_Boom	2020-09-28 18:30				7		7
US_Debris_Boom	2020-09-29 10:30				7		7
US_Debris_Boom	2020-09-29 14:30				9		9
US_Debris_Boom	2020-09-29 18:30				16		16
US_Debris_Boom	2020-09-30 9:30				9		9
US_Debris_Boom	2020-09-30 14:00				11		11
US_Debris_Boom	2020-09-30 18:30				13		13
US_Debris_Boom	2020-10-01 10:15				9		9
US_Debris_Boom	2020-10-01 15:30				10		10
US_Debris_Boom	2020-10-01 18:30				8		8
US_Debris_Boom	2020-10-02 9:00				13		13
US_Debris_Boom	2020-10-02 16:00				15		15
WP-DS	2020-01-16 12:05	0.9	8.6	327			
WP-DS	2020-07-11 13:30	10.3		340	4.5		4.5
WP-DS	2020-08-22 14:40	10.7	8.1	400	705		705
WP-DS	2020-09-04 15:15	10	8.2		2.1	2	2.1
WP-DS	2020-12-15 13:20	0.2	6.5	340	2	2.3	2
WP-US	2020-07-11 13:10	10.5		330	4		4
WP-US	2020-08-22 13:45	10.8	7.9	310	670		670
WP-US	2020-09-04 14:40	9.5	8.2		3.3	3	3.3
WP-US	2020-12-15 12:40	0.1	6.4	350	3.8	3.2	3.8

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

PEACE RIVER
HYDRO PARTNERS

Appendix 3-C: 2020 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
					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
85-WP	8/22/2020 16:15	YI0135	M	C060262				11.6																		
AC_E_HAIRPIN_DITCH	5/18/2020 10:45	XU2634	M	C033728	8.09	966	621	26.7	440	413	255	<1.0	311	<1.0	<1.0	36.6	0.247	0.499	202			0.168	<0.010	0.875	0.875	<0.0030
AC-E-GW-Sump	5/18/2020 15:30	XU2641	M	C033728	8.16	2490	1660	5.7	97.4	92.7	349	<1.0	426	<1.0	<1.0	87.0	0.652	1.29	724			1.49	0.225	0.435	0.661	0.0063
AC-E-GW-Sump	6/8/2020 11:20	XX1070	M	C039370	8.16	2000	1260	3.7	30.4	30.3	332	<1.0	405	<1.0	<1.0	53.4	0.476	0.720	560			0.908	0.138	1.39	1.52	0.0085
AC-E-Sump	5/18/2020 11:05	XU2635	M	C033728	7.87	2360	1790	5.7	765	726	189	<1.0	230	<1.0	<1.0	46.4	1.58	0.659	929			0.653	0.022	0.929	0.951	<0.0030
AC-E-Sump	11/2/2020	YU2811	M	C081296	8.00	1030	672	204	509	500	235	<1.0	286	<1.0	<1.0	52.4	0.416	0.521	235			0.087	<0.010	0.779	0.779	<0.0030
AC-W-Sump	5/19/2020 16:35	XU3589	M	C033944	8.42	1200	863	9.9	546	435	256	5.1	300	6.1	<1.0	36.7	0.449	0.238	316			0.041	<0.010	0.678	0.678	<0.0030
AC-W-Sump	11/4/2020 12:45	YU7150	M	C082156	8.15	1190	680	7.1	539	497	347	<1.0	423	<1.0	<1.0	32.4	0.337	0.232	283			0.053	<0.010	1.04	1.04	0.0042
AC-W-Sump	11/13/2020 10:50	YV9731	M	C084016	7.98	1090	704	8.1	513	502	411	<1.0	502	<1.0	<1.0	31.8	0.298	0.128	239			0.038	<0.010	1.11	1.11	0.0167
Area_21_Sump	7/16/2020 16:50	YC4667	M	C049952	8.04	939	520	7.0	258	250	354	<1.0	431	<1.0	<1.0	41.3	0.143	0.506	63.3			<0.015	<0.010	1.55	1.55	<0.0030
Area_30_SP	8/22/2020 22:45	YI0134	M	C060262				2.8																		
Area_A_N_Ditch	1/8/2020 11:15	XF3038	M	C001783	7.37	605	340	<1.0	337	335	283	<1.0	345	<1.0	<1.0	5.99	0.139	0.069	31.9			0.030	<0.010	0.284	0.284	0.0030
Area_A_N_Ditch	2/6/2020 14:40	XI8762	M	C008772	7.53	648	365	10.8	336	340	302	<1.0	369	<1.0	<1.0	6.18	0.138	0.046	37.8			0.125	<0.010	0.304	0.304	<0.0030
Area_A_N_Ditch	3/11/2020 11:30	XN7889	M	C018851	8.01	356	205	23.8	155	162	111	<1.0	136	<1.0	<1.0	25.2	0.184	0.354	21.9			0.295	0.039	0.455	0.494	0.0110
Area_A_N_Ditch	4/3/2020 12:15	XP9114	M	C023756	8.05	560	304	2.7	293	271	221	<1.0	270	<1.0	<1.0	26.0	0.136	0.323	32.8			0.835				<0.0030
Area_A_N_Ditch	5/7/2020 13:45	XT2579	M	C031444	8.14	647	374	6.5	379	405	292	<1.0	356	<1.0	<1.0	7.79	0.140	0.054	45.2			0.046	<0.010	0.414	0.414	<0.0030
Area_A_N_Ditch	5/29/2020 12:00	XV5616	M	C036525	8.08	582	364	1.6	276	277	230	<1.0	280	<1.0	<1.0	9.75	0.105	0.116	83.5			0.019	<0.010	<0.010	<0.014	<0.0030
Area_A_N_Ditch	6/5/2020 13:55	XW9906	M	C039108	7.70	656	412	1.8	345	337	303	<1.0	369	<1.0	<1.0	9.84	0.141	0.071	43.4			0.017	<0.010	0.528	0.528	<0.0030
Area_A_N_Ditch	7/9/2020 14:45	YB4140	M	C047920	8.02	524	272	1.6	267	267	219	<1.0	267	<1.0	<1.0	8.93	0.179	0.080	34.4			<0.015	<0.010	1.04	1.04	<0.0030
Crusher-FeedPitPond2	3/13/2020 13:45	XN9533	M	C019176	8.02	995	618	12.0	505	508	420	<1.0	513	<1.0	<1.0	13.5	0.180	0.142	140			0.157	<0.0050	0.116	0.116	<0.0030
DIC_Sump	5/2/2020 10:10	XS7458	M	C030328	7.91	295	176	11.0	116	112	57.8	<1.0	70.5	<1.0	<1.0	3.54	0.134	0.032	80.2			0.019	<0.010	0.054	0.054	<0.0030
DIC_Sump	5/13/2020 14:10	XT8156	M	C032775	8.12	774	487	21.7	387	371	142	<1.0	173	<1.0	<1.0	7.62	0.058	0.141	172			0.085	<0.010	0.023	0.023	<0.0030
DIC_Sump	7/11/2020	YB7198	M	C048486				109																		
DIC-DIP	8/19/2020 12:45	YH3196	M	C059023	7.81	216	112	6.0	97.6	98.5	81.9	<1.0	99.9	<1.0	<1.0	0.64	0.076	<0.010	28.5			<0.015	<0.010	0.060	0.060	<0.0030
DIC-DIP	9/5/2020 10:35	YK1343	M	C064288	8.13	273	184	23.2	127	118	92.9	<1.0	113	<1.0	<1.0	1.19	0.110	0.010	50.8			0.023	0.0141	0.083	0.097	0.0070
DIC-DIP	9/10/2020 14:45	YK8217	M	C065709	8.82	306	201	29.6	136	132	78.4	5.9	81.4	7.0	<1.0	1.54	0.141	0.018	68.0			0.045	<0.010	0.065	0.065	0.0083
DIC-DIP	9/21/2020 16:50	YM6398	M	C068837	7.47	200	184	9.9	99.2	99.2	85.6	<1.0	104	<1.0	<1.0	0.75	0.056	<0.010	17.7			<0.015	<0.010	0.049	0.049	<0.0030
DIC-DIP	9/23/2020 16:30	YN0389	M	C069533	7.57	200	177	17.2	96.2	97.9	84.2	<1.0	103	<1.0	<1.0	0.90	<0.050	<0.010	17.2			<0.015	<0.010	0.054	0.054	<0.0030
DIC-DIP	9/27/2020 11:30	YN7523	M	C070629	7.52	197	112	5.4	98.1	102	96.2	<1.0	117	<1.0	<1.0	0.84	<0.050	<0.010	17.6			<0.015	<0.010	0.022	0.022	<0.0030
DIC-DIP	10/2/2020 12:30	YO6601	M	C072223	6.80	218	88	10.5	107	105	131	<1.0	160	<1.0	<1.0	0.62	0.058	<0.010	19.9			<0.015	<0.010	0.039	0.039	<0.0030
DIC-DIP	10/9/2020 11:30	YQ0193	M	C074387	7.59	190	132	8.5	91.9	93.5	86.5	<1.0	106	<1.0	<1.0	0.89	0.058	<0.010	16.1			0.025	<0.010	0.038	0.038	<0.0030
DIP-Seep	8/12/2020 13:30	YG4639	M	C057419	8.22		5790	36.4	1280	1160												1.10	0.331	0.887	1.22	0.0040
DOC_S_Sump	1/8/2020 15:15	XF3044	M	C001783	7.86	1100	712	2.7	211	225	262	<1.0	320	<1.0	<1.0	13.5	0.517	0.217	269			0.053	0.036	1.10	1.13	<0.0030
DOC_S_Sump	2/6/2020 13:30	XI8761	M	C008772	8.05	1010	612	2.0	190	189	255	<1.0	311	<1.0	<1.0	14.4	0.502	0.262	223			0.213	0.018	0.590	0.608	0.0038
DOC_S_Sump	6/6/2020 12:30	XX0128	M	C039138	11.5	3610	2040	210	172	59.0	313	279	<1.0	41.0	83.2	135	0.402	2.04	921			0.590	0.600	0.453	1.05	<0.0030
DOC-DOP	8/19/2020 12:15	YH3195	M	C059023	8.08	227	120	24.6	103	96.0	80.4	<1.0	98.1	<1.0	<1.0	1.86	0.052	<0.010	31.7			<0.015	<0.010	0.063	0.063	<0.0030
DOC-DOP	9/5/2020 10:10	YK1342	M	C064288	7.50	222	146	46.1	102	92.4	84.9	<1.0	104	<1.0	<1.0	1.88	0.060	0.015	31.0			0.023	0.0192	0.073	0.092	<0.0030
DOC-DOP	9/11/2020 9:00	YK8184	M	C065706	8.21	223	130	78.4	115	102	89.7	<1.0	109	<1.0	<1.0	1.67	0.059	0.016	27.9			<0.015	<0.010	0.049	0.049	0.0051
DOC-DOP	9/11/2020 9:10	YK8185	D	C065706	8.24	223	153	80.1	111	99.9	88.0	<1.0	107	<1.0	<1.0	1.48	0.060	0.013	28.4			<0.015	<0.010	0.052	0.052	0.0050
DOC-DOP	9/21/2020 16:20	YM6396	M	C068837	7.53	200	168	22.0	102	98.2	90.0	<1.0	110	<1.0	<1.0	1.18	<0.050	<0.010	18.3			0.038	<0.010	0.056	0.056	<0.0030
DOC-DOP	9/23/2020 15:55	YN0388	M	C069533	7.67	204	183	88.7	107	98.5	101	<1.0	124	<1.0	<1.0	1.42	<0.050	<0.010	18.7			<0.015	<0.010	0.056	0.056	<0.0030
DOC-DOP	9/27/2020 12:55	YN7526	M	C070629	7.60	198	96	28.6	107	104	93.5	<1.0	114	<1.0	<1.0	1.22	<0.050	<0.010	15.8			<0.015	<0.010	0.022	0.022	<0.0030
DOC-DOP	10/2/2020 12:10	YO6600	M	C072223	6.83	219	120	13.6	107	106	133	<1.0	162	<1.0	<1.0	0.53	0.054	<0.010	20.1			<0.015	<0.010	0.040	0.040	<0.0030
DOC-DOP	10/9/2020 11:00	YQ0194	M	C074387	7.48	196	120	7.4	92.4	93.7	79.2	<1.0	96.6	<1.0	<1.0	0.60	0.056	<0.010	16.7			<0.015	<0.010	0.017	0.017	<0.0030
DOP_BT_East	1/8/2020 15:40	XF3045	M	C001783	8.05	4040	3250	68.4	1060	1060	459	<1.0	560	<1.0	<1.0	75.3	0.517	1.09	1680			0.236	0.016	1.27	1.28	0.0032
DOP-Seep	8/12/2020 13:00	YG4638	M	C057419	8.59	7640	5870	211	772	638	372	16.6	414	19.9	<1.0	266	0.911	4.46	3660			0.610	0.612	0.618	1.23	0.0049
East-Buffer-Creek	4/28/2020 17:15	XS1882	M	C029097	4.18	2030	1590	19.1	668	726	<1.0	<1.0	<1.0	<1.0	<1.0	4.77	0.933	0.267	1100			0.672	<0.010	0.077	0.077	<0.0030
GC-Debris-US	5/7/2020 15:00	XT2582	M	C031444				19800																		
GC-Debris-US	5/28/2020 17:15	XV7333	M	C036873				6400																		
GC-Debris-US	6/2/2020 14:00	XW3136	M	C037913				2050																		
GC-Debris-US	6/18/2020 12:30	XY6291	M	C042383				23800																		
GC-Debris-US	7/11/2020 18:00	YB7197	M	C048486				3380																		
GC-Debris-US	8/1/2020 13:15	YE6671	M	C054219				1390																		
GC-Debris-US	8/22/2020 14:45	YI0133	M	C060262				878																		
GC-Debris-US	9/13/2020 16:30	YL1417	M	C066239				187																		
GC-Debris-US	10/4/2020 13:20	YP0011	M	C072767			1280	4.5															<0.010	<0.010	<0.010	
GC-Debris-US	11/1/2020 14:50	YU1491	M	C081010				968																		
L3-DC-DS	4/19/2020 17:35	XR2522	M	C026927				135																		
L3-DC-DS	6/18/2020 17:30	XY6289	M	C042383				61.8																		
L3-DC-US	4/19/2020 17:30	XR2521	M	C026927				130																		
L3-DC-US	6/18/2020 18:00	XY6292	M	C042383				26.4																		
LBCD_Trench	4/20/2020 15:20	XR3419	M	C027096	9.28	3220	2180	27.7	133	115	129	20.5	108	24.6	<1.0	196	0.637	3.47	1100			1.61	0.075	0.296	0.371	0.0037
LBCD-Sump-BT	1/4/2020 13:00	XE9882	M	C000877	7.95	979	642	1.9	447	412	190	<1.0	232	<1.0	<1.0	39.8	0.057	0.604	260			0.072	<0.010	0.080	0.080	0.0031
LBCD-Sump-BT	1/7/2020 15:40	XF1935	M	C001464	7.99	971	664	1.8	415	410	191	<1.0	233	<1.0	<1.0	35.2	<0.050	0.584	269			0.036	<0.010	0.086	0.086	<0.0030
LBCD-Sump-BT	1/14/2020 13:35	XF8103	M	C002891	7.93	911	597	1.1	371	389	201	<1.0	246	<1.0	<1.0	38.4	<0.050	0.568	214			0.015	0.012	0.118	0.130	<0.0030
LBCD-Sump-BT	1/22/2020 14:00	XG7455	M	C004860	8.07	862	524	1.7	354	342	220	<1.0	268	<1.0	<1.0	35.1	0.055	0.553	189			0.020	<0.010	0.143	0.143	<0.0030
LBCD-Sump-BT	1/28/2020 14:40	XH5363	M	C006197	8.01	854	512	1.8	323	326	224	<1.0	273	<1.0	<1.0	33.9	0.050	0.509	177			0.018	<0.010	0.068	0.068	<0.0030
LBCD-Sump-BT	2/5/2020 14:45	XI6890	M	C008469	7.93	856	466	<1.0	328	339	214	<1.0	261	<1.0	<1.0	33.7	0.051	0.477	185			0.017	0.012	0.126	0.138	0.0040
LBCD-Sump-BT	2/11/2020 12:30	XJ6275	M	C010122	7.95	787	496	3.3	315	313	205	<1.0	250	<1.0	<1.0	29.9	<0.050	0.424	185			0.022	<0.010	0.148	0.148	<0.0030

Appendix 3-C: 2020 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
					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
LBCD-Sump-BT	2/14/2020 9:50	XJ9481	M	C010793	8.10	2020	1420	2.0	627	615	336	<1.0	410	<1.0	<1.0	53.8	0.090	0.850	721			0.696	<0.010	0.131	0.131	0.0041
LBCD-Sump-BT	2/18/2020 14:20	XK4686	M	C011881	7.90	1040	676	1.5	386	378	224	<1.0	274	<1.0	<1.0	41.1	0.083	0.684	270			0.117	<0.010	0.053	0.053	<0.0030
LBCD-Sump-BT	2/25/2020 13:40	XL5027	M	C014003	8.19	954	617	3.4	361	367	206	<1.0	251	<1.0	<1.0	41.8	0.061	0.579	228			0.070	0.011	0.097	0.108	<0.0030
LBCD-Sump-BT	3/5/2020 16:20	XN0423	M	C017276	8.16	898	550	19.6	313	291	167	<1.0	204	<1.0	<1.0	39.8	0.080	0.534	213			0.366	0.021	0.172	0.193	<0.0030
LBCD-Sump-BT	3/11/2020 14:55	XN7894	M	C018851	8.27	865	548	14.5	307	306	175	<1.0	213	<1.0	<1.0	37.0	0.100	0.506	202			0.245	0.014	0.159	0.174	<0.0030
LBCD-Sump-BT	3/17/2020 13:45	XO3911	M	C020169	8.03	991	622	1.3	337	354	210	<1.0	256	<1.0	<1.0	47.0	0.102	0.704	215			0.191	<0.010	0.096	0.096	<0.0030
LBCD-Sump-BT	3/27/2020 13:00	XP2506	M	C022160	8.12	721	432	<1.0	293	284	206	<1.0	251	<1.0	<1.0	18.6	0.067	0.290	150			0.031	<0.010	0.169	0.169	<0.0030
LBCD-Sump-BT	3/31/2020 13:15	XP6327	M	C023153	8.10	736	444	2.9	278	277	201	<1.0	246	<1.0	<1.0	27.2	0.078	0.368	155			0.052	0.015	0.084	0.098	<0.0030
LBCD-Sump-BT	4/10/2020 13:05	XQ5871	M	C025257	9.08	985	595	53.1	113	85.4	92.4	10.4	87.3	12.5	<1.0	40.3	0.119	0.685	286			0.676	0.033	0.174	0.207	<0.0030
LBCD-Sump-BT	4/15/2020 14:55	XQ9342	M	C026226	9.52	821	567	46.5	59.3	57.0	82.7	19.8	52.6	23.7	<1.0	38.0	0.126	0.609	236			0.651	0.034	0.140	0.174	<0.0030
LBCD-Sump-BT	4/29/2020 13:05	XS3521	M	C029452	8.72	2570	1670	15.5	159	150	190	9.6	208	11.5	<1.0	180	0.614	2.79	880			0.355	0.116	0.688	0.804	0.0039
LBCD-Sump-BT	5/7/2020 14:00	XT2578	M	C031444	8.40	2300	1430	114	233	184	227	3.2	269	3.9	<1.0	177	0.481	2.67	653			0.812	0.055	0.762	0.816	<0.0030
LBCD-Sump-BT	5/19/2020 14:35	XU3586	M	C033944	8.82	3890	2600	65.3	206	147	324	20.6	344	24.7	<1.0	250	0.701	4.12	1110			1.33	0.194	0.700	0.894	<0.0030
LBCD-Sump-BT	5/30/2020 17:30	XV8358	M	C037043	7.40	1340	792	16.5	163	166	315	<1.0	384	<1.0	<1.0	79.9	0.367	1.62	236			0.019	0.056	0.471	0.527	0.0032
LBCD-Sump-BT	6/13/2020 15:30	XX9602	M	C040986	7.13	2350	1500	17.6	345	354	289	<1.0	353	<1.0	<1.0	110	0.342	1.72	801			0.935	0.176	1.01	1.19	<0.0030
LBCD-Sump-BT	6/20/2020 13:00	XY9025	M	C042884	8.39	1850	1320	10.7	364	346	138	2.0	164	2.4	<1.0	33.6	0.426	0.644	766			0.194	0.186	1.89	2.07	0.0034
LBCD-Sump-BT	6/27/2020 19:45	XZ9073	M	C044897	8.15	1140	786	8.9	453	428	186	<1.0	227	<1.0	<1.0	24.3	0.138	0.433	375			0.163	0.014	0.597	0.612	<0.0030
LBCD-Sump-BT	6/30/2020 15:45	YA2742	M	C045692	6.53	4670	3460	347	645	649	200	<1.0	244	<1.0	<1.0	134	1.54	2.23	2170			1.81	0.494	4.86	5.36	0.0042
LBCD-Sump-BT	8/1/2020 13:00	YE6669	M	C054219	8.13	2120	1580	1.6	518	498	135	<1.0	164	<1.0	<1.0	43.7	0.750	0.815	957			0.149	0.0799	1.38	1.46	<0.0030
LBCD-Sump-BT	11/4/2020 11:30	YU7149	M	C082156	8.34	1740	1150	15.0	204	198	149	1.6	178	1.9	<1.0	83.2	0.241	0.948	691			0.725	0.220	0.927	1.15	<0.0030
LBCD-Sump-BT	11/10/2020 10:40	YV4534	M	C083245	7.70	2030	1380	98.4	551	495	259	<1.0	316	<1.0	<1.0	60.6	0.157	0.624	740			0.584	0.099	0.508	0.608	<0.0030
LBCD-Sump-BT	11/25/2020 11:30	YY0220	M	C087472	7.98	1430	1070	1.6	598	600	362	<1.0	442	<1.0	<1.0	16.6	0.071	0.248	476			0.062	<0.010	0.225	0.225	0.0030
LBEX_B1	2/23/2020 14:00	XL1346	M	C013192	7.79	853	553	16.3	383	372	202	<1.0	246	<1.0	<1.0	2.38	0.221	0.089	230			0.358	0.041	1.96	2.00	<0.0030
LBEX_B1	4/8/2020 15:40	XQ4593	M	C024938	8.09	840	596	7440	808	396	123	<1.0	150	<1.0	<1.0	4.66	0.283	0.088	291			1.03	0.040	5.02	5.06	<0.0030
LBEX_B1	5/14/2020 14:10	XU0102	M	C033161	8.22	1540	1040	47.0	589	577	433	<1.0	529	<1.0	<1.0	10.1	0.363	0.194	414			<0.015	<0.010	<0.010	<0.014	<0.0030
LBEX_B1	6/8/2020 16:45	XX1071	M	C039370	6.73	1840	1410	18000	2640	1010	136	<1.0	166	<1.0	<1.0	11.7	0.293	0.328	910			0.775	0.023	8.21	8.23	<0.0030
LBEX_B1	7/1/2020 16:10	YA2711	M	C045689	8.00	921	407	5920	494	426	110	<1.0	135	<1.0	<1.0	12.2	0.333	0.189	354			0.196	<0.010	1.98	1.98	0.0040
LBEX_B1	10/22/2020 14:15	YS3858	M	C078323	7.96	1640	1090	18.5	695	747	530	<1.0	647	<1.0	<1.0	10.6	0.424	0.124	363			0.062	<0.010	0.223	0.223	0.0064
LBEX_Bench_0	5/19/2020 16:30	XU3832	M	C034012	8.09	2680	2070	11.3	1100	1100	391	<1.0	478	<1.0	<1.0	6.79	0.627	0.363	1120			0.459	0.037	0.489	0.526	<0.0030
LBGC-OUT	3/2/2020 20:20	XM6323	M	C016408				52.5																		
LBGC-OUT	3/3/2020 13:00	XM6550	M	C016468				11.2																		
LBGC-OUT	3/4/2020 17:30	XM7999	M	C016826				9.8																		
LBGC-OUT	3/5/2020 16:40	XN0422	M	C017276				12.9																		
LBGC-OUT	3/26/2020 18:00	XP2435	M	C022151				1680																		
LBGC-OUT	3/27/2020 0:45	XP2507	M	C022160				305																		
LBGC-OUT	4/19/2020 17:00	XR2520	M	C026927				13700																		
LBGC-OUT	5/4/2020 15:20	XS8358	M	C030506				24100																		
LBGC-OUT	5/5/2020 13:45	XT0144	M	C030949				22000																		
LBGC-OUT	5/6/2020 17:00	XT1607	M	C031246				14500																		
LBGC-OUT	5/7/2020 14:30	XT2581	M	C031444				15200																		
LBGC-OUT	5/8/2020 12:30	XT2573	M	C031442				16700																		
LBGC-OUT	5/9/2020 15:00	XT4492	M	C031859				17100																		
LBGC-OUT	5/10/2020 16:10	XT4531	M	C031867				7890																		
LBGC-OUT	5/11/2020 13:30	XT5202	M	C032074				13700																		
LBGC-OUT	5/18/2020 14:15	XU2595	M	C033718				8110															<0.010	0.467	0.467	
LBGC-OUT	5/28/2020 16:45	XV7332	M	C036873				6480																		
LBGC-OUT	6/2/2020 13:50	XW3135	M	C037913				2570																		
LBGC-OUT	6/18/2020 12:10	XY6290	M	C042383				21700																		
LBGC-OUT	7/11/2020 17:45	YB7196	M	C048486				3710																		
LBGC-OUT	8/1/2020 13:05	YE6670	M	C054219				1070																		
LBGC-OUT	8/22/2020 14:30	YI0132	M	C060262				270																		
LBGC-OUT	9/13/2020 16:20	YL1416	M	C066239				26.8																		
LBGC-OUT	10/4/2020 13:30	YP0010	M	C072767			1350	2.0															<0.010	<0.010	<0.010	
LBGC-OUT	11/1/2020 15:10	YU1492	M	C081010				82.9																		
LBL3C-1.65	3/26/2020 18:30	XP2436	M	C022151				1010																		
Mustard-Creek	8/10/2020 13:35	YG0107	M	C056587	7.45	900	604	5.4	325	319	104	<1.0	127	<1.0	<1.0	3.10	0.463	0.100	334			0.108	<0.010	<0.010	<0.014	0.0145
PR_DIC	8/13/2020 19:50	YG7226	M	C057822	7.66	187	211	23.5	99.6	92.3	77.7	<1.0	94.8	<1.0	<1.0	0.66	<0.050	<0.010	15.4			<0.015	<0.010	0.067	0.067	<0.0030
PR_DIC	8/14/2020 9:50	YG7191	M	C057817	7.92	186	95	18.8	97.0	91.7	83.3	<1.0	102	<1.0	<1.0	<0.50	<0.050	<0.010	14.9			<0.015	<0.010	0.065	0.065	<0.0030
PR_DIC	8/15/2020 10:15	YH0056	M	C058356	7.87	185	97	21.0	93.9	91.2	80.4	<1.0	98.1	<1.0	<1.0	0.94	<0.050	<0.010	14.9			<0.015	<0.010	0.063	0.063	<0.0030
PR_DIC	8/28/2020 15:40	YI9495	M	C062013	7.63	187	104	18.0	97.9	99.8	82.5	<1.0	101	<1.0	<1.0	0.63	<0.050	<0.010	15.2			<0.015	<0.0050	0.063	0.063	<0.0030
PR_DIC	8/29/2020 12:50	YJ1741	M	C062465	8.17	192	128	11.5	93.2	94.2	80.4	<1.0	98.1	<1.0	<1.0	0.54	<0.050	<0.010	14.2			<0.015	<0.010	0.050	0.050	<0.0030
PR_DIC_DS	9/21/2020 18:15	YM6400	M	C068837	7.50	199	172	26.9	100	96.8	88.9	<1.0	108	<1.0	<1.0	1.24	<0.050	<0.010	18.0			<0.015	<0.010	0.051	0.051	0.0035
PR_DIC_DS	9/27/2020 12:05	YN7524	M	C070629	7.70	197	76	13.3	99.7	103	91.6	<1.0	112	<1.0	<1.0	<0.50	<0.050	<0.010	17.3			<0.015	<0.010	0.018	0.018	<0.0030
PR_DIC_DS	10/2/2020 9:40	YO6598	M	C072223	6.81	219	124	9.3	107	106	123	<1.0	150	<1.0	<1.0	0.74	0.053	<0.010	20.2			<0.015	<0.010	0.033	0.033	<0.0030
PR_DIC_US	9/21/2020 17:45	YM6399	M	C068837	7.51	199	184	101	104	99.2	90.1	<1.0	110	<1.0	<1.0	0.99	<0.050	<0.010	17.9			<0.015	<0.010	0.053	0.053	<0.0030
PR_DIC_US	9/27/2020 11:10	YN7522	M	C070629	7.60	198	120	8.5	101	103	94.3	<1.0	115	<1.0	<1.0	0.66	<0.050	<0.010	17.9			<0.015	<0.010	0.022	0.022	<0.0030
PR_DIC_US	10/2/2020 9:50	YO6599	M	C072223	6.94	222	120	8.8	105	106	133	<1.0	162	<1.0	<1.0	0.85	0.052	<0.010	20.5			<0.015	<0.010	0.037	0.037	<0.0030
PR_DOC	8/14/2020 16:45	YG8152	M	C057967	7.71	178	116	84.0	100	90.4	79.8	<1.0	97.4	<1.0	<1.0	0.61	<0.050	<0.010	13.6			<0.015	<0.0050	0.065	0.065	<0.0030
PR_DOC	8/15/2020 10:55	YH0057	M	C058356	7.89	184	90	123	100	90.5	81.4	<1.0	99.4	<1.0	<1.0	0.73	<0.050	<0.010	15.0			<0.015	<0.010	0.060	0.060	<0.0030

Appendix 3-C: 2020 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
					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
PR_DOC	8/16/2020 12:15	YH0174	M	C058389	7.93	186	104	51.8	98.2	92.5	80.0	<1.0	97.6	<1.0	<1.0	0.61	<0.050	<0.010	15.6			<0.015	<0.010	0.060	0.060	0.0051
PR_DOC	8/31/2020 16:10	YJ3637	M	C062857	8.19	190	136	13.7	97.8	92.5	80.5	<1.0	98.2	<1.0	<1.0	<0.50	<0.050	<0.010	15.1			0.025	<0.010	0.055	0.055	0.0038
PR_DOC	9/1/2020 14:30	YJ6692	M	C063433	8.23	193	107	9.3	90.4	92.4	78.1	<1.0	95.2	<1.0	<1.0	2.35	<0.050	<0.010	15.7			<0.015	<0.010	0.060	0.060	<0.0030
PR_DOC	9/5/2020 9:40	YK1341	M	C064288	7.38	194	94	22.8	99.2	92.2	84.9	<1.0	104	<1.0	<1.0	0.56	<0.050	<0.010	17.0			<0.015	<0.0050	0.068	0.068	<0.0030
PR_DOC	9/7/2020 9:10	YK2583	M	C064592	8.12	208	128	13.2	101	100	82.5	<1.0	101	<1.0	<1.0	0.57	<0.050	<0.010	17.6			<0.015	<0.010	0.053	0.053	<0.0030
PR_DOC_DS	9/21/2020 16:05	YM6395	M	C068837	7.58	200	240	23.7	103	98.9	85.1	<1.0	104	<1.0	<1.0	1.22	<0.050	<0.010	18.1			<0.015	<0.010	0.050	0.050	<0.0030
PR_DOC_DS	9/27/2020 13:15	YN7527	M	C070629	7.68	198	52	25.1	102	102	102	<1.0	125	<1.0	<1.0	0.85	<0.050	<0.010	17.7			<0.015	<0.010	0.019	0.019	<0.0030
PR_DOC_DS	10/2/2020 9:20	YO6596	M	C072223	6.63	219	108	19.0	105	106	123	<1.0	150	<1.0	<1.0	0.69	0.053	<0.010	17.7			<0.015	<0.010	0.041	0.041	<0.0030
PR_DOC_US	9/21/2020 16:50	YM6397	M	C068837	7.55	199	204	57.1	108	99.9	100	<1.0	122	<1.0	<1.0	1.14	<0.050	<0.010	18.1			0.021	<0.010	0.048	0.048	<0.0030
PR_DOC_US	9/27/2020 12:30	YN7525	M	C070629	7.58	196	100	18.9	103	101	92.9	<1.0	113	<1.0	<1.0	0.66	<0.050	<0.010	17.4			<0.015	<0.010	0.022	0.022	<0.0030
PR_DOC_US	10/2/2020 9:30	YO6597	M	C072223	6.74	220	96	14.6	110	106	152	<1.0	185	<1.0	<1.0	0.94	0.053	<0.010	20.4			<0.015	<0.010	0.040	0.040	<0.0030
QAQC_Curing_Tanks	1/10/2020 11:10	XF5146	M	C002216	9.39	4070		6.4	25.0	23.9	1410	227	1170	272	<1.0	27.9	<0.050	2.04	502			0.034	0.0231	23.0	23.0	0.0381
QAQC_Curing_Tanks	2/17/2020 14:00	XK3292	M	C011572	9.32	4570	3130	6.9	35.3	27.1	1590	258	1310	310	<1.0	35.6	1.36	2.42	531			<0.015				0.0099
QAQC_Curing_Tanks	3/28/2020 12:30	XP3715	M	C022531	9.02	1420	874	3.7	39.6	35.8	450	35.3	463	42.4	<1.0	10.8	0.673	0.731	191			0.021	0.017	6.66	6.68	0.0032
QAQC_Curing_Tanks	5/10/2020 15:20	XT4530	M	C031867	9.16	2240	1390	2.9	44.4	40.3	745	91.6	685	110	<1.0	25.4	0.803	0.880	180			0.019	0.026	14.4	14.4	0.0032
QAQC_Sink	1/10/2020 11:00	XF5145	M	C002216	8.06	368		2.8	187	206	146	<1.0	178	<1.0	<1.0	2.04	0.590	<0.010	37.8			0.022	<0.0050	0.024	0.024	<0.0030
QAQC_Sink	2/17/2020 13:40	XK3291	M	C011572	7.12	389	224	<1.0	198	194	160	<1.0	195	<1.0	<1.0	3.03	0.493	<0.010	47.4			<0.015				<0.0030
QAQC_Sink	3/28/2020 12:20	XP3714	M	C022531	8.01	372	210	1.6	184	185	147	<1.0	180	<1.0	<1.0	2.16	0.535	<0.010	43.3			0.016	<0.010	0.033	0.033	0.0033
QAQC_Sink	5/10/2020 15:10	XT4529	M	C031867	8.09	424	232	<1.0	217	224	161	<1.0	197	<1.0	<1.0	2.87	0.646	<0.010	78.2			<0.015	<0.010	0.029	0.029	<0.0030
RBAC-SUMP	5/11/2020 10:30	XT5199	M	C032074	8.14	2730	1980	130	779	804	230	<1.0	281	<1.0	<1.0	57.4	1.40	0.718	1140			1.10	0.029	0.991	1.02	<0.0030
RBAC-SUMP	11/24/2020 14:30	YX7836	M	C087146	8.04	1170	800	3.5	198	218	390	<1.0	476	<1.0	<1.0	49.8	0.351	<0.010	179			0.119	0.010	1.01	1.02	0.0177
RB-Core-Trench-Sump	6/13/2020 13:15	XX9597	M	C040986	9.10	1840	1390	377	107	30.5	248	27.6	235	33.2	<1.0	113	0.676	1.89	501			0.719	0.512	2.08	2.59	0.0295
RB-Core-Trench-Sump	6/20/2020 15:10	XY9031	M	C042884	9.06	2370	1660	1150	110	24.1	364	37.1	353	44.5	<1.0	143	1.04	2.19	583			1.58	0.913	3.12	4.03	0.0174
RB-R5B-ACDC	1/8/2020 12:15	XF3039	M	C001783	7.97	934	552	2.6	476	478	335	<1.0	409	<1.0	<1.0	29.5	0.137	0.237	143			0.025	<0.010	0.974	0.974	0.0089
RB-R5B-ACDC	2/5/2020 12:00	XI6884	M	C008469	7.93	921	482	3.2	440	417	318	<1.0	388	<1.0	<1.0	34.8	0.129	0.297	129			<0.015	<0.010	1.09	1.09	0.0039
RB-R5B-ACDC	3/9/2020 13:15	XN3893	M	C018020	8.01	912	533	42.8	409	399	297	<1.0	363	<1.0	<1.0	33.2	0.129	0.272	145			0.032	<0.010	1.00	1.00	<0.0030
RB-R5B-ACDC	4/2/2020 11:40	XP7674	M	C023465	8.14	823	461	5.5	476	358	287	<1.0	350	<1.0	<1.0	32.2	0.103	0.331	114			0.048	<0.010	1.22	1.22	<0.0030
RB-R5B-ACDC	5/9/2020 12:00	XT4487	M	C031859	8.14	951	589	1.5	442	483	291	<1.0	355	<1.0	<1.0	18.4	0.150	0.213	178			0.017	<0.010	0.915	0.915	<0.0030
RB-R5B-ACDC	6/5/2020 14:40	XW9907	M	C039108	7.89	844	752	2.1	428	394	289	<1.0	352	<1.0	<1.0	15.4	0.148	0.153	164			<0.015	<0.010	0.922	0.922	<0.0030
RB-R5B-ACDC	7/2/2020 15:40	YA4187	M	C045984	8.06	748	420	810	387	358	191	<1.0	233	<1.0	<1.0	17.4	0.311	0.309	171			0.030	<0.010	0.841	0.841	0.0032
RB-R5B-ACDC	7/10/2020 11:00	YB4120	M	C047917	8.15	763	456	4.0	385	370	250	<1.0	306	<1.0	<1.0	23.9	0.161	0.331	121			0.025	<0.010	0.905	0.905	<0.0030
RB-R5B-ACDC	7/15/2020 10:50	YC2135	M	C049614	8.13	807	481	17.4	389	371	265	<1.0	323	<1.0	<1.0	26.6	0.185	0.378	110			0.058	<0.010	0.977	0.977	<0.0030
RB-R5B-ACDC	7/21/2020 14:55	YD0799	M	C051251	7.94	766	469	717	507	366	233	<1.0	284	<1.0	<1.0	28.7	0.214	0.402	125			0.130	0.011	0.845	0.856	0.0070
RB-R5B-ACDC	9/2/2020 14:45	YJ7832	M	C063666	8.03	770	460	<1.0	342	359	254	<1.0	310	<1.0	<1.0	25.1	0.191	0.293	117			0.064	<0.010	0.717	0.717	<0.0030
RCC-NE-Sump-BT	1/4/2020 15:15	XE9886	M	C000877	7.48	1400	800	28.6	248	218	364	<1.0	444	<1.0	<1.0	101	0.343	1.92	182			0.212	0.022	0.226	0.248	0.0037
RCC-NE-Sump-BT	1/7/2020 14:15	XF1933	M	C001464	8.47	947	564	41.7	122	102	195	4.4	227	5.3	<1.0	93.9	0.262	1.50	138			0.083	0.017	0.113	0.130	0.0034
RCC-NE-Sump-BT	1/14/2020 12:20	XF8101	M	C002891	8.16	1120	647	14.0	184	179	308	<1.0	375	<1.0	<1.0	73.3	0.321	1.32	156			0.154	<0.010	0.170	0.170	0.0057
RCC-NE-Sump-BT	1/24/2020 10:30	XG9571	M	C005174	8.38	1180	747	5.9	173	177	325	2.9	389	3.5	<1.0	78.4	0.340	1.46	182			0.157	0.019	0.185	0.204	<0.0030
RCC-NE-Sump-BT	1/28/2020 13:30	XH5361	M	C006197	7.33	1370	750	9.8	200	197	392	<1.0	478	<1.0	<1.0	88.3	0.321	1.58	186			0.243	0.011	0.161	0.172	<0.0030
RCC-NE-Sump-BT	2/5/2020 13:35	XI6888	M	C008469	7.02	1420	716	9.9	185	185	349	<1.0	425	<1.0	<1.0	96.1	0.377	1.76	206			0.289	0.018	0.250	0.267	0.0046
RCC-NE-Sump-BT	2/11/2020 14:00	XJ6274	M	C010122	7.37	1240	739	158	188	178	329	<1.0	402	<1.0	<1.0	89.8	0.325	1.56	194			0.251	0.037	0.188	0.225	0.0115
RCC-NE-Sump-BT	2/18/2020 13:15	XK4685	M	C011881	6.93	1150	680	36.9	149	151	303	<1.0	369	<1.0	<1.0	86.0	0.363	1.50	156			0.147	0.042	0.117	0.159	0.0055
RCC-NE-Sump-BT	2/25/2020 12:15	XL5025	M	C014003	7.38	1300	779	15.9	211	214	346	<1.0	423	<1.0	<1.0	77.1	0.319	1.38	190			0.255	0.022	0.255	0.276	<0.0030
RCC-NE-Sump-BT	3/4/2020 14:30	XM8006	M	C016829	7.57	1150	678	46.2	146	141	286	<1.0	349	<1.0	<1.0	79.7	0.353	1.62	168			0.426	0.064	0.242	0.306	0.0034
RCC-NE-Sump-BT	3/10/2020 11:50	XN6092	M	C018396	7.88	1040	613	10.3	183	172	281	<1.0	343	<1.0	<1.0	72.4	0.234	1.18	143			0.221	0.023	0.138	0.161	0.0034
RCC-NE-Sump-BT	3/17/2020 12:35	XO3909	M	C020169	7.50	1250	729	18.3	155	164	306	<1.0	374	<1.0	<1.0	88.3	0.410	1.48	180			0.314	0.011	0.151	0.162	0.0080
RCC-NE-Sump-BT	3/27/2020 0:20	XP2505	M	C022160	8.13	586	332	30.2	213	195	242	<1.0	296	<1.0	<1.0	12.6	0.485	0.208	53.0			0.150	<0.010	0.123	0.123	0.0068
RCC-NE-Sump-BT	3/31/2020 12:30	XP6326	M	C023153	8.07	634	363	2.1	241	234	264	<1.0	322	<1.0	<1.0	12.0	0.197	0.230	50.6			0.146	<0.010	0.102	0.102	0.0036
RCC-NE-Sump-BT	4/7/2020 12:30	XQ3416	M	C024753	8.11	643	455	12.4	227	225	270	<1.0	329	<1.0	<1.0	12.6	0.242	0.225	57.3			0.125	<0.010	0.090	0.090	0.0040
RCC-NE-Sump-BT	4/15/2020 13:40	XQ9340	M	C026226	8.31	931	545	478	218	156	238	<1.0	290	<1.0	<1.0	48.2	0.284	0.975	179			0.294	0.043	0.470	0.513	<0.0030
RCC-NE-Sump-BT	4/24/2020 11:55	XR7270	M	C028014	8.27	1350	812	43.3	188	186	301	<1.0	367	<1.0	<1.0	67.7	0.312	1.30	239			0.394	0.053	0.645	0.698	<0.0030
RCC-NE-Sump-BT	4/28/2020 13:15	XS2089	M	C029151	7.10	1270	782	14.9	152	153	283	<1.0	345	<1.0	<1.0	70.9	0.325	1.35	247			0.214	0.057	0.582	0.640	<0.0030
RCC-NE-Sump-BT	5/6/2020 16:50	XT1605	M	C031246	7.39	1230	771	26.9	192	174	278	<1.0	339	<1.0	<1.0	75.8	0.332	1.38	403			0.204	0.043	0.437	0.480	0.0314
RCC-NE-Sump-BT	5/13/2020 12:40	XT8152	M	C032775	8.34	1240	715	5.8	161	142	289	1.1	350	1.3	<1.0	73.8	0.367	1.39	145			0.095	0.034	0.428	0.462	<0.0030
RCC-NE-Sump-BT	5/19/2020 13:15	XU3583	M	C033944	8.15	1360	857	16.3	163	156	301	<1.0	367	<1.0	<1.0	98.4	0.354	1.71	221			0.175	0.055	0.524	0.579	<0.0030
RCC-NE-Sump-BT	5/30/2020 14:30	XV8355	M	C037043	8.22	2310	1490	9.9	310	266	296	<1.0	361	<1.0	<1.0	115	0.405	2.26	707			0.507	0.069	0.571	0.639	<0.0030
RCC-NE-Sump-BT	6/10/2020 13:50	XX4756	M	C040036	8.21	1380	848	83.6	117	94.9	282	<1.0	344	<1.0	<1.0	88.0	0.395	1.77	269			0.231	0.110	1.00	1.11	0.0092
RCC-NE-Sump-BT	6/20/2020 14:45	XY9029	M	C042884	6.93	923	600	2.9	282	274	234	<1.0	285	<1.0	<1.0	19.6	0.249	0.405	206			0.052	0.011	0.377	0.388	0.0037
RCC-NE-Sump-BT	6/25/2020 16:00	XZ5985	M	C044346	8.41	380	194	34.8	148	138	148	2.3	175	2.8	<1.0	6.31	0.153	0.129	42.2			0.036	<0.010	<0.010	<0.014	0.0079
RCC-NE-Sump-BT	6/30/2020 13:10	YA2737	M	C045692	6.80	723	423	34.4	214	207	232	<1.0	283	<1.0	<1.0	16.9	0.233	0.320	120			0.050	<0.010	0.182	0.182	0.0072
RCC-NE-Sump-BT	7/9/2020 15:10	YB4141	M	C047920	8.15	838	500	4.6	290	282	218	<1.0	266	<1.0	<1.0	17.9	0.243	0.339	193			0.041	<0.010	0.322	0.322	<0.0030
RCC-NE-Sump-BT	7/14/2020 13:00	YC1071	M	C049344	7.37	1010	672	210	207	190	204	<1.0	248	<1.0	<1.0	24.4	0.322	0.480	247			0.127	0.015	0.150	0.164	0.109
RCC-NE-Sump-BT	7/23/2020 14:50	YD4257	M	C051864	6.63	839	510	1.8	255	255	222	<1.0	271	<1.0	<1.0	17.0	0.187	0.292	177			0.034	<0.010	0.262	0.262	<0.0030
RCC-NE-Sump-BT	8/1/2020 12:00	YE6668	M	C054219	8.13	771	388	2.8	235	232	231	<1.0	282	<1.0	<1.0	16.2	0.230	0.507	173			0.016	0.0052	0.278	0.283	0.0033
RCC-NE-Sump-BT	8/13/2020 12:25	YG7259	M	C057823	8.24	768	555	4.5	225	198	213	<1.0	259	<1.0	<1.0	17.3	0.221	0.343	157			<0.015	<0.010	0.23	0.23	<0.0030
RCC-NE-Sump-BT	8/22/2020 12:00	YI0131	M	C060262	7.98	792	516	442	223	119	104	<1.0	126	<1.0	<1.0	30.6	0.272	0.717	198			0.051	0.21	0.28	0.49	0.0184
RCC-Zula-Ditch	4/7/2020 12:20	XQ3415	M	C024753	8.48	1220	832	77.4	171	144	276	5.7	323	6.8	<1.0	78.6	0.354	1.40	208			0.495	0.021	0.309	0.330	<0.0030
RCC-Zula-Ditch	4/23/2020 14:30	XR7183	M	C027994	8.40	1500	927	81.8	185	194	306	3.5	364	4.2	<1.0	87.8	0.372	1.63	293			0.402	0.061	0.750	0.810	<0.0030
RCC-Zula-Ditch	4/28/2020 12:55	XS2088	M	C029151	8.43	1430	906	32.2	163	140	283	4.0	336	4.8	<1.0	93.0	0.370	1.76	308			0.190	0.068	0.648	0.716	0.0031

Appendix 3-C: 2020 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
					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
RCC-Zula-Ditch	5/6/2020 16:10	XT1604	M	C031246	8.28	1390	862	104	258	132	274	<1.0	335	<1.0	<1.0	94.7	0.372	1.74	287			0.163	0.055	0.516	0.570	<0.0030
RCC-Zula-Ditch	5/13/2020 12:25	XT8151	M	C032775	8.48	1470	847	8.4	156	130	303	6.2	354	7.5	<1.0	100	0.376	1.82	195			0.117	0.049	0.475	0.524	<0.0030
RCC-Zula-Ditch	5/19/2020 12:55	XU3582	M	C033944	8.61	1550	969	37.8	174	125	298	9.7	340	11.6	<1.0	122	0.378	2.08	274			0.129	0.066	0.630	0.696	<0.0030
RSEM-L5E-EOP	4/13/2020 10:30	XQ5693	M	C025217	7.90	667	337	33.2	294	<0.50	96.0	<1.0	117	<1.0	<1.0	6.42	0.235	0.116	209			0.330	0.043	2.21	2.25	<0.0030
RSEM-L5E-EOP	4/14/2020 10:45	XQ8324	M	C025913	7.91	587	346	33.0	252	261	100	<1.0	122	<1.0	<1.0	5.43	0.207	0.091	169			0.287	0.036	1.71	1.74	<0.0030
RSEM-L5E-EOP	4/14/2020 10:55	XQ8325	D	C025913	7.85	583	366	41.3	254	250	101	<1.0	124	<1.0	<1.0	5.35	0.225	0.087	169			0.279	0.038	1.69	1.73	<0.0030
RSEM-L5E-EOP	4/15/2020 18:00	XQ9343	M	C026226	7.45	535	341	62.1	221	235						4.77	0.208	0.074	172			0.221	0.032	1.42	1.45	<0.0030
RSEM-L5E-EOP	4/16/2020 14:35	XR0410	M	C026516	7.80	511	318	41.1	203	229	94.9	<1.0	116	<1.0	<1.0	4.53	0.215	0.066	161			0.215	0.031	1.31	1.34	<0.0030
RSEM-L5E-EOP	4/17/2020 12:50	XR0399	M	C026514	7.82	490	310	48.1	220	209	93.0	<1.0	113	<1.0	<1.0	4.22	0.209	0.059	152			0.219	0.031	1.21	1.24	0.0036
RSEM-L5E-EOP	4/18/2020 13:10	XR2303	M	C026869	8.13	476	274	25.8	179	194	93.1	<1.0	114	<1.0	<1.0	4.25	0.218	0.048	141			0.195	0.027	1.09	1.12	0.0039
RSEM-L5E-EOP	4/19/2020 16:30	XR2518	M	C026927	7.98	472	291	40.6	198	187	94.7	<1.0	115	<1.0	<1.0	3.80	0.197	0.060	138			0.320	0.029	1.04	1.06	0.0035
RSEM-L5E-EOP	4/20/2020 14:20	XR3422	M	C027099	7.98	488	311	21.7	197	182	98.5	<1.0	120	<1.0	<1.0	4.58	0.182	0.048	146			0.217	0.028	0.982	1.01	<0.0030
RSEM-L5E-EOP	4/20/2020 14:30	XR3423	D	C027099	7.79	484	326	23.0	212	194	95.1	<1.0	116	<1.0	<1.0	4.58	0.184	0.048	146			0.215	0.028	0.986	1.01	<0.0030
RSEM-L5E-EOP	4/21/2020 13:10	XR4954	M	C027465	8.07	485	281	26.1	215	192	97.9	<1.0	119	<1.0	<1.0	4.69	0.191	0.058	145			0.194	0.027	0.981	1.01	<0.0030
RSEM-L5E-EOP	4/22/2020 13:50	XR6357	M	C027799	8.10	509	322	15.1	256	214	102	<1.0	125	<1.0	<1.0	4.74	0.189	0.074	145			0.180	0.024	0.936	0.960	<0.0030
RSEM-L5E-EOP	4/23/2020 11:40	XR7179	M	C027994	8.14	528	333	14.8	216	201	107	<1.0	130	<1.0	<1.0	4.52	0.186	0.076	176			0.181	0.026	0.937	0.963	<0.0030
RSEM-L5E-EOP	4/23/2020 11:50	XR7180	D	C027994	7.82	526	330	15.1	225	225	103	<1.0	126	<1.0	<1.0	4.53	0.209	0.074	152			0.167	0.025	0.940	0.965	<0.0030
RSEM-L5E-EOP	4/24/2020 13:30	XR7271	M	C028014	8.07	525	302	11.9	205	188	107	<1.0	131	<1.0	<1.0	4.84	0.214	0.073	153			0.164	0.025	0.929	0.954	<0.0030
RSEM-L5E-EOP	4/25/2020 13:30	XR8897	M	C028412	8.24	538	332	4.7	211	204	112	<1.0	136	<1.0	<1.0	4.83	0.184	0.138	144			0.118	0.021	0.903	0.924	<0.0030
RSEM-L5E-EOP	4/26/2020 14:15	XR8995	M	C028429	8.19	557	327	4.8	202	202	117	<1.0	142	<1.0	<1.0	5.15	0.205	0.081	172			0.106	0.022	0.938	0.960	<0.0030
RSEM-L5E-EOP	4/27/2020 9:55	XS0056	M	C028666	8.23	561	319	5.5	248	226	117	<1.0	142	<1.0	<1.0	5.63	0.212	0.063	157			0.098	0.022	0.941	0.963	<0.0030
RSEM-L5E-EOP	4/27/2020 10:05	XS0057	D	C028666	8.23	562	322	4.4	235	235	117	<1.0	142	<1.0	<1.0	5.59	0.197	0.065	154			0.024	0.030	0.934	0.964	<0.0030
RSEM-L5E-EOP	4/28/2020 15:05	XS2091	M	C029151	8.14	582	385	13.4	235	211	123	<1.0	150	<1.0	<1.0	5.04	0.224	0.061	184			<0.015	0.020	0.920	0.940	<0.0030
RSEM-L5E-EOP	4/29/2020 13:50	XS3522	M	C029452	7.78	598	375	14.7	233	259	128	<1.0	157	<1.0	<1.0	5.41	0.244	0.070	189			0.030	0.017	0.918	0.935	<0.0030
RSEM-L5E-EOP	4/30/2020 14:10	XS4885	M	C029734	8.04	634	394	4.6	253	225	135	<1.0	165	<1.0	<1.0	6.67	0.246	0.077	192			0.015	0.012	0.910	0.922	<0.0030
RSEM-L5E-EOP	5/1/2020 13:20	XS5999	M	C029956	8.32	628	392	4.7	265	256	136	<1.0	166	<1.0	<1.0	6.51	0.238	0.088	192			<0.015	0.018	0.820	0.838	<0.0030
RSEM-L5E-EOP	5/3/2020 9:15	XS7393	M	C030307	8.32	654	403	13.7	244	246	136	<1.0	165	<1.0	<1.0	6.68	0.241	0.110	184			0.035	0.022	0.685	0.707	<0.0030
RSEM-L5E-EOP	5/4/2020 15:30	XS8357	M	C030506	8.33	635	396	10.7	286	280	132	<1.0	162	<1.0	<1.0	6.74	0.245	0.098	183			<0.015	0.011	0.568	0.579	<0.0030
RSEM-L5E-EOP	5/5/2020 13:15	XT0142	M	C030949	8.21	649	429	7.3	290	300	132	<1.0	161	<1.0	<1.0	6.83	0.244	0.113	170			0.020	0.015	0.517	0.532	<0.0030
RSEM-L5E-EOP	5/6/2020 17:15	XT1606	M	C031246	8.07	679	465	7.7	318	305	131	<1.0	160	<1.0	<1.0	7.48	0.208	0.098	191			0.017	<0.010	0.389	0.389	<0.0030
RSEM-L5E-EOP	5/7/2020 14:35	XT2580	M	C031444	7.94	750	472	4.8	457	368	140	<1.0	171	<1.0	<1.0	8.58	0.177	0.123	225			0.018	<0.010	0.206	0.206	<0.0030
RSEM-L5E-EOP	5/8/2020 12:20	XT2571	M	C031442	7.94	737	479	4.6	358	352	132	<1.0	160	<1.0	<1.0	7.82	0.182	0.126	262			<0.015	<0.010	0.229	0.229	<0.0030
RSEM-L5E-EOP	5/9/2020 14:10	XT4491	M	C031859	8.10	797	510	15.3	345	372	138	<1.0	168	<1.0	<1.0	8.34	0.124	0.120	216			<0.015	<0.010	0.090	0.090	<0.0030
RSEM-L5E-EOP	5/10/2020 12:00	XT4526	M	C031867	8.17	822	544	7.1	413	411	141	<1.0	173	<1.0	<1.0	8.91	0.117	0.148	217			<0.015	<0.010	0.088	0.088	<0.0030
RSEM-L5E-EOP	5/11/2020 11:45	XT5201	M	C032074	8.31	883	596	4.8	440	481	147	<1.0	179	<1.0	<1.0	9.23	0.103	0.144	297			<0.015	<0.010	0.049	0.049	<0.0030
RSEM-L5E-EOP	5/12/2020 14:45	XT7073	M	C032509	8.03	889	622	11.4	504	521	147	<1.0	179	<1.0	<1.0	9.06	0.088	0.159	278			0.015	<0.010	0.022	0.022	<0.0030
RSEM-L5E-EOP	5/13/2020 14:45	XT8157	M	C032775	8.09	955	637	25.0	494	482	157	<1.0	192	<1.0	<1.0	8.81	0.069	0.115	255			0.046	<0.010	0.019	0.019	<0.0030
RSEM-L5E-EOP	5/14/2020 13:40	XU0101	M	C033161	8.09	928	664	9.4	477	485	157	<1.0	192	<1.0	<1.0	8.11	0.072	0.111	321			0.015	<0.010	0.011	<0.014	<0.0030
RSEM-L5E-EOP	5/15/2020 10:15	XU0133	M	C033173	8.15	917	618	7.9	481	488	156	<1.0	190	<1.0	<1.0	8.30	0.065	0.103	321			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-L5E-EOP	5/16/2020 14:40	XU2653	M	C033733	8.17	901	600	7.9	533	495	153	<1.0	187	<1.0	<1.0	8.39	0.063	0.112	316			0.026	<0.010	<0.010	<0.014	<0.0030
RSEM-L5E-EOP	5/17/2020 13:10	XU2519	M	C033704	8.22	899	548	1.4	526	487	152	<1.0	186	<1.0	<1.0	8.68	0.064	0.112	322			0.030	<0.010	<0.010	<0.014	<0.0030
RSEM-L5E-EOP	5/18/2020 14:35	XU2640	M	C033728	8.17	893	642	<1.0	534	478	149	<1.0	182	<1.0	<1.0	8.27	0.066	0.112	308			0.037	<0.010	0.018	0.018	<0.0030
RSEM-L5E-EOP	5/19/2020 15:30	XU3588	M	C033944	8.21	900	680	14.9	551	522	147	<1.0	179	<1.0	<1.0	9.34	0.066	0.110	317			0.042	<0.010	0.021	0.021	<0.0030
RSEM-L5E-EOP	5/20/2020 14:05	XU5561	M	C034306	8.19	901	600	2.4	429	439	147	<1.0	179	<1.0	<1.0	9.78	0.063	0.119	289			0.016	<0.010	<0.010	<0.014	<0.0030
RSEM-L5E-EOP	5/21/2020 16:00	XU7001	M	C034623	8.11	872	532	5.9	392	396	145	<1.0	177	<1.0	<1.0	8.58	0.073	0.108	311			0.177	<0.010	<0.010	<0.014	<0.0030
RSEM-L5E-EOP	5/22/2020 17:05	XU8404	M	C034984	8.15	873	597	3.9	402	396	143	<1.0	174	<1.0	<1.0	8.00	0.066	0.117	305			<0.015	<0.010	0.018	0.018	<0.0030
RSEM-L5E-EOP	5/23/2020 15:40	XU8589	M	C034993	8.09	875	598	3.5	433	408	141	<1.0	171	<1.0	<1.0	8.19	0.068	0.111	302			<0.015	<0.010	0.020	0.020	<0.0030
RSEM-L5E-EOP	5/24/2020 13:45	XU8649	M	C035010	8.08	872	859	5.7	427	401	138	<1.0	168	<1.0	<1.0	8.09	0.065	0.112	306			<0.015	<0.010	0.022	0.022	<0.0030
RSEM-L5E-EOP	6/9/2020 12:30	XX3622	M	C039793	6.93	1010	820	65.4	468	478	114	<1.0	139	<1.0	<1.0	16.7	0.191	0.206	389			0.119	0.017	1.60	1.62	<0.0030
RSEM-L5E-EOP	6/10/2020 11:55	XX4750	M	C040036	7.16	1020	744	12.1	491	469	126	<1.0	154	<1.0	<1.0	17.1	0.201	0.186	403			0.046	0.022	1.73	1.75	<0.0030
RSEM-L5E-EOP	6/10/2020 12:05	XX4751	D	C040036	6.91	1020	740	12.0	506	474	115	<1.0	140	<1.0	<1.0	17.1	0.203	0.190	411			0.063	0.023	1.72	1.74	<0.0030
RSEM-L5E-EOP	6/11/2020 14:35	XX7043	M	C040416	7.11	1020	700	6.1	467	495	130	<1.0	158	<1.0	<1.0	17.4	0.206	0.192	383			0.025	0.020	1.65	1.67	<0.0030
RSEM-L5E-EOP	6/12/2020 14:55	XX9584	M	C040980	7.37	1040	712	1.3	459	491	126	<1.0	154	<1.0	<1.0	17.2	0.218	0.188	412			0.034	0.026	1.71	1.74	<0.0030
RSEM-L5E-EOP	6/13/2020 16:15	XX9603	M	C040986	7.22	1030	530	4.8	466	472	130	<1.0	158	<1.0	<1.0	17.0	0.214	0.180	420			0.028	0.023	1.59	1.61	<0.0030
RSEM-L5E-EOP	6/14/2020 13:00	XX9643	M	C040993	7.20	1030	604	26.7	463	480	127	<1.0	156	<1.0	<1.0	18.7	0.220	0.195	411			0.037	0.029	1.58	1.61	<0.0030
RSEM-L5E-EOP	6/14/2020 13:10	XX9644	D	C040993	7.35	1040	538	24.7	456	484	129	<1.0	157	<1.0	<1.0	19.0	0.222	0.195	406			0.036	0.042	1.56	1.60	0.0030
RSEM-L5E-EOP	6/15/2020 19:45	XY1608	M	C041415	6.63	1340	989	20.5	640	658	108	<1.0	131	<1.0	<1.0	12.5	0.319	0.203	590			0.110	0.033	7.09	7.12	<0.0030
RSEM-L5E-EOP	6/16/2020 12:40	XY1512	M	C041388	6.71	1510	1210	5.6	781	786	111	<1.0	135	<1.0	<1.0	11.6	0.296	0.231	704			0.144	0.041	10.0	10.1	<0.0030
RSEM-L5E-EOP	6/17/2020 17:30	XY6281	M	C042380	7.74	1520	1150	6.3	724	740	103	<1.0	125	<1.0	<1.0	12.5	0.324	0.246	743			0.136	0.053	9.27	9.32	<0.0030
RSEM-L5E-EOP	6/18/2020 16:50	XY6288	M	C042383	7.93	1600	1240	11.8	798	734	102	<1.0	125	<1.0	<1.0	14.3	0.356	0.260	746			0.138	0.069	9.32	9.39	<0.0030
RSEM-L5E-EOP	6/19/2020 10:45	XY6267	M	C042375	8.00	1570	1180	16.3	670	673	110	<1.0	135	<1.0	<1.0	21.2	0.358	0.297	699			0.223	0.116	7.61	7.73	<0.0030
RSEM-L5E-EOP	6/20/2020 12:45	XY9024	M	C042884	7.98	1100	788	10.7	456	446	105	<1.0	128	<1.0	<1.0	18.2	0.309	0.231	435			0.068	0.109	4.85	4.96	0.0058
RSEM-L5E-EOP	6/21/2020 11:00	XY9117	M	C042904	8.02	876	636	14.5	360	362	109	<1.0	133	<1.0	<1.0	15.9	0.267	0.168	299			0.073	0.129	3.64	3.77	0.0045
RSEM-L5E-EOP	6/22/2020 17:10	XZ0409	M	C043197	8.15	857	608	15.7	368	362	110	<1.0	134	<1.0	<1.0	14.7	0.256	0.165	289			0.031	0.123	3.34	3.46	0.0030
RSEM-L5E-EOP	6/23/2020 17:30	XZ2253	M	C043604	8.19	878	588	12.9	364	377	116	<1.0	142	<1.0	<1.0	15.5	0.262	0.161	298			0.040	0.120	3.22	3.34	0.0032
RSEM-L5E-EOP	6/24/2020 11:40	XZ5346	M	C044267	8.04	953		8.1	399	392	119	<1.0	145	<1.0	<1.0	15.8	0.286	0.168	324			0.063	0.133	3.29	3.42	0.0033
RSEM-L5E-EOP	6/24/2020 11:50	XZ5347	D	C044267	8.20	958		7.7	397	399	122	<1.0	148	<1.0	<1.0	15.9	0.280	0.169	327			0.062	0.140	3.36	3.50	<0.0030
RSEM-L5E-EOP	6/25/2020 18:10	XZ5988	M	C044346	8.04	1160	761	15.2	477	472	120	<1.0	146	<1.0	<1.0	18.3	0.332	0.224	452			0.133	0.166	4.01	4.17	<0.0030
RSEM-L5E-EOP	7/2/2020 16:30	YA4192	M	C045985	8.05	1130	784	12.5	503	512	118	<1.0	144	<1.0	<1.0	12.3	0.320	0.192	459			0.027	0.079	2.73	2.81	0.0051

Appendix 3-C: 2020 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
					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
RSEM-L5E-EOP	7/3/2020 11:00	YA5151	M	C046179	7.84	928	704	111	450	444	94.4	<1.0	115	<1.0	<1.0	6.11	0.330	0.143	372			0.065	0.0276	3.67	3.69	<0.0030
RSEM-L5E-EOP	7/3/2020 11:10	YA5152	D	C046179	7.84	922	690	114	435	438	91.6	<1.0	112	<1.0	<1.0	5.86	0.340	0.133	310			0.058	0.0254	3.78	3.81	<0.0030
RSEM-L5E-EOP	7/4/2020 16:05	YA6737	M	C046470	7.83	1050	734	29.1	481	496	95.8	<1.0	117	<1.0	<1.0	5.44	0.346	0.142	435			0.128	0.033	6.53	6.56	0.0030
RSEM-L5E-EOP	7/5/2020 13:10	YA6922	M	C046500	7.89	1700	1280	22.7	639	648	101	<1.0	123	<1.0	<1.0	21.5	0.417	0.413	796			0.143	0.069	4.40	4.47	0.0030
RSEM-L5E-EOP	7/6/2020 13:25	YA8351	M	C046846	8.17	1600	1050	13.9	563	583	116	<1.0	142	<1.0	<1.0	20.2	0.409	1.10	721			0.176	0.093	3.50	3.59	<0.0030
RSEM-L5E-EOP	7/7/2020 16:20	YB0053	M	C047206	8.13	1690	1260	11.5	606	606	116	<1.0	141	<1.0	<1.0	23.5	0.407	0.451	757			0.079	0.130	3.71	3.84	<0.0030
RSEM-L5E-EOP	7/22/2020 12:30	YD2615	M	C051641	6.74	2190	1720	3.7	690	744	20.3	<1.0	24.8	<1.0	<1.0	36.7	0.251	0.714	1080			0.037	0.117	4.41	4.53	<0.0030
RSEM-L5E-EOP	7/22/2020 12:40	YD2616	D	C051641	6.79	2180	1710	3.3	746	714	22.7	<1.0	27.7	<1.0	<1.0	37.1	0.237	0.693	1090			0.024	0.117	4.43	4.55	<0.0030
RSEM-L5E-EOP	7/23/2020 11:05	YD4252	M	C051864	7.08	2250	1800	2.9	727	742	24.7	<1.0	30.1	<1.0	<1.0	38.4	0.207	0.717	1110			0.048	0.123	4.59	4.72	<0.0030
RSEM-L5E-EOP	7/23/2020 11:15	YD4253	D	C051864	6.95	2250	1780	<1.0	687	751	26.0	<1.0	31.7	<1.0	<1.0	38.6	0.204	0.718	1120			0.037	0.123	4.59	4.71	<0.0030
RSEM-L5E-EOP	7/24/2020 11:35	YD5907	M	C052038	6.93	2250	1830	5.2	740	754	25.8	<1.0	31.5	<1.0	<1.0	38.0	0.250	0.722	1280			0.019	0.111	4.54	4.65	<0.0030
RSEM-L5E-EOP	7/25/2020 10:30	YD7672	M	C052402	6.89	2290	1770	2.1	762	741	25.7	<1.0	31.3	<1.0	<1.0	38.6	0.219	0.726	1080			<0.015	0.104	4.30	4.40	<0.0030
RSEM-L5E-EOP	7/25/2020 10:40	YD7673	D	C052402	6.84	2290	1780	1.4	737	749	26.5	<1.0	32.4	<1.0	<1.0	38.5	0.201	0.714	1060			<0.015	0.104	4.29	4.40	<0.0030
RSEM-L5E-EOP	7/26/2020 11:05	YD7710	M	C052420	6.76	2300	1760	2.8	914	746	23.3	<1.0	28.5	<1.0	<1.0	38.8	0.201	0.715	1080			0.016	0.10	3.9	4.0	<0.0030
RSEM-L5E-EOP	7/27/2020 11:00	YD7770	M	C052432	6.42	2270	1750	5.3	787	739	21.8	<1.0	26.6	<1.0	<1.0	38.2	0.224	0.722	1120			0.020	0.096	3.4	3.5	0.0034
RSEM-L5E-EOP	7/29/2020 13:00	YE4005	M	C053695	7.13	2290	1760	2.7	723	746	24.1	<1.0	29.4	<1.0	<1.0	38.4	0.215	0.700	1170			0.032	0.079	3.40	3.48	0.0032
RSEM-L5E-EOP	7/30/2020 17:00	YE5559	M	C054021	7.00	2830	1840	8.3	800	780	25.9	<1.0	31.5	<1.0	<1.0	39.7	0.113	0.730	1180			0.028	0.095	3.66	3.76	<0.0030
RSEM-L5E-EOP	8/29/2020 13:25	YJ1742	M	C062465	8.21	1680	1400	16.8	794	788	82.9	<1.0	101	<1.0	<1.0	10.4	0.405	0.214	845			0.032	0.086	7.10	7.19	<0.0030
RSEM-L5E-EOP	8/30/2020 10:45	YJ1568	M	C062426	8.27	1690	1320	12.2	773	784	82.0	<1.0	100	<1.0	<1.0	11.1	0.409	0.209	865			0.030	0.094	7.0	7.1	<0.0030
RSEM-L5E-EOP	8/31/2020 11:45	YJ3636	M	C062857	8.17	1760	1380	13.3	823	827	85.5	<1.0	104	<1.0	<1.0	13.0	0.393	0.238	886			0.023	0.080	6.0	6.1	<0.0030
RSEM-L5E-EOP	9/1/2020 10:25	YJ6688	M	C063433	8.39	1820	1390	30.0	785	820	92.6	1.3	110	1.5	<1.0	16.1	0.362	0.255	906			0.037	0.068	5.10	5.17	0.0060
RSEM-L5E-EOP	9/2/2020 12:10	YJ7828	M	C063666	8.28	1830	1420	13.1	783	820	89.9	<1.0	110	<1.0	<1.0	16.7	0.373	0.13	883			0.054	0.072	4.97	5.04	<0.0030
RSEM-L5E-EOP	9/2/2020 12:20	YJ7829	D	C063666	8.25	1800	1440	12.3	788	815	88.6	<1.0	108	<1.0	<1.0	15.9	0.367	<0.10	882			0.053	0.070	4.94	5.01	<0.0030
RSEM-L5E-EOP	9/3/2020 13:35	YK0029	M	C064047	8.25	1830	1440	14.4	803	834	81.9	<1.0	99.9	<1.0	<1.0	16.8	0.357	0.14	896			0.024	0.071	4.70	4.77	<0.0030
RSEM-L5E-SP	2/29/2020 14:30	XM2365	M	C015500	7.87	703	465	13.5	325	322	83.5	<1.0	102	<1.0	<1.0	3.70	0.198	0.057	240			0.428	0.063	3.14	3.21	0.0044
RSEM-L5E-SP	5/2/2020 10:45	XS7459	M	C030328	8.26	627	404	5.4	246	229	133	<1.0	162	<1.0	<1.0	6.50	0.246	0.081	176			0.049	0.019	0.772	0.791	<0.0030
RSEM-L5E-SP	5/25/2020 10:30	XU8667	M	C035018	8.07	876	1070	2.8	337	404	136	<1.0	166	<1.0	<1.0	8.91	0.065	0.121	306			<0.015	<0.010	0.025	0.025	<0.0030
RSEM-L5E-SP	5/26/2020 16:30	XV2884	M	C035941	8.22	875	597	2.4	416	402	136	<1.0	165	<1.0	<1.0	7.96	0.074	0.113	307			0.019	<0.010	0.016	0.016	<0.0030
RSEM-L5E-SP	5/27/2020 14:30	XV4566	M	C036323	7.84	876	584	2.0	418	408	145	<1.0	176	<1.0	<1.0	7.82	0.076	0.117	304			0.028	<0.010	0.011	<0.014	<0.0030
RSEM-L5E-SP	5/30/2020 17:45	XV8357	M	C037043	7.70	873	600	3.8	411	406	137	<1.0	167	<1.0	<1.0	9.23	0.086	0.114	326			0.017	<0.010	<0.010	<0.014	<0.0030
RSEM-L5E-SP	7/21/2020 11:47	YC8397	M	C050753	7.11	2010	1580	10.2	681	684	26.2	<1.0	31.9	<1.0	<1.0	28.4	0.312	0.578	994			0.033	0.094	3.48	3.57	<0.0030
RSEM-L5E-SP	8/28/2020 16:20	YI9496	M	C062013	7.80	1670	1390	17.6	811	811	80.5	<1.0	98.2	<1.0	<1.0	9.98	0.420	0.208	791			<0.015	0.0919	7.43	7.53	<0.0030
RSEM-L5W-EOP	4/19/2020 16:45	XR2519	M	C026927	8.55	1030	675	16.4	172	157	78.0	2.8	88.3	3.4	<1.0	41.5	0.217	0.657	340			0.549	0.041	0.838	0.879	0.0032
RSEM-L5W-EOP	4/19/2020 19:30	XR3421	M	C027098	7.69	1120	688	16.1	172	168	87.0	<1.0	106	<1.0	<1.0	45.6	0.269	0.770	359			0.625	0.040	0.820	0.860	<0.0030
RSEM-L5W-EOP	7/4/2020 16:15	YA6738	M	C046470	7.93	1070	756	12.3	381	393	71.8	<1.0	87.6	<1.0	<1.0	7.35	0.313	0.194	458			<0.015	0.038	2.96	3.00	<0.0030
RSEM-L5W-EOP	7/5/2020 13:20	YA6923	M	C046500	8.02	1080	756	3.2	399	408	79.0	<1.0	96.4	<1.0	<1.0	7.63	0.310	0.190	463			<0.015	0.037	2.90	2.93	<0.0030
RSEM-L5W-EOP	7/7/2020 16:30	YB0054	M	C047206	8.08	1110	756	25.0	414	410	77.1	<1.0	94.0	<1.0	<1.0	7.73	0.303	0.198	475			0.016	0.043	2.76	2.80	<0.0030
RSEM-L5W-EOP	7/8/2020 16:00	YB2463	M	C047619	8.25	1130	760	24.7	421	430	81.2	<1.0	99.0	<1.0	<1.0	7.47	0.332	0.199	481			0.022	0.040	2.69	2.73	<0.0030
RSEM-L5W-SP	7/3/2020 11:20	YA5153	M	C046179	7.73	1230	904	40.0	416	438	72.2	<1.0	88.1	<1.0	<1.0	10.3	0.390	0.239	501			0.016	0.0460	3.76	3.80	<0.0030
RSEM-L6-EOP	6/17/2020 17:45	XY6278	M	C042380	7.84	881	498	3.8	307	309	51.4	<1.0	62.7	<1.0	<1.0	59.0	0.249	0.838	289			0.048	0.013	0.423	0.436	<0.0030
RSEM-L6-EOP	6/18/2020 13:00	XY6287	M	C042383	7.51	902	568	4.3	303	311	54.6	<1.0	66.6	<1.0	<1.0	59.5	0.256	0.821	289			0.028	0.017	0.463	0.481	<0.0030
RSEM-L6-EOP	6/19/2020 11:00	XY6268	M	C042375	8.01	930	596	2.0	320	317	55.6	<1.0	67.9	<1.0	<1.0	61.7	0.259	0.808	304			0.053	0.017	0.455	0.472	<0.0030
RSEM-L6-EOP	6/20/2020 13:40	XY9026	M	C042884	8.01	943	608	1.8	329	314	56.5	<1.0	68.9	<1.0	<1.0	65.0	0.268	0.820	309			0.022	0.018	0.480	0.498	<0.0030
RSEM-L6-EOP	6/21/2020 11:45	XY9121	M	C042904	8.04	997	672	3.0	331	333	63.8	<1.0	77.9	<1.0	<1.0	61.5	0.276	0.725	339			0.032	0.024	0.545	0.569	<0.0030
RSEM-L6-EOP	6/22/2020 16:30	XZ0406	M	C043197	8.06	1080	700	4.7	348	347	70.3	<1.0	85.7	<1.0	<1.0	61.0	0.277	0.808	372			0.049	0.035	0.591	0.626	<0.0030
RSEM-L6-EOP	6/23/2020 14:00	XZ2252	M	C043604	8.01	1120	676	3.3	354	369	74.3	<1.0	90.6	<1.0	<1.0	59.4	0.275	0.788	397			0.055	0.029	0.553	0.582	<0.0030
RSEM-L6-EOP	6/27/2020 19:15	XZ9070	M	C044897	8.01	1110	713	2.9	341	356	68.8	<1.0	83.9	<1.0	<1.0	57.9	0.316	0.820	388			0.025	0.017	0.387	0.405	<0.0030
RSEM-L6-EOP	6/27/2020 19:25	XZ9071	D	C044897	8.07	1090	675	3.6	347	355	68.1	<1.0	83.1	<1.0	<1.0	59.4	0.308	0.827	393			0.027	0.017	0.386	0.403	<0.0030
RSEM-L6-SP	5/29/2020 12:15	XV5617	M	C036525	6.63	857	552	<1.0	304	306	40.2	<1.0	49.1	<1.0	<1.0	64.9	0.223	0.744	283			0.122	<0.010	0.109	0.109	<0.0030
RSEM-L6-SP	6/16/2020 10:25	XY1503	M	C041388	6.40	849	526	4.6	311	312	53.8	<1.0	65.6	<1.0	<1.0	64.0	0.249	0.786	267			0.034	<0.010	0.326	0.326	<0.0030
RSEM-L6-SP	6/25/2020 17:30	XZ5987	M	C044346	8.03	1100	689	4.0	324	339	66.5	<1.0	81.1	<1.0	<1.0	59.0	0.292	0.812	406			0.035	0.020	0.428	0.448	<0.0030
RSEM-L6-SP	7/5/2020 9:25	YA6828	M	C046487	8.11	1280	872	2.7	341	355	94.8	<1.0	116	<1.0	<1.0	35.9	0.348	0.579	488			0.137	0.050	0.973	1.02	0.0044
RSEM-R5a-A-EOP	6/30/2020 11:55	YA2735	M	C045692	7.78	1110	713	6.1	173	175	122	<1.0	148	<1.0	<1.0	21.9	0.244	0.390	387			0.028	0.015	0.814	0.829	0.338
RSEM-R5a-A-EOP	7/4/2020 13:35	YA6734	M	C046470	8.03	1040	652	62.8	170	168	91.0	<1.0	111	<1.0	<1.0	16.1	0.247	0.343	367			0.093	0.043	1.62	1.66	0.0114
RSEM-R5a-A-EOP	7/5/2020 11:45	YA6921	M	C046500	8.18	1510	992	10.6	197	184	139	<1.0	169	<1.0	<1.0	30.7	0.264	0.561	544			0.280	0.094	2.34	2.43	0.0073
RSEM-R5A-A-SP	3/29/2020 13:50	XP3927	M	C022584	7.95	257	171	59.1	92.9	86.9	77.9	<1.0	95.1	<1.0	<1.0	3.52	0.122	0.052	44.8			0.043	0.034	0.583	0.617	0.0054
RSEM-R5A-A-SP	4/12/2020 11:25	XQ6089	M	C025305	7.98	243	142	62.5	106	102	72.5	<1.0	88.5	<1.0	<1.0	5.93	0.110	0.076	37.1			0.128	<0.010	0.249	0.249	0.0108
RSEM-R5A-A-SP	6/16/2020 11:35	XY1508	M	C041388	6.77	606	326	10.5	142	136	102	<1.0	124	<1.0	<1.0	8.45	0.206	0.182	192			0.042	0.014	0.762	0.776	0.0048
RSEM-R5A-B-SP	3/29/2020 14:00	XP3928	M	C022584	7.98	246	176	16.6	72.1	65.2	59.2	<1.0	72.2	<1.0	<1.0	4.16	0.131	0.069	50.4			0.098	0.039	0.545	0.584	0.0065
RSEM-R5A-B-SP	4/12/2020 11:35	XQ6090	M	C025305	7.92	292	292	367	104	67.5	58.5	<1.0	71.4	<1.0	<1.0	6.12	0.154	0.102	67.5			0.289	0.025	0.440	0.465	0.0113
RSEM-R5A-B-SP	6/16/2020 11:45	XY1509	M	C041388	6.58	596	389	6.9	143	138	81.5	<1.0	99.4	<1.0	<1.0	7.83	0.223	0.164	198			0.016	0.014	1.26	1.28	0.0052
RSEM-R5A-B-SP	7/3/2020 14:20	YA5154	M	C046179	7.77	564	400	122	108	103	67.9	<1.0	82.9	<1.0	<1.0	8.73	0.230	0.153	185			0.018	0.0153	0.898	0.914	0.0081
RSEM-R5A-C-SP	3/29/2020 14:30	XP3929	M	C022584	7.87	431	259	6.7	93.9	95.6	45.6	<1.0	55.7	<1.0	<1.0	13.2	0.119	0.214	136			0.142	0.072	0.934	1.01	0.0032
RSEM-R5A-C-SP	4/12/2020 12:15	XQ6091	M	C025305	8.11	362	324	113	100	75.0	62.0	<1.0	75.6	<1.0	<1.0	8.62	0.182	0.150	91.4			0.226	0.033	0.615	0.647	0.0098
RSEM-R5A-C-SP	6/16/2020 12:00	XY1510	M	C041388	7.77	2870	1990	39.6	289	288	269	<1.0	328	<1.0	<1.0	75.6	0.296	1.30	1070			0.874	0.129	4.65	4.77	<0.0030
RSEM-R5A-D-SP	3/29/2020 14:40	XP3930	M	C022584	7.88	281	183	6.4	73.4	74.2	47.8	<1.0	58.4	<1.0	<1.0	6.39	0.104	0.101	71.3			0.073	0.047	0.618	0.665	0.0059
RSEM-R5A-D-SP	4/12/2020 12:25	XQ6092	M	C025305	8.00	368	273	72.2	103	75.2	60.5	<1.0	73.9	<1.0	<1.0	8.91	0.181	0.149	94.9			0.293	0.034	0.663	0.697	0.0062
RSEM-R5A-D-SP	6/16/2020 12:10	XY1511	M	C041388	7.62	2080	1420	8.1	245	254	198	<1.0	241	<1.0	<1.0	47.7	0.262	0.880	780			0.411	0.072	3.90	3.97	<0.0030
RSEM-R5B-EOP	1/1/2020 13:10	XE7142	M	C000229	7.88	1380	900	2.7	331	330	262	<1.0	320	<1.0	<1.0	52.5	0.343	0.651	354			0.250	0.021	0.991	1.01	0.0032

Appendix 3-C: 2020 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
					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
RSEM-R5B-EOP	1/1/2020 13:20	XE7143	D	C000229	7.86	1380	892	1.9	332	340	260	<1.0	318	<1.0	<1.0	52.4	0.353	0.641	348			0.369	0.020	0.986	1.01	0.0033
RSEM-R5B-EOP	1/2/2020 11:20	XE7177	M	C000238	7.94	1370	872	3.1	334	344	265	<1.0	324	<1.0	<1.0	61.0	0.348	0.651	348			0.349	0.023	0.994	1.02	0.0034
RSEM-R5B-EOP	1/2/2020 11:30	XE7178	D	C000238	7.99	1370	864	<1.0	337	338	264	<1.0	322	<1.0	<1.0	48.1	0.350	0.642	351			0.334	0.020	0.994	1.01	0.0039
RSEM-R5B-EOP	1/3/2020 12:40	XE8695	M	C000625	8.19	1310	826	4.4	349	358	263	<1.0	321	<1.0	<1.0	51.8	0.330	0.632	311			0.279	0.0162	0.988	1.00	<0.0030
RSEM-R5B-EOP	1/3/2020 12:50	XE8696	D	C000625	8.23	1320	820	1.2	346	349	263	<1.0	321	<1.0	<1.0	51.8	0.320	0.637	301			0.257	0.0188	0.980	0.999	<0.0030
RSEM-R5B-EOP	1/4/2020 14:20	XE9883	M	C000877	8.01	1220	750	1.9	386	362	284	<1.0	346	<1.0	<1.0	41.7	0.322	0.570	282			0.117	0.017	1.03	1.05	0.0046
RSEM-R5B-EOP	1/4/2020 14:30	XE9884	D	C000877	7.93	1230	754	2.7	404	361	285	<1.0	348	<1.0	<1.0	45.5	0.316	0.571	276			0.188	0.015	0.987	1.00	0.0043
RSEM-R5B-EOP	1/5/2020 13:10	XE9854	M	C000870	8.06	1190	652	1.3	380	345	282	<1.0	344	<1.0	<1.0	44.8	0.299	0.563	247			0.220	0.026	0.998	1.02	0.0044
RSEM-R5B-EOP	1/5/2020 13:20	XE9855	D	C000870	8.03	1190	659	2.0	362	344	278	<1.0	340	<1.0	<1.0	45.0	0.290	0.564	254			0.155	0.018	0.998	1.02	0.0048
RSEM-R5B-EOP	1/6/2020 12:50	XF0705	M	C001127	8.15	1200	696	2.3	312	317	275	<1.0	336	<1.0	<1.0	49.2	0.309	0.587	276			0.239	0.017	0.976	0.994	0.0038
RSEM-R5B-EOP	1/6/2020 13:00	XF0706	D	C001127	8.18	1200	510	2.4	315	322	276	<1.0	337	<1.0	<1.0	50.0	0.309	0.565	281			0.270	0.017	0.974	0.991	0.0037
RSEM-R5B-EOP	1/7/2020 13:40	XF1930	M	C001464	7.94	1210	768	3.9	305	305	266	<1.0	324	<1.0	<1.0	50.5	0.298	0.602	280			0.117	0.018	0.933	0.952	0.0043
RSEM-R5B-EOP	1/7/2020 13:50	XF1931	D	C001464	7.89	1210	768	2.5	300	307	267	<1.0	326	<1.0	<1.0	50.0	0.295	0.584	280			0.139	0.018	0.916	0.934	0.0038
RSEM-R5B-EOP	1/8/2020 13:30	XF3040	M	C001783	7.97	1220	752	3.3	295	300	274	<1.0	334	<1.0	<1.0	43.5	0.320	0.603	264			0.154	0.019	0.899	0.918	<0.0030
RSEM-R5B-EOP	1/8/2020 13:40	XF3041	D	C001783	8.04	1220	736	3.5	326	300	274	<1.0	334	<1.0	<1.0	44.5	0.322	0.603	268			0.152	0.019	0.885	0.904	0.0045
RSEM-R5B-EOP	1/9/2020 11:50	XF4215	M	C002074	7.94	1230	784	2.1	271	275	271	<1.0	330	<1.0	<1.0	46.7	0.311	0.611	280			0.096	0.014	0.797	0.812	0.0041
RSEM-R5B-EOP	1/9/2020 12:00	XF4216	D	C002074	7.86	1240	764	1.7	279	278	272	<1.0	332	<1.0	<1.0	44.1	0.334	0.628	270			0.145	0.020	0.854	0.874	0.0041
RSEM-R5B-EOP	1/10/2020 14:00	XF5143	M	C002216	8.32	1230		3.2	263	273	252	1.4	304	1.6	<1.0	38.8	0.300	0.664	230			0.351	0.0200	0.887	0.907	<0.0030
RSEM-R5B-EOP	1/10/2020 14:10	XF5144	D	C002216	8.27	1230		2.8	264	269	250	<1.0	305	<1.0	<1.0	51.1	0.300	0.675	286			0.157	0.0207	0.871	0.891	<0.0030
RSEM-R5B-EOP	1/11/2020 11:40	XF5746	M	C002384	7.99	1240	764	5.1	258	264	263	<1.0	321	<1.0	<1.0	51.9	0.334	0.630	298			0.148	0.023	0.872	0.894	0.0035
RSEM-R5B-EOP	1/11/2020 11:50	XF5747	D	C002384	7.98	1240	756	1.0	255	264	265	<1.0	324	<1.0	<1.0	50.9	0.332	0.634	298			0.131	0.024	0.878	0.902	0.0035
RSEM-R5B-EOP	1/12/2020 12:40	XF5773	M	C002394	7.83	1240	776	1.8	253	257	261	<1.0	318	<1.0	<1.0	51.2	0.325	0.640	296			0.165	0.024	0.873	0.897	<0.0030
RSEM-R5B-EOP	1/12/2020 12:50	XF5774	D	C002394	7.88	1240	772	2.1	250	257	261	<1.0	318	<1.0	<1.0	50.1	0.332	0.643	301			0.143	0.023	0.865	0.888	<0.0030
RSEM-R5B-EOP	1/13/2020 11:25	XF7158	M	C002657	8.03	1240	744	2.1	255	257	261	<1.0	319	<1.0	<1.0	52.2	0.332	0.698	291			0.379	0.022	0.853	0.875	<0.0030
RSEM-R5B-EOP	1/13/2020 11:35	XF7159	D	C002657	8.00	1240	760	1.3	258	258	262	<1.0	320	<1.0	<1.0	50.4	0.325	0.698	294			0.362	0.023	0.850	0.872	<0.0030
RSEM-R5B-EOP	1/14/2020 11:40	XF8098	M	C002891	7.87	1250	745	1.6	260	256	257	<1.0	313	<1.0	<1.0	55.1	0.309	0.721	286			0.148	0.021	0.847	0.869	0.0034
RSEM-R5B-EOP	1/14/2020 11:50	XF8099	D	C002891	7.78	1250	756	1.0	253	257	251	<1.0	306	<1.0	<1.0	54.1	0.310	0.715	282			0.194	0.021	0.850	0.871	<0.0030
RSEM-R5B-EOP	1/15/2020 12:35	XF9569	M	C003144	8.00	1260	764	<1.0	263	257	258	<1.0	314	<1.0	<1.0	49.2	0.344	0.704	284			0.163	0.022	0.861	0.883	0.0042
RSEM-R5B-EOP	1/15/2020 12:45	XF9570	D	C003144	8.00	1260	795	2.3	268	256	255	<1.0	311	<1.0	<1.0	53.3	0.337	0.708	284			0.211	0.020	0.849	0.869	<0.0030
RSEM-R5B-EOP	1/16/2020 13:00	XG0615	M	C003413	7.79	1230	796	1.4	238	238	255	<1.0	311	<1.0	<1.0	55.9	0.288	0.762	290			0.142	0.021	0.867	0.888	0.0047
RSEM-R5B-EOP	1/16/2020 13:10	XG0616	D	C003413	7.77	1230	805	1.8	242	241	253	<1.0	309	<1.0	<1.0	60.6	0.327	0.744	289			0.218	0.021	0.867	0.888	0.0040
RSEM-R5B-EOP	1/17/2020 12:25	XG0614	M	C003412	7.80	1330	823	4.7	241	239	259	<1.0	316	<1.0	<1.0	61.3	0.301	0.861	302			0.412	0.018	0.896	0.914	0.0058
RSEM-R5B-EOP	1/18/2020 11:40	XG2772	M	C003851	8.01	1340	846	2.5	248	252	261	<1.0	319	<1.0	<1.0	68.1	0.360	0.923	343			0.395	0.020	0.944	0.963	0.0103
RSEM-R5B-EOP	1/19/2020 14:45	XG2756	M	C003847	7.99	1400	871	2.1	248	252	265	<1.0	323	<1.0	<1.0	76.3	0.373	1.04	360			0.137	0.019	1.00	1.02	0.0112
RSEM-R5B-EOP	1/20/2020 11:50	XG2705	M	C003843	7.96	1460	904	1.3	255	251	267	<1.0	326	<1.0	<1.0	80.2	0.376	1.12	376			0.180	0.018	1.04	1.06	0.0155
RSEM-R5B-EOP	1/21/2020 14:10	XG5825	M	C004470	8.08	1530	940	1.8	257	251	286	<1.0	349	<1.0	<1.0	84.3	0.384	1.30	363			0.246	0.020	1.10	1.11	0.0220
RSEM-R5B-EOP	1/21/2020 14:20	XG5826	D	C004470	8.20	1530	945	2.5	263	250	260	<1.0	317	<1.0	<1.0	86.2	0.407	1.30	360			0.318	0.020	1.10	1.12	0.0218
RSEM-R5B-EOP	1/22/2020 15:50	XG7452	M	C004860	8.01	1520	946	1.6	255	247	287	<1.0	351	<1.0	<1.0	83.2	0.404	1.28	366			0.274	0.026	1.11	1.13	0.0216
RSEM-R5B-EOP	1/22/2020 16:00	XG7453	D	C004860	8.12	1520	914	3.8	250	246	272	<1.0	331	<1.0	<1.0	83.0	0.404	1.29	352			0.266	0.013	0.984	0.997	0.0238
RSEM-R5B-EOP	1/23/2020 15:20	XG9563	M	C005172	8.11	1520	926	2.8	252	264	301	<1.0	367	<1.0	<1.0	86.3	0.381	1.28	361			0.265	0.034	1.08	1.11	0.0227
RSEM-R5B-EOP	1/23/2020 15:30	XG9564	D	C005172	8.12	1520	944	2.1	251	261	271	<1.0	330	<1.0	<1.0	84.1	0.398	1.28	366			0.082	0.020	0.949	0.969	0.0227
RSEM-R5B-EOP	1/24/2020 11:10	XG9569	M	C005174	8.08	1530	937	3.5	250	260	268	<1.0	327	<1.0	<1.0	79.8	0.396	1.29	355			0.358	0.020	1.09	1.11	0.0234
RSEM-R5B-EOP	1/24/2020 11:20	XG9570	D	C005174	8.09	1530	934	3.7	248	257	265	<1.0	323	<1.0	<1.0	84.0	0.386	1.29	362			0.194	0.022	1.10	1.12	0.0222
RSEM-R5B-EOP	1/25/2020 12:00	XH2064	M	C005631	8.14	1540	930	2.4	243	247	299	<1.0	365	<1.0	<1.0	84	0.365	1.31	360			0.231	0.016	1.04	1.06	0.0227
RSEM-R5B-EOP	1/25/2020 12:10	XH2062	D	C005631	8.04	1540	926	2.3	249	245	302	<1.0	368	<1.0	<1.0	84	0.379	1.29	360			0.190	0.016	1.05	1.07	0.0225
RSEM-R5B-EOP	1/26/2020 13:40	XH2025	M	C005623	8.10	1550	953	3.3	245	250	305	<1.0	372	<1.0	<1.0	78	0.374	1.31	340			0.233	0.017	0.979	0.996	0.0212
RSEM-R5B-EOP	1/26/2020 13:50	XH2026	D	C005623	8.22	1550	943	1.8	243	247	304	<1.0	371	<1.0	<1.0	83	0.378	1.31	340			0.376	0.018	1.10	1.12	0.0259
RSEM-R5B-EOP	1/27/2020 14:10	XH3887	M	C005941	7.87	1510	900	5.2	264	257	304	<1.0	371	<1.0	<1.0	82.1	0.367	1.26	360			0.194				0.0220
RSEM-R5B-EOP	1/27/2020 14:20	XH3888	D	C005941	8.00	1500	898	4.0	262	262	309	<1.0	377	<1.0	<1.0	77.2	0.361	1.24	346			0.180				0.0206
RSEM-R5B-EOP	1/28/2020 12:45	XH5358	M	C006197	8.03	1410	836	3.8	294	289	320	<1.0	390	<1.0	<1.0	74.9	0.329	1.07	311			0.165	<0.010	1.08	1.08	0.0185
RSEM-R5B-EOP	1/28/2020 12:55	XH5359	D	C006197	8.05	1420	837	1.9	289	286	319	<1.0	389	<1.0	<1.0	75.4	0.331	1.07	302			0.183	0.010	1.05	1.06	0.0183
RSEM-R5B-EOP	1/29/2020 11:40	XH6910	M	C006592	8.02	1310	814	1.9	326	319	303	<1.0	370	<1.0	<1.0	69.9	0.304	0.873	271			0.125	0.017	1.15	1.17	0.0152
RSEM-R5B-EOP	1/29/2020 11:50	XH6911	D	C006592	8.00	1310	811	1.9	333	329	302	<1.0	369	<1.0	<1.0	66.0	0.304	0.921	269			0.138	0.032	1.19	1.22	0.0162
RSEM-R5B-EOP	1/30/2020 13:15	XH8746	M	C006955	8.00	1260	768	2.2	314	326	307	<1.0	374	<1.0	<1.0	66.6	0.280	0.900	245			0.249	0.025	1.06	1.08	0.0139
RSEM-R5B-EOP	1/30/2020 13:25	XH8747	D	C006955	8.04	1270	779	2.2	315	321	311	<1.0	380	<1.0	<1.0	65.8	0.303	0.909	243			0.103	0.020	1.09	1.11	0.0150
RSEM-R5B-EOP	1/31/2020 13:05	XH9849	M	C007079	8.11	1250	792	3.2	309	312	318	<1.0	388	<1.0	<1.0	66.7	0.290	0.952	227			0.106	0.0146	1.01	1.03	0.0142
RSEM-R5B-EOP	1/31/2020 13:15	XH9850	D	C007079	8.15	1260	780	4.4	313	318	316	<1.0	385	<1.0	<1.0	77.6	0.290	0.965	257			0.133	0.0142	1.02	1.03	0.0122
RSEM-R5B-EOP	2/1/2020 11:30	XI1802	M	C007448	8.03	1330	823	1.8	285	293	303	<1.0	369	<1.0	<1.0	70.9	0.312	1.03	266			0.158	0.031	1.01	1.04	0.0139
RSEM-R5B-EOP	2/1/2020 11:45	XI1803	D	C007448	8.07	1340	845	2.1	290	291	303	<1.0	370	<1.0	<1.0	71.2	0.318	0.987	264			0.165	0.018	1.01	1.02	0.0114
RSEM-R5B-EOP	2/2/2020 13:50	XI1832	M	C007454	8.04	1360	867	3.3	272	282	291	<1.0	355	<1.0	<1.0	75.5	0.310	1.04	286			0.203	0.031	0.985	1.02	0.0093
RSEM-R5B-EOP	2/2/2020 14:00	XI1833	D	C007454	8.01	1360	859	3.5	275	277	293	<1.0	357	<1.0	<1.0	76.8	0.327	1.04	290			0.186	0.025	1.01	1.04	0.0092
RSEM-R5B-EOP	2/3/2020 12:20	XI3479	M	C007820	8.25	1440	817	4.9	258	265	297	<1.0	362	<1.0	<1.0	76.3	0.373	1.06	299			0.318	0.023	0.977	1.00	0.0051
RSEM-R5B-EOP	2/3/2020 12:30	XI3480	D	C007820	8.10	1400	838	4.4	261	274	288	<1.0	351	<1.0	<1.0	74.7	0.350	1.03	300			0.227	0.037	0.975	1.01	0.0052
RSEM-R5B-EOP	2/4/2020 11:50	XI3460	M	C007815	8.28	1440	896	2.3	243	256	295	<1.0	360	<1.0	<1.0	76.8	0.377	1.09	308			0.290	0.035	0.968	1.00	0.0044
RSEM-R5B-EOP	2/4/2020 12:00	XI3461	D	C007815	8.10	1430	841	2.9	253	263	289	<1.0	353	<1.0	<1.0	76.5	0.361	1.11	311			0.385	0.025	0.972	0.997	0.0056
RSEM-R5B-EOP	2/5/2020 12:55	XI6885	M	C008469	7.94	1450	819	4.2	246	246	282	<1.0	344	<1.0	<1.0	74.9	0.352	1.11	355			0.267	0.035	0.981	1.02	0.0050
RSEM-R5B-EOP	2/5/2020 13:05	XI6886	D	C008469	7.85	1450	827	3.9	256	247	277	<1.0	338	<1.0	<1.0	74.1	0.329	1.10	337			0.297	0.025	0.979	1.00	0.0052
RSEM-R5B-EOP	2/6/2020 12:00	XI8757	M	C008772	8.11	1470	781	4.7	245	253	275	<1.0	336	<1.0	<1.0	74.0	0.368	1.08	341			0.420	0.037	0.955	0.992	0.0052
RSEM-R5B-EOP	2/6/2020 12:10	XI8758	D	C008772	8.14	1480	832	4.3	245	244	280	<1.0	341	<1.0	<1.0	75.1	0.355	1.08	347			0.421	0.037	0.961	0.998	0.0050

Appendix 3-C: 2020 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
					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
RSEM-R5B-EOP	2/7/2020 12:10	XI8782	M	C008775	8.00	1480	898	5.3	250	249	278	<1.0	339	<1.0	<1.0	74.3	0.350	1.08	354			0.433	0.026	0.923	0.949	0.0050
RSEM-R5B-EOP	2/8/2020 11:50	XJ1670	M	C009232	7.92	1470	931	2.8	249	254	276	<1.0	337	<1.0	<1.0	74.9	0.350	1.03	392			0.430	0.030	0.873	0.903	0.0038
RSEM-R5B-EOP	2/8/2020 12:00	XJ1671	D	C009232	7.87	1470	936	3.7	253	251	274	<1.0	335	<1.0	<1.0	77.0	0.364	1.05	349			0.420	0.027	0.869	0.896	0.0036
RSEM-R5B-EOP	2/9/2020 13:10	XJ1690	M	C009242	7.91	1430	902	5.5	254	255	276	<1.0	337	<1.0	<1.0	70.4	0.344	0.982	337			0.426	0.031	0.839	0.870	<0.0030
RSEM-R5B-EOP	2/9/2020 13:20	XJ1691	D	C009242	7.90	1430	934	3.5	244	254	280	<1.0	341	<1.0	<1.0	71.9	0.357	1.00	339			0.421	0.029	0.838	0.867	<0.0030
RSEM-R5B-EOP	2/10/2020 11:10	XJ1714	M	C009249	7.85	1420	857	3.9	262	251	281	<1.0	343	<1.0	<1.0	68.9	0.355	0.977	340			0.426	0.029	0.823	0.852	0.0030
RSEM-R5B-EOP	2/10/2020 11:20	XJ1715	D	C009249	7.88	1420	877	4.5	251	256	278	<1.0	340	<1.0	<1.0	69.5	0.330	0.980	336			0.431	0.030	0.826	0.856	0.0235
RSEM-R5B-EOP	2/11/2020 15:30	XJ6272	M	C010122	8.01	1370	791	5.1	257	254	276	<1.0	336	<1.0	<1.0	68.7	0.333	0.933	353			0.393	0.033	0.813	0.846	0.0041
RSEM-R5B-EOP	2/11/2020 15:40	XJ6273	D	C010122	7.97	1370	869	3.9	256	254	275	<1.0	336	<1.0	<1.0	69.6	0.341	0.957	323			0.283	0.032	0.813	0.845	0.0073
RSEM-R5B-EOP	2/12/2020 15:20	XJ8072	M	C010503	7.82	1360	845	6.5	252	248	279	<1.0	341	<1.0	<1.0	68.3	0.363	0.949	307			0.305	0.032	0.818	0.850	0.0039
RSEM-R5B-EOP	2/12/2020 15:30	XJ8073	D	C010503	7.78	1360	867	4.8	254	251	273	<1.0	334	<1.0	<1.0	68.0	0.361	0.971	322			0.305	0.029	0.820	0.849	0.0043
RSEM-R5B-EOP	2/13/2020 14:20	XJ9468	M	C010790	7.83	1360	822	3.8	248	241	273	<1.0	333	<1.0	<1.0	70.0	0.370	0.953	330			0.315	0.030	0.818	0.849	0.0035
RSEM-R5B-EOP	2/13/2020 14:30	XJ9469	D	C010790	7.97	1350	838	3.9	253	246	274	<1.0	335	<1.0	<1.0	68.2	0.356	0.961	318			0.261	0.030	0.821	0.851	0.0030
RSEM-R5B-EOP	2/14/2020 11:30	XJ9493	M	C010796	7.89	1370	828	3.7	252	242	275	<1.0	335	<1.0	<1.0	70.2	0.341	0.947	332			0.314	0.032	0.819	0.850	<0.0030
RSEM-R5B-EOP	2/14/2020 11:40	XJ9494	D	C010796	7.95	1360	814	4.0	245	244	273	<1.0	334	<1.0	<1.0	67.0	0.360	0.949	318			0.252	0.032	0.821	0.853	<0.0030
RSEM-R5B-EOP	2/15/2020 12:10	XK0372	M	C011012	8.30	1390	846	8.0	239	248	279	<1.0	340	<1.0	<1.0	67.5	0.380	0.955	297			0.269	0.0298	0.831	0.861	<0.0030
RSEM-R5B-EOP	2/15/2020 12:20	XK0373	D	C011012	8.30	1390	908	6.0	237	241	274	<1.0	335	<1.0	<1.0	68.1	0.400	0.955	305			0.225	0.0263	0.824	0.850	<0.0030
RSEM-R5B-EOP	2/16/2020 14:00	XK3308	M	C011578	7.84	1360	816	4.4	249	246	274	<1.0	335	<1.0	<1.0	69.1	0.380	0.950	317			0.113	0.027	0.762	0.789	0.0042
RSEM-R5B-EOP	2/16/2020 14:10	XK3307	D	C011578	7.83	1350	830	3.7	245	243	267	<1.0	326	<1.0	<1.0	72.5	0.384	0.962	312			0.172	0.030	0.761	0.791	0.0032
RSEM-R5B-EOP	2/17/2020 16:20	XK3289	M	C011572	7.84	1370	856	4.2	235	234	268	<1.0	327	<1.0	<1.0	71.7	0.382	0.984	322			0.127				0.0032
RSEM-R5B-EOP	2/17/2020 16:30	XK3290	D	C011572	7.91	1380	846	4.3	239	237	255	<1.0	311	<1.0	<1.0	77.3	0.351	1.01	324			0.121				0.0033
RSEM-R5B-EOP	2/18/2020 12:40	XK4682	M	C011881	7.83	1390	852	4.7	228	229	261	<1.0	318	<1.0	<1.0	80.2	0.399	1.07	319			0.188	0.039	0.705	0.745	0.0037
RSEM-R5B-EOP	2/18/2020 12:50	XK4683	D	C011881	7.74	1390	854	4.1	232	226	263	<1.0	321	<1.0	<1.0	81.5	0.402	1.07	377			0.289	0.039	0.702	0.741	<0.0030
RSEM-R5B-EOP	2/19/2020 11:35	XK5999	M	C012192	7.82	1410	882	3.3	212	225	260	<1.0	317	<1.0	<1.0	82.6	0.402	1.09	414			0.265	0.042	0.706	0.748	0.0034
RSEM-R5B-EOP	2/19/2020 11:45	XK6000	D	C012192	7.98	1410	872	3.2	220	235	255	<1.0	312	<1.0	<1.0	86.4	0.370	1.13	369			0.217	0.041	0.713	0.754	0.0036
RSEM-R5B-EOP	2/20/2020 12:30	XK7909	M	C012680	7.93	1420	872	1.9	230	225	262	<1.0	320	<1.0	<1.0	84.0	0.388	1.08	361			0.334	0.041	0.746	0.787	0.0033
RSEM-R5B-EOP	2/20/2020 12:40	XK7910	D	C012680	7.77	1420	874	1.8	232	219	260	<1.0	317	<1.0	<1.0	84.5	0.388	1.09	389			0.133	0.052	0.744	0.796	0.0035
RSEM-R5B-EOP	2/21/2020 11:40	XK7931	M	C012683	7.84	1400	865	2.4	239	227	256	<1.0	312	<1.0	<1.0	80.3	0.339	1.03	335			0.157	0.036	0.758	0.794	<0.0030
RSEM-R5B-EOP	2/21/2020 11:50	XK7932	D	C012683	7.82	1400	866	2.6	235	227	245	<1.0	299	<1.0	<1.0	81.3	0.373	1.03	339			0.167	0.037	0.751	0.788	<0.0030
RSEM-R5B-EOP	2/23/2020 11:40	XL1342	M	C013192	7.86	1370	846	2.0	236	231	238	<1.0	291	<1.0	<1.0	75.2	0.301	0.976	323			0.123	0.037	0.747	0.783	0.0034
RSEM-R5B-EOP	2/23/2020 11:50	XL1343	D	C013192	7.88	1370	841	2.2	241	236	240	<1.0	293	<1.0	<1.0	74.9	0.315	0.974	363			0.130	0.037	0.747	0.784	0.0038
RSEM-R5B-EOP	2/24/2020 11:35	XL1317	M	C013183	7.98	1370	860	1.9	224	237	238	<1.0	290	<1.0	<1.0	75.6	0.309	0.970	364			0.183	0.049	0.727	0.776	0.0033
RSEM-R5B-EOP	2/25/2020 11:00	XL5022	M	C014003	8.22	1360	830	1.9	237	236	218	<1.0	267	<1.0	<1.0	73.7	0.297	0.978	357			0.221	0.038	0.716	0.754	<0.0030
RSEM-R5B-EOP	2/25/2020 11:10	XL5023	D	C014003	8.23	1360	832	3.3	236	241	223	<1.0	272	<1.0	<1.0	71.5	0.313	0.977	403			0.310	0.048	0.718	0.766	0.0032
RSEM-R5B-EOP	2/26/2020 10:50	XL6611	M	C014425	8.26	1340	836	3.5	234	231	223	<1.0	273	<1.0	<1.0	71.5	0.307	1.04	414			0.381	0.040	0.750	0.791	<0.0030
RSEM-R5B-EOP	2/26/2020 11:00	XL6612	D	C014425	8.17	1340	790	3.5	238	231	225	<1.0	275	<1.0	<1.0	72.6	0.315	1.08	371			0.343	0.043	0.743	0.785	<0.0030
RSEM-R5B-EOP	2/27/2020 11:35	XL6657	M	C014448	8.05	1280	779	2.5	237	238	210	<1.0	256	<1.0	<1.0	63.9	0.296	0.966	312			0.379	0.045	0.807	0.852	<0.0030
RSEM-R5B-EOP	2/28/2020 12:00	XL8820	M	C014870	8.33	1290	790	4.4	246	245	213	<1.0	259	<1.0	<1.0	64.1	0.296	0.959	316			0.401	0.045	0.823	0.868	0.0041
RSEM-R5B-EOP	2/29/2020 12:25	XM2598	M	C015563	8.05	1270	777	7.9	236	234	201	<1.0	246	<1.0	<1.0	63.0	0.302	0.970	310			0.418	0.049	0.825	0.875	0.0039
RSEM-R5B-EOP	3/1/2020 10:55	XM2630	M	C015569	7.92	1290	803	6.5	246	236	203	<1.0	248	<1.0	<1.0	72.9	0.334	0.996	345			0.372	0.055	0.805	0.860	<0.0030
RSEM-R5B-EOP	3/2/2020 19:30	XM6322	M	C016408	8.12	1360	836	6.8	226	239	188	<1.0	229	<1.0	<1.0	78.0	0.286	1.04	381			0.366	0.054	0.876	0.930	0.0048
RSEM-R5B-EOP	3/3/2020 11:50	XM6548	M	C016468	7.93	1370	858	4.5	229	238	187	<1.0	228	<1.0	<1.0	81.6	0.334	1.08	350			0.456	0.063	0.801	0.864	0.0032
RSEM-R5B-EOP	3/3/2020 12:00	XM6549	D	C016468	7.84	1370	854	5.2	238	242	198	<1.0	242	<1.0	<1.0	83.5	0.334	1.07	357			0.438	0.053	0.800	0.854	0.0036
RSEM-R5B-EOP	3/4/2020 16:20	XM8004	M	C016829	8.14	1370	834	3.7	238	239	191	<1.0	234	<1.0	<1.0	84.8	0.327	1.10	356			0.403	0.055	0.794	0.849	<0.0030
RSEM-R5B-EOP	3/4/2020 16:30	XM8005	D	C016829	8.06	1370	840	6.3	240	236	201	<1.0	245	<1.0	<1.0	83.3	0.326	1.09	357			0.380	0.066	0.786	0.851	<0.0030
RSEM-R5B-EOP	3/5/2020 15:20	XN0420	M	C017276	8.12	1370	824	4.7	220	223	187	<1.0	228	<1.0	<1.0	79.5	0.323	1.02	343			0.537	0.054	0.768	0.822	<0.0030
RSEM-R5B-EOP	3/5/2020 15:30	XN0421	D	C017276	8.12	1370	823	3.5	223	221	188	<1.0	229	<1.0	<1.0	81.1	0.327	1.02	339			0.491	0.061	0.781	0.842	<0.0030
RSEM-R5B-EOP	3/6/2020 11:20	XN0417	M	C017275	7.88	1360	832	1.1	220	217	202	<1.0	246	<1.0	<1.0	80.2	0.336	1.01	340			0.526	0.055	0.743	0.798	0.0037
RSEM-R5B-EOP	3/6/2020 11:30	XN0416	D	C017275	8.07	1360	812	6.2	218	216	201	<1.0	245	<1.0	<1.0	81.8	0.326	1.01	335			0.467	0.055	0.745	0.800	0.0042
RSEM-R5B-EOP	3/7/2020 11:20	XN3072	M	C017820	8.07	1330	801	4.1	206	208	182	<1.0	222	<1.0	<1.0	80.0	0.312	0.969	346			0.423	0.055	0.709	0.764	<0.0030
RSEM-R5B-EOP	3/7/2020 11:30	XN3073	D	C017820	8.07	1330	801	3.5	212	209	183	<1.0	223	<1.0	<1.0	77.9	0.293	0.976	339			0.438	0.054	0.711	0.764	0.0031
RSEM-R5B-EOP	3/8/2020 11:30	XN2025	M	C017627	7.99	1340	809	5.9	205	202	205	<1.0	250	<1.0	<1.0	75.7	0.326	0.991	336			0.397	0.052	0.687	0.739	<0.0030
RSEM-R5B-EOP	3/8/2020 11:40	XN2026	D	C017627	8.06	1340	811	4.9	204	202	196	<1.0	239	<1.0	<1.0	75.0	0.323	0.994	337			0.398	0.053	0.685	0.738	<0.0030
RSEM-R5B-EOP	3/9/2020 14:40	XN3894	M	C018020	8.05	1290	794	2.7	214	215	196	<1.0	239	<1.0	<1.0	74.3	0.288	0.965	320			0.321	0.048	0.690	0.738	0.0041
RSEM-R5B-EOP	3/9/2020 14:50	XN3895	D	C018020	7.99	1290	784	3.4	213	208	198	<1.0	242	<1.0	<1.0	73.4	0.293	0.971	320			0.338	0.049	0.694	0.742	<0.0030
RSEM-R5B-EOP	3/10/2020 11:05	XN6088	M	C018396	8.05	1250	770	3.9	221	219	197	<1.0	240	<1.0	<1.0	73.5	0.233	0.892	304			0.323	0.044	0.674	0.718	<0.0030
RSEM-R5B-EOP	3/11/2020 13:10	XN7890	M	C018851	8.17	1080	678	10.8	215	212	184	<1.0	225	<1.0	<1.0	58.1	0.280	0.720	252			0.352	0.043	0.635	0.678	<0.0030
RSEM-R5B-EOP	3/12/2020 10:55	XN8893	M	C019027	8.16	992	635	10.1	207	203	186	<1.0	227	<1.0	<1.0	46.9	0.261	0.646	201			0.322	0.041	0.629	0.669	<0.0030
RSEM-R5B-EOP	3/13/2020 12:30	XN9532	M	C019176	8.12	954	586	8.4	200	194	184	<1.0	224	<1.0	<1.0	49.6	0.250	0.612	232			0.318	0.0396	0.669	0.708	<0.0030
RSEM-R5B-EOP	3/14/2020 12:25	XO0536	M	C019410	8.20	995	583	4.0	227	196	186	<1.0	227	<1.0	<1.0	47.4	0.289	0.649	204			0.304	0.040	0.629	0.669	0.0033
RSEM-R5B-EOP	3/14/2020 12:35	XO0537	D	C019410	8.23	1000	583	3.3	196	194	176	<1.0	215	<1.0	<1.0	46.8	0.355	0.655	204			0.371	0.042	0.630	0.672	<0.0030
RSEM-R5B-EOP	3/15/2020 13:00	XO0653	M	C019435	8.29	1070	626	2.1	192	196	186	<1.0	227	<1.0	<1.0	51.7	0.302	0.714	215			0.314	0.042	0.665	0.708	<0.0030
RSEM-R5B-EOP	3/15/2020 13:10	XO0654	D	C019435	8.34	1070	618	2.3	204	194	186	<1.0	227	<1.0	<1.0	51.9	0.305	0.702	246			0.317	0.044	0.658	0.701	<0.0030
RSEM-R5B-EOP	3/16/2020 12:50	XO2542	M	C019847	8.08	1090	662	3.1	194	191	193	<1.0	236	<1.0	<1.0	58.8	0.287	0.817	230			0.300	0.050	0.719	0.769	<0.0030
RSEM-R5B-EOP	3/16/2020 13:00	XO2543	D	C019847	8.11	1080	674	2.4	191	191	194	<1.0	236	<1.0	<1.0	61.1	0.287	0.763	252			0.300	0.051	0.723	0.773	<0.0030
RSEM-R5B-EOP	3/17/2020 12:05	XO3906	M	C020169	7.85	1150	687	2.9	185	194	205	<1.0	250	<1.0	<1.0	55.5	0.330	0.857	258			0.321	0.056	0.739	0.795	0.0043
RSEM-R5B-EOP	3/17/2020 12:15	XO3907	D	C020169	7.98	1150	686	1.9	181	194	227	<1.0	277	<1.0	<1.0	60.4	0.338	0.848	258			0.316	0.055	0.737	0.792	0.0039
RSEM-R5B-EOP	3/18/2020 11:40	XO5557	M	C020445	7.98	1140	688	2.5	184	183	196	<1.0	239	<1.0	<1.0	60.1	0.338	0.817	260			0.340	0.054	0.747	0.801	0.0033
RSEM-R5B-EOP	3/18/2020 11:50	XO5558	D	C020445	8.02	1150	688	2.6	179	186	194	<1.0	237	<1.0	<1.0	59.1	0.341	0.776	259			0.380	0.059	0.759	0.818	0.0033

Appendix 3-C: 2020 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
					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
RSEM-R5B-EOP	3/19/2020 11:30	XO6999	M	C020738	8.20	1140	672	6.1	186	190	208	<1.0	254	<1.0	<1.0	61.2	0.355	0.788	257			0.332	0.047	0.723	0.770	0.0031
RSEM-R5B-EOP	3/19/2020 11:40	XO7000	D	C020738	8.18	1140	692	5.3	192	193	209	<1.0	255	<1.0	<1.0	59.3	0.341	0.795	254			0.407	0.055	0.724	0.779	<0.0030
RSEM-R5B-EOP	3/20/2020 12:15	XO7002	M	C020739	8.18	1100	662	7.7	190	191	218	<1.0	266	<1.0	<1.0	60.1	0.335	0.753	227			0.281	0.043	0.687	0.730	<0.0030
RSEM-R5B-EOP	3/20/2020 12:25	XO7003	D	C020739	8.19	1110	650	6.6	187	192	233	<1.0	284	<1.0	<1.0	57.5	0.338	0.748	236			0.271	0.043	0.685	0.729	<0.0030
RSEM-R5B-EOP	3/21/2020 11:30	XO8297	M	C021037	7.91	1110	652	7.7	203	186	216	<1.0	264	<1.0	<1.0	55.8	0.338	0.740	234			0.335	0.043	0.686	0.728	0.0031
RSEM-R5B-EOP	3/21/2020 11:40	XO8298	D	C021037	7.87	1100	656	6.5	200	187	257	<1.0	314	<1.0	<1.0	59.3	0.328	0.773	238			0.335	0.048	0.685	0.734	0.0031
RSEM-R5B-EOP	3/22/2020 11:20	XO8419	M	C021064	7.90	1060	629	4.6	196	178	201	<1.0	245	<1.0	<1.0	49.2	0.333	0.702	233			0.348	0.042	0.644	0.686	0.0031
RSEM-R5B-EOP	3/22/2020 11:30	XO8420	D	C021064	7.86	1060	641	4.0	192	178	214	<1.0	261	<1.0	<1.0	48.9	0.332	0.725	234			0.350	0.045	0.655	0.700	<0.0030
RSEM-R5B-EOP	3/23/2020 12:00	XO8465	M	C021073	7.91	1040	623	7.7	195	177	171	<1.0	209	<1.0	<1.0	48.4	0.347	0.674	252			0.578	0.046	0.639	0.685	0.0036
RSEM-R5B-EOP	3/24/2020 13:10	XP0444	M	C021618	7.99	1060	691	6.7	205	196	176	<1.0	215	<1.0	<1.0	49.3	0.311	0.696	264			0.380	0.045	0.646	0.691	<0.0030
RSEM-R5B-EOP	3/24/2020 13:20	XP0441	D	C021618	8.13	1050	754	6.5	202	197	174	<1.0	213	<1.0	<1.0	50.8	0.308	0.664	262			0.368	0.046	0.644	0.690	<0.0030
RSEM-R5B-EOP	3/25/2020 12:50	XP1314	M	C021872	7.87	1090	659	4.1	210	211	164	<1.0	201	<1.0	<1.0	48.4	0.297	0.743	291			0.405	0.045	0.655	0.701	<0.0030
RSEM-R5B-EOP	3/25/2020 13:00	XP1315	D	C021872	8.13	1090	658	3.4	213	214	167	<1.0	204	<1.0	<1.0	49.1	0.320	0.729	290			0.379	0.045	0.654	0.699	<0.0030
RSEM-R5B-EOP	3/26/2020 14:10	XP2433	M	C022151	8.16	1070	623	4.7	206	202	164	<1.0	200	<1.0	<1.0	49.1	0.315	0.711	279			0.380	0.045	0.649	0.694	<0.0030
RSEM-R5B-EOP	3/26/2020 14:20	XP2434	D	C022151	8.09	828	468	23.7	158	156	131	<1.0	160	<1.0	<1.0	44.4	0.241	0.572	202			0.343	0.042	0.577	0.619	<0.0030
RSEM-R5B-EOP	3/27/2020 10:50	XP2503	M	C022160	8.04	980	583	16.8	171	170	156	<1.0	191	<1.0	<1.0	49.6	0.278	0.764	240			0.427	0.048	0.599	0.647	<0.0030
RSEM-R5B-EOP	3/27/2020 11:00	XP2504	D	C022160	8.23	972	570	17.5	171	167	155	<1.0	189	<1.0	<1.0	48.8	0.291	0.744	238			0.341	0.047	0.596	0.644	<0.0030
RSEM-R5B-EOP	3/28/2020 14:10	XP3712	M	C022531	8.13	1010	607	11.0	157	157	158	<1.0	193	<1.0	<1.0	50.5	0.278	0.837	246			0.360	0.057	0.622	0.679	<0.0030
RSEM-R5B-EOP	3/28/2020 14:20	XP3713	D	C022531	7.99	1000	602	9.3	160	158	154	<1.0	188	<1.0	<1.0	55.2	0.279	0.836	242			0.375	0.059	0.621	0.680	<0.0030
RSEM-R5B-EOP	3/29/2020 15:30	XP3675	M	C022512	8.14	1130	672	5.8	173	171	175	<1.0	213	<1.0	<1.0	59.3	0.314	0.925	396			0.388	0.057	0.620	0.677	<0.0030
RSEM-R5B-EOP	3/30/2020 15:00	XP5011	M	C022895	8.26	1240	744	2.7	201	182	184	<1.0	225	<1.0	<1.0	64.8	0.340	1.02	294			0.454	0.060	0.612	0.673	0.0031
RSEM-R5B-EOP	3/31/2020 12:00	XP6323	M	C023153	8.09	1280	771	4.7	218	199	191	<1.0	233	<1.0	<1.0	70.7	0.289	1.01	351			0.463	0.059	0.602	0.662	<0.0030
RSEM-R5B-EOP	3/31/2020 12:10	XP6324	D	C023153	8.14	1280	782	4.5	206	197	191	<1.0	233	<1.0	<1.0	68.7	0.292	1.00	323			0.479	0.059	0.601	0.661	<0.0030
RSEM-R5B-EOP	4/1/2020 12:10	XP6344	M	C023159	8.17	1280	760	2.8	213	215	191	<1.0	233	<1.0	<1.0	70.1	0.319	0.976	319			0.454	0.059	0.577	0.636	<0.0030
RSEM-R5B-EOP	4/1/2020 12:20	XP6345	D	C023159	8.13	1280	779	5.4	206	217	194	<1.0	237	<1.0	<1.0	71.1	0.294	0.996	361			0.481	0.058	0.576	0.634	<0.0030
RSEM-R5B-EOP	4/2/2020 11:00	XP7671	M	C023465	8.27	1280	728	4.5	216	215	195	<1.0	238	<1.0	<1.0	67.4	0.302	0.918	341			0.530	0.062	0.585	0.648	<0.0030
RSEM-R5B-EOP	4/2/2020 11:10	XP7672	D	C023465	8.04	1300	735	5.6	207	205	196	<1.0	240	<1.0	<1.0	69.0	0.310	0.919	344			0.589	0.062	0.580	0.642	0.0035
RSEM-R5B-EOP	4/3/2020 11:10	XP9111	M	C023756	8.24	1280	807	4.7	206	208	200	<1.0	244	<1.0	<1.0	64.5	0.271	0.921	350			0.473				<0.0030
RSEM-R5B-EOP	4/3/2020 11:20	XP9112	D	C023756	8.26	1280	783	6.7	216	213	199	<1.0	243	<1.0	<1.0	62.1	0.275	0.878	345			0.481				<0.0030
RSEM-R5B-EOP	4/4/2020 11:30	XQ0607	M	C024053	8.16	1280	796	2.7	213	214	195	<1.0	237	<1.0	<1.0	61.6	0.305	0.891	353			0.497	0.066	0.626	0.692	<0.0030
RSEM-R5B-EOP	4/4/2020 11:40	XQ0608	D	C024053	8.17	1280	804	2.1	216	210	198	<1.0	242	<1.0	<1.0	60.9	0.299	0.854	357			0.505	0.066	0.630	0.696	<0.0030
RSEM-R5B-EOP	4/5/2020 12:20	XQ0577	M	C024048	8.00	1300	828	3.1	232	210	191	<1.0	233	<1.0	<1.0	59.8	0.282	0.906	367			0.539	0.062	0.665	0.728	<0.0030
RSEM-R5B-EOP	4/5/2020 12:30	XQ0578	D	C024048	8.15	1310	816	2.7	217	219	198	<1.0	241	<1.0	<1.0	56.6	0.297	0.888	366			0.522	0.063	0.644	0.706	<0.0030
RSEM-R5B-EOP	4/6/2020 12:25	XQ1945	M	C024407	7.80	1320	835	2.7	253	223	196	<1.0	239	<1.0	<1.0	59.3	0.277	0.907	361			0.524	0.067	0.642	0.709	<0.0030
RSEM-R5B-EOP	4/6/2020 12:35	XQ1946	D	C024407	8.07	1330	817	1.9	259	222	199	<1.0	243	<1.0	<1.0	58.0	0.274	0.931	358			0.503	0.062	0.646	0.708	<0.0030
RSEM-R5B-EOP	4/7/2020 11:50	XQ3412	M	C024753	8.23	1330	898	5.3	258	242	197	<1.0	241	<1.0	<1.0	53.0	0.302	0.819	371			0.590	0.058	0.645	0.703	<0.0030
RSEM-R5B-EOP	4/7/2020 12:00	XQ3413	D	C024753	8.08	1330	893	5.3	256	245	200	<1.0	244	<1.0	<1.0	54.4	0.276	0.825	357			0.606	0.060	0.649	0.709	<0.0030
RSEM-R5B-EOP	4/8/2020 11:30	XQ4587	M	C024938	8.18	996	627	21.7	227	223	155	<1.0	189	<1.0	<1.0	40.3	0.261	0.587	277			0.386	0.039	0.526	0.565	<0.0030
RSEM-R5B-EOP	4/8/2020 11:40	XQ4588	D	C024938	8.00	993	628	23.4	239	224	152	<1.0	186	<1.0	<1.0	39.8	0.265	0.589	277			0.402	0.039	0.523	0.562	<0.0030
RSEM-R5B-EOP	4/9/2020 12:20	XQ4586	M	C024937	8.01	802	480	23.3	180	163	89.9	<1.0	110	<1.0	<1.0	33.9	0.240	0.441	241			0.354	0.045	0.449	0.494	<0.0030
RSEM-R5B-EOP	4/10/2020 11:30	XQ5867	M	C025257	7.83	711	418	41.9	220	185	75.4	<1.0	92.0	<1.0	<1.0	26.6	0.250	0.389	208			0.345	0.043	0.403	0.446	<0.0030
RSEM-R5B-EOP	4/10/2020 11:40	XQ5868	D	C025257	7.74	714	416	34.5	185	197	74.2	<1.0	90.5	<1.0	<1.0	27.0	0.239	0.385	211			0.329	0.043	0.404	0.447	0.0034
RSEM-R5B-EOP	4/11/2020 18:50	XQ5966	M	C025274	7.82	928	553	7.0	215	209	81.3	<1.0	99.2	<1.0	<1.0	38.8	0.274	0.525	294			0.465	0.055	0.461	0.516	<0.0030
RSEM-R5B-EOP	4/12/2020 13:35	XQ6093	M	C025305	7.57	937	483	7.1	219	219	82.3	<1.0	100	<1.0	<1.0	39.7	0.288	0.569	296			0.457	0.055	0.465	0.520	<0.0030
RSEM-R5B-EOP	4/12/2020 13:45	XQ6094	D	C025305	7.63	936	522	5.8	213	215	83.7	<1.0	102	<1.0	<1.0	39.9	0.288	0.562	295			0.438	0.054	0.467	0.522	<0.0030
RSEM-R5B-EOP	4/13/2020 10:30	XQ5692	M	C025217	7.85	909	526	6.3	214	294	90.5	<1.0	110	<1.0	<1.0	39.4	0.308	0.536	278			0.414	0.050	0.466	0.516	<0.0030
RSEM-R5B-EOP	4/14/2020 18:05	XQ8327	M	C025913	7.80	852	527	6.7	186	194	83.4	<1.0	102	<1.0	<1.0	37.7	0.285	0.563	326			0.403	0.046	0.434	0.480	<0.0030
RSEM-R5B-EOP	4/15/2020 13:05	XQ9337	M	C026226	7.89	894	546	11.4	186	194	88.0	<1.0	107	<1.0	<1.0	37.8	0.312	0.601	281			0.391	0.049	0.458	0.507	<0.0030
RSEM-R5B-EOP	4/15/2020 13:15	XQ9338	D	C026226	7.95	891	581	6.1	180	201	88.0	<1.0	107	<1.0	<1.0	37.0	0.331	0.622	277			0.389	0.048	0.453	0.501	<0.0030
RSEM-R5B-EOP	4/16/2020 12:30	XR0406	M	C026516	7.72	921	588	6.5	168	179	90.5	<1.0	110	<1.0	<1.0	42.0	0.331	0.641	284			0.380	0.048	0.453	0.501	<0.0030
RSEM-R5B-EOP	4/16/2020 12:40	XR0407	D	C026516	7.74	929	608	7.1	184	195	91.4	<1.0	112	<1.0	<1.0	40.8	0.354	0.639	286			0.372	0.048	0.454	0.502	<0.0030
RSEM-R5B-EOP	4/17/2020 11:25	XR0398	M	C026514	7.67	945	592	2.0	173	250	92.5	<1.0	113	<1.0	<1.0	43.5	0.356	0.656	288			0.372	0.051	0.466	0.516	<0.0030
RSEM-R5B-EOP	4/18/2020 10:30	XR2299	M	C026869	7.89	979	634	<1.0	160	176	97.1	<1.0	119	<1.0	<1.0	38.7	0.363	0.661	269			0.364	0.047	0.462	0.509	0.0032
RSEM-R5B-EOP	4/18/2020 10:40	XR2300	D	C026869	7.97	987	620	1.5	153	175	96.6	<1.0	118	<1.0	<1.0	41.8	0.384	0.657	320			0.362	0.047	0.463	0.510	0.0032
RSEM-R5B-EOP	4/19/2020 14:45	XR2517	M	C026927	7.70	1010	631	3.9	176	152	91.9	<1.0	112	<1.0	<1.0	43.5	0.376	0.666	321			0.420	0.045	0.446	0.491	0.0042
RSEM-R5B-EOP	4/20/2020 16:40	XR3425	M	C027099	7.88	1030	658	4.6	169	159	90.1	<1.0	110	<1.0	<1.0	44.6	0.376	0.675	321			0.456	0.043	0.429	0.473	<0.0030
RSEM-R5B-EOP	4/21/2020 11:20	XR4950	M	C027465	7.92	1070	621	5.3	168	182	92.8	<1.0	113	<1.0	<1.0	47.4	0.345	0.641	327			0.435	0.044	0.449	0.493	<0.0030
RSEM-R5B-EOP	4/21/2020 11:30	XR4951	D	C027465	8.05	1070	616	6.1	184	172	93.6	<1.0	114	<1.0	<1.0	46.8	0.352	0.639	336			0.664	0.043	0.451	0.494	0.0033
RSEM-R5B-EOP	4/22/2020 11:30	XR6353	M	C027799	8.11	1090	665	5.7	226	166	93.1	<1.0	114	<1.0	<1.0	43.7	0.361	0.644	321			0.426	0.038	0.451	0.488	<0.0030
RSEM-R5B-EOP	4/22/2020 11:40	XR6354	D	C027799	7.85	1100	687	7.9	241	181	90.7	<1.0	111	<1.0	<1.0	44.4	0.367	0.647	330			0.424	0.037	0.450	0.487	<0.0030
RSEM-R5B-EOP	4/23/2020 14:05	XR7182	M	C027994	8.19	1210	752	4.3	165	181	96.0	<1.0	117	<1.0	<1.0	48.8	0.399	0.691	372			0.444	0.039	0.491	0.530	<0.0030
RSEM-R5B-EOP	4/24/2020 11:05	XR7266	M	C028014	8.21	1350	859	2.2	207	206	98.4	<1.0	120	<1.0	<1.0	54.2	0.464	0.788	429			0.477	0.039	0.534	0.574	0.0113
RSEM-R5B-EOP	4/24/2020 11:15	XR7267	D	C028014	8.22	1340	850	2.6	202	211	97.2	<1.0	119	<1.0	<1.0	54.4	0.389	0.788	498			0.484	0.038	0.533	0.571	<0.0030
RSEM-R5B-EOP	4/25/2020 11:05	XR8893	M	C028412	8.19	1460	922	1.7	232	107	96.2	<1.0	117	<1.0	<1.0	62.3	0.443	0.909	521			0.532	0.040	0.560	0.600	<0.0030
RSEM-R5B-EOP	4/25/2020 11:15	XR8894	D	C028412	7.84	1450	924	1.9	225	207	93.3	<1.0	114	<1.0	<1.0	62.2	0.469	0.897	519			0.513	0.039	0.557	0.596	<0.0030
RSEM-R5B-EOP	4/26/2020 11:50	XR8990	M	C028429	7.81	1540	968	1.5	238	201	91.0	<1.0	111	<1.0	<1.0	65.8	0.478	0.922	558			0.550	0.044	0.612	0.657	<0.0030
RSEM-R5B-EOP	4/26/2020 12:00	XR8991	D	C028429	8.22	1540	967	2.1	239	220	96.4	<1.0	118	<1.0	<1.0	67.9	0.443	0.926	554			0.561	0.044	0.605	0.650	<0.0030
RSEM-R5B-EOP	4/27/2020 13:05	XS0059	M	C028666	8.22	1610	1020	2.5	199	189	95.9	<1.0	117	<1.0	<1.0	75.1	0.455	1.06	480			0.576	0.046	0.618	0.664	<0.0030
RSEM-R5B-EOP	4/28/2020 14:10	XS2090	M	C029151	8.25	1640	1090	1.8	193	211	99.7	<1.0	122	<1.0	<1.0	79.1	0.457	1.12	606			0.254	0.045	0.634	0.679	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R5B-EOP	4/29/2020 11:45	XS3520	M	C029452	8.05	1670	1060	3.6	194	215	140	<1.0	171	<1.0	<1.0	81.2	0.529	1.10	608			0.168	0.046	0.634	0.680	<0.0030
RSEM-R5B-EOP	4/30/2020 11:45	XS4884	M	C029734	8.25	1680	1090	3.4	210	191	103	<1.0	125	<1.0	<1.0	84.1	0.527	1.10	527			0.119	0.044	0.637	0.681	<0.0030
RSEM-R5B-EOP	5/1/2020 12:00	XS5998	M	C029956	8.32	1690	1090	2.1	203	221	104	<1.0	127	<1.0	<1.0	78.4	0.490	1.15	513			0.110	0.042	0.633	0.675	0.0043
RSEM-R5B-EOP	5/2/2020 12:35	XS7463	M	C030328	8.32	1700	1060	6.0	204	213	104	<1.0	127	<1.0	<1.0	83.9	0.512	1.08	601			0.455	0.039	0.619	0.658	<0.0030
RSEM-R5B-EOP	5/4/2020 14:30	XS8356	M	C030506	7.04	1710	1080	1.7	196	218	107	<1.0	131	<1.0	<1.0	83.5	0.507	1.15	580			0.231	0.051	0.701	0.752	<0.0030
RSEM-R5B-EOP	5/7/2020 12:00	XT2577	M	C031444	7.65	1710	1060	3.4	242	240	102	<1.0	125	<1.0	<1.0	82.8	0.493	1.19	662			0.247	0.027	0.579	0.606	<0.0030
RSEM-R5B-EOP	5/8/2020 13:00	XT2572	M	C031442	7.93	1690	1060	1.9	216	249	107	<1.0	130	<1.0	<1.0	82.0	0.483	1.18	574			0.135	0.025	0.515	0.540	<0.0030
RSEM-R5B-EOP	5/9/2020 12:40	XT4488	M	C031859	7.88	1640	1040	2.5	223	232	115	<1.0	140	<1.0	<1.0	80.3	0.420	1.14	524			0.058	0.017	0.462	0.479	<0.0030
RSEM-R5B-EOP	5/9/2020 12:50	XT4490	D	C031859	8.02	1650	1030	2.6	266	250	113	<1.0	138	<1.0	<1.0	80.1	0.443	1.16	552			0.148	0.017	0.461	0.478	<0.0030
RSEM-R5B-EOP	5/10/2020 13:30	XT4528	M	C031867	8.22	1600	984	2.1	222	255	118	<1.0	143	<1.0	<1.0	76.5	0.397	1.12	497			0.058	0.022	0.456	0.479	<0.0030
RSEM-R5B-EOP	5/11/2020 9:45	XT5198	M	C032074	8.29	1630	1010	1.8	225	228	121	<1.0	147	<1.0	<1.0	74.5	0.409	1.02	475			0.035	0.021	0.439	0.460	<0.0030
RSEM-R5B-EOP	5/12/2020 11:40	XT7069	M	C032509	8.31	1590	1010	2.3	256	266	118	<1.0	145	<1.0	<1.0	74.4	0.432	1.02	470			0.065	0.013	0.408	0.421	<0.0030
RSEM-R5B-EOP	5/16/2020 12:00	XU2649	M	C033733	8.28	1570	994	2.7	257	244	121	<1.0	148	<1.0	<1.0	70.5	0.438	1.11	482			0.075	<0.010	0.232	0.232	<0.0030
RSEM-R5B-EOP	5/17/2020 10:40	XU2515	M	C033704	8.16	1550	971	<0.98	263	244	118	<1.0	144	<1.0	<1.0	71.2	0.421	1.03	490			0.056	<0.010	0.228	0.228	<0.0030
RSEM-R5B-EOP	5/18/2020 0:10	XU2636	M	C033728	8.01	1530	993	<1.0	239	242	120	<1.0	147	<1.0	<1.0	68.4	0.423	1.01	476			0.050	<0.010	0.249	0.249	0.0408
RSEM-R5B-EOP	5/21/2020 14:30	XU7000	M	C034623	7.97	1480	846	1.0	217	200	120	<1.0	147	<1.0	<1.0	67.3	0.421	0.929	456			0.016	<0.010	0.184	0.184	<0.0030
RSEM-R5B-EOP	5/22/2020 15:40	XU8403	M	C034984	8.07	1460	909	1.2	205	201	119	<1.0	145	<1.0	<1.0	63.7	0.380	0.903	475			0.016	<0.010	0.154	0.154	<0.0030
RSEM-R5B-EOP	6/9/2020 17:10	XX3628	M	C039793	8.03	1210	812	17.7	262	259	158	<1.0	193	<1.0	<1.0	66.9	0.313	0.770	362			0.080	<0.010	0.036	0.036	<0.0030
RSEM-R5B-EOP	6/14/2020 15:25	XX9648	M	C040993	7.66	1040	571	31.9	269	277	154	<1.0	188	<1.0	<1.0	48.1	0.302	0.711	307			0.067	0.017	0.096	0.113	<0.0030
RSEM-R5B-EOP	6/15/2020 16:30	XY1607	M	C041415	6.78	716	437	13.4	234	240	103	<1.0	126	<1.0	<1.0	33.0	0.349	0.558	204			0.088	0.051	0.527	0.579	<0.0030
RSEM-R5B-EOP	6/16/2020 11:25	XY1507	M	C041388	6.78	795	536	3.7	291	291	101	<1.0	123	<1.0	<1.0	33.9	0.461	0.591	256			0.109	0.050	0.734	0.785	<0.0030
RSEM-R5B-EOP	6/17/2020 13:20	XY6279	M	C042380	8.01	871	525	1.6	321	319	81.2	<1.0	99.1	<1.0	<1.0	33.4	0.527	0.616	308			0.131	0.051	0.791	0.842	<0.0030
RSEM-R5B-EOP	6/18/2020 14:30	XY6286	M	C042383	7.88	961	620	2.3	355	357	82.2	<1.0	100	<1.0	<1.0	34.0	0.573	0.623	348			0.139	0.051	0.814	0.865	<0.0030
RSEM-R5B-EOP	6/19/2020 12:00	XY6265	M	C042375	8.10	997	668	1.8	359	367	83.4	<1.0	102	<1.0	<1.0	34.0	0.592	0.622	353			0.165	0.049	0.814	0.863	<0.0030
RSEM-R5B-EOP	6/19/2020 12:10	XY6266	D	C042375	8.01	1000	688	1.9	366	364	82.8	<1.0	101	<1.0	<1.0	33.6	0.601	0.611	359			0.141	0.049	0.816	0.866	<0.0030
RSEM-R5B-EOP	6/20/2020 15:30	XY9032	M	C042884	8.15	1020	684	1.5	358	364	85.4	<1.0	104	<1.0	<1.0	35.4	0.621	0.632	381			0.055	0.050	0.825	0.875	0.0030
RSEM-R5B-EOP	6/21/2020 14:45	XY9119	M	C042904	8.15	1060	744	5.1	365	376	87.8	<1.0	107	<1.0	<1.0	34.5	0.612	0.639	393			0.086	0.057	0.851	0.908	<0.0030
RSEM-R5B-EOP	6/22/2020 12:30	XZ0405	M	C043197	8.20	1090	768	5.1	355	379	91.3	<1.0	111	<1.0	<1.0	36.9	0.624	0.667	405			0.068	0.070	0.872	0.942	0.0100
RSEM-R5B-EOP	6/23/2020 16:40	XZ2251	M	C043604	8.31	1120	748	4.2	357	376	92.7	<1.0	113	<1.0	<1.0	37.4	0.618	0.680	420			0.059	0.066	0.862	0.928	<0.0030
RSEM-R5B-EOP	6/24/2020 13:50	XZ5350	M	C044267	8.29	1140		2.5	369	368	93.6	<1.0	114	<1.0	<1.0	39.2	0.636	0.686	412			0.061	0.064	0.849	0.913	<0.0030
RSEM-R5B-EOP	6/25/2020 16:30	XZ5986	M	C044346	8.23	1150	732	7.3	369	370	96.1	<1.0	117	<1.0	<1.0	38.6	0.651	0.709	447			0.048	0.058	0.794	0.852	<0.0030
RSEM-R5B-EOP	6/26/2020 15:20	XZ7318	M	C044624	8.11	1140	788	3.6	371	361	97.3	<1.0	119	<1.0	<1.0	41.6	0.640	0.710	425			0.032	0.0560	0.842	0.898	<0.0030
RSEM-R5B-EOP	6/27/2020 18:20	XZ9067	M	C044897	8.30	1130	752	3.0	364	364	95.4	<1.0	116	<1.0	<1.0	37.2	0.654	0.716	414			0.035	0.051	0.743	0.795	<0.0030
RSEM-R5B-EOP	6/28/2020 11:15	XZ9157	M	C044916	8.27	1160	779	4.4	349	345	106	<1.0	129	<1.0	<1.0	37.8	0.667	0.728	414			0.025	0.057	0.763	0.820	<0.0030
RSEM-R5B-EOP	6/29/2020 15:00	YA0780	M	C045275	8.29	1170	765	3.6	344	342	112	<1.0	136	<1.0	<1.0	41.6	0.648	0.704	406			0.026	0.065	0.811	0.877	<0.0030
RSEM-R5B-EOP	6/29/2020 15:10	YA0781	D	C045275	8.33	1170	764	4.2	343	343	114	<1.0	139	<1.0	<1.0	41.4	0.645	0.711	403			0.107	0.065	0.813	0.878	<0.0030
RSEM-R5B-EOP	6/30/2020 12:35	YA2736	M	C045692	8.30	1170	768	5.3	323	330	127	<1.0	155	<1.0	<1.0	43.1	0.615	0.732	409			0.045	0.062	0.807	0.869	<0.0030
RSEM-R5B-EOP	7/1/2020 12:30	YA2710	M	C045689	8.23	997	568	24.4	318	304	207	<1.0	253	<1.0	<1.0	36.2	0.375	0.623	245			0.111	0.043	0.813	0.856	0.0032
RSEM-R5B-EOP	7/2/2020 14:25	YA4191	M	C045985	8.37	770	428	25.7	245	263	164	2.0	196	2.4	<1.0	32.9	0.310	0.523	187			0.062	0.026	0.634	0.660	0.0047
RSEM-R5B-EOP	7/3/2020 16:35	YA5157	M	C046179	7.87	524	330	67.2	204	214	101	<1.0	123	<1.0	<1.0	21.3	0.290	0.312	135			0.026	0.0071	0.435	0.442	<0.015
RSEM-R5B-EOP	7/4/2020 12:45	YA6731	M	C046470	7.97	478	284	8.8	198	206	81.2	<1.0	99.1	<1.0	<1.0	14.7	0.306	0.209	140			<0.015	<0.010	0.356	0.356	0.0056
RSEM-R5B-EOP	7/4/2020 12:55	YA6732	D	C046470	8.01	479	278	8.4	196	207	81.1	<1.0	99.0	<1.0	<1.0	14.4	0.306	0.209	143			<0.015	<0.010	0.351	0.351	0.0051
RSEM-R5B-EOP	7/5/2020 10:50	YA6920	M	C046500	7.95	602	392	3.6	252	257	78.3	<1.0	95.5	<1.0	<1.0	14.3	0.419	0.257	189			0.044	<0.010	0.369	0.369	0.0030
RSEM-R5B-EOP	7/6/2020 11:45	YA8350	M	C046846	8.14	758	404	2.3	312	319	97.9	<1.0	119	<1.0	<1.0	16.4	0.522	0.276	258			0.080	<0.010	0.423	0.423	<0.0030
RSEM-R5B-EOP	7/7/2020 13:00	YB0052	M	C047206	7.94	873	536	3.1	373	370	107	<1.0	131	<1.0	<1.0	17.4	0.582	0.342	294			0.077	0.012	0.457	0.469	<0.0030
RSEM-R5B-EOP	7/8/2020 15:30	YB2462	M	C047619	8.23	905	597	3.2	381	390	122	<1.0	149	<1.0	<1.0	18.3	0.577	0.360	319			0.075	0.012	0.475	0.487	<0.0030
RSEM-R5B-EOP	7/9/2020 15:30	YB4138	M	C047920	8.27	876	576	2.5	372	382	143	<1.0	174	<1.0	<1.0	19.9	0.524	0.370	274			0.043	<0.010	0.472	0.472	<0.0030
RSEM-R5B-EOP	7/10/2020 10:45	YB4118	M	C047917	8.34	847	560	2.7	374	382	164	1.3	197	1.6	<1.0	20.9	0.457	0.368	238			0.018	<0.010	0.479	0.479	<0.0030
RSEM-R5B-EOP	7/11/2020 16:00	YB7195	M	C048486	8.24	804	494	1.9	354	351	172	<1.0	210	<1.0	<1.0	22.1	0.390	0.341	212			<0.015	<0.010	0.378	0.378	<0.0030
RSEM-R5B-EOP	7/12/2020 15:40	YB7110	M	C048462	8.18	777	444	3.5	351	350	180	<1.0	220	<1.0	<1.0	22.7	0.341	0.351	188			0.017	<0.010	0.405		<0.0030
RSEM-R5B-EOP	7/13/2020 15:30	YB9221	M	C048875	8.23	746	412	3.5	344	340	181	<1.0	221	<1.0	<1.0	23.7	0.286	0.364	180			0.022	<0.010	0.382	0.382	<0.0030
RSEM-R5B-EOP	7/14/2020 12:45	YC1070	M	C049344	8.25	733	464	3.1	330	334	183	<1.0	223	<1.0	<1.0	24.3	0.285	0.363	167			0.038	<0.010	0.326	0.326	<0.0030
RSEM-R5B-EOP	7/15/2020 11:35	YC2136	M	C049614	8.19	738	452	2.9	330	320	185	<1.0	226	<1.0	<1.0	24.3	0.233	0.348	164			0.034	<0.010	0.371	0.371	<0.0030
RSEM-R5B-EOP	7/16/2020 14:20	YC4663	M	C049952	8.20	738	418	1.3	313	323	188	<1.0	229	<1.0	<1.0	25.3	0.198	0.338	157			0.049	<0.010	0.386	0.386	<0.0030
RSEM-R5B-EOP	7/16/2020 14:30	YC4664	D	C049952	8.21	732	414	2.0	323	323	191	<1.0	232	<1.0	<1.0	25.2	0.214	0.346	158			0.031	<0.010	0.392	0.392	<0.0030
RSEM-R5B-EOP	7/17/2020 12:45	YC5479	M	C050110	8.19	711	460	2.0	317	312	207	<1.0	252	<1.0	<1.0	23.6	0.220	0.355	149			0.026	0.0071	0.412	0.420	<0.0030
RSEM-R5B-EOP	7/17/2020 12:55	YC5480	D	C050110	8.18	709	476	2.8	324	313	205	<1.0	250	<1.0	<1.0	23.4	0.230	0.347	152			0.018	0.0078	0.383	0.390	<0.0030
RSEM-R5B-EOP	7/18/2020 12:05	YC7456	M	C050583	8.16	704	421	1.7	316	310	187	<1.0	228	<1.0	<1.0	24.4	0.191	0.382	144			0.026	<0.010	0.368	0.368	<0.0030
RSEM-R5B-EOP	7/18/2020 12:15	YC7457	D	C050583	8.19	709	422	1.2	316	310	184	<1.0	224	<1.0	<1.0	24.4	0.188	0.388	144			0.033	<0.010	0.366	0.366	<0.0030
RSEM-R5B-EOP	7/19/2020 12:40	YC7534	D	C050603	8.20	695	412	1.9	313	306	188	<1.0	229	<1.0	<1.0	24.7	0.183	0.377	135			0.045	<0.010	0.389	0.389	<0.0030
RSEM-R5B-EOP	7/19/2020 13:30	YC7533	M	C050603	8.18	695	422	1.9	303	306	188	<1.0	230	<1.0	<1.0	24.9	0.197	0.395	134			0.025	<0.010	0.391	0.391	<0.0030
RSEM-R5B-EOP	7/20/2020 12:30	YC8545	M	C050811	8.17	684	420	4.4	313	304	190	<1.0	232	<1.0	<1.0	26.0	0.188	0.366	130			0.025	<0.010	0.375	0.375	<0.0030
RSEM-R5B-EOP	7/21/2020 15:20	YD0798	M	C051251	8.18	670	407	2.3	303	305	189	<1.0	231	<1.0	<1.0	25.6	0.183	0.352	124			0.018	<0.010	0.365	0.365	<0.0030
RSEM-R5B-EOP	7/22/2020 14:20	YD2619	M	C051641	8.28	672	403	2.6	299	296	182	<1.0	223	<1.0	<1.0	25.6	0.175	0.352	124			0.022	<0.010	0.320	0.320	<0.0030
RSEM-R5B-EOP	7/23/2020 14:20	YD4256	M	C051864	8.31	660	420	<1.0	292	292	175	<1.0	214	<1.0	<1.0	26.3	0.141	0.360	124			0.028	<0.010	0.257	0.257	<0.0030
RSEM-R5B-EOP	7/24/2020 14:05	YD5908	M	C052038	8.28	630	418	3.2	296	289	188	<1.0	229	<1.0	<1.0	26.0	0.170	0.364	131			<0.015	0.0044	0.244	0.249	<0.0030
RSEM-R5B-EOP	7/25/2020 12:00	YD7676	M	C052402	8.29	650	368	2.5	292	282	174	<1.0	212	<1.0	<1.0	26.5	0.137	0.411	118			<0.015	<0.010	0.210	0.210	<0.0030
RSEM-R5B-EOP	7/26/2020 13:15	YD7711	M	C052420	8.34	641	364	1.6	286	283	168	1.8	200	2.1	<1.0	26.9	0.140	0.384	115			0.067	<0.010	0.14	0.14	<0.0030
RSEM-R5B-EOP	7/26/2020 13:25	YD7712	D	C052420	8.32	642	345	2.3	285	280	172	<1.0	210	<1.0	<1.0	26.9	0.136	0.376	116			<0.015	<0.010	0.14	0.14	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R5B-EOP	7/27/2020 11:50	YD7771	M	C052432	8.31	635	330	2.3	286	279	168	<1.0	204	<1.0	<1.0	27.3	0.146	0.363	120			<0.015	<0.010	0.19	0.19	<0.0030
RSEM-R5B-EOP	7/28/2020 13:45	YE2031	M	C053295	8.26	625	353	2.8	289	268	167	<1.0	204	<1.0	<1.0	27.4	0.126	0.381	121			<0.015	<0.010	0.120	0.120	<0.0030
RSEM-R5B-EOP	7/30/2020 14:30	YE4007	M	C053695	8.36	626	360	1.9	274	264	165	2.5	196	3.0	<1.0	27.2	0.148	0.360	117			0.039	<0.010	0.083	0.083	<0.0030
RSEM-R5B-EOP	7/31/2020 12:10	YE5652	M	C054023	8.37	616	336	1.4	270	269	162	3.0	191	3.6	<1.0	27.8	0.123	0.358	119			0.016	<0.010	0.052	0.052	<0.0030
RSEM-R5B-EOP	7/31/2020 12:20	YE5654	D	C054023	8.35	617	344	2.3	285	266	161	2.7	190	3.2	<1.0	27.5	0.122	0.356	118			0.064	<0.010	0.050	0.050	<0.0030
RSEM-R5B-EOP	8/1/2020 11:30	YE6667	M	C054219	8.21	600	378	2.8	286	271	168	<1.0	205	<1.0	<1.0	26.2	0.160	0.321	123			<0.015	0.0056	0.094	0.100	<0.0030
RSEM-R5B-EOP	8/2/2020 13:45	YE8518	M	C054579	8.23	611	360	2.8	270	266	164	<1.0	200	<1.0	<1.0	28.5	0.146	0.370	120			0.022	<0.010	0.031	0.031	<0.0030
RSEM-R5B-EOP	8/3/2020 11:40	YE8526	M	C054582	8.28	615	228	2.4	275	266	163	<1.0	199	<1.0	<1.0	28.6	0.148	0.337	119			<0.015	<0.010	0.054	0.054	<0.0030
RSEM-R5B-EOP	8/4/2020 11:20	YF1642	M	C055153	8.21	592	404	3.7	261	263	151	<1.0	185	<1.0	<1.0	28.7	0.158	0.336	125			0.017	<0.010	0.032	0.032	<0.0030
RSEM-R5B-EOP	8/5/2020 11:05	YF2975	M	C055442	8.10	586	329	2.3	251	258	145	<1.0	177	<1.0	<1.0	28.0	0.149	0.340	114			<0.015	<0.010	0.013	<0.014	<0.0030
RSEM-R5B-EOP	8/6/2020 12:40	YF2970	M	C055440	8.14	571	320	1.9	260	260	152	<1.0	185	<1.0	<1.0	28.0	0.158	0.344	120			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/7/2020 10:45	YF4855	M	C055741	8.30	588	296	3.1	252	254	155	<1.0	189	<1.0	<1.0	28.3	0.167	0.367	114			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/8/2020 11:15	YF8356	M	C056281	8.16	582	398	1.9	238	240	151	<1.0	184	<1.0	<1.0	27.4	0.174	0.366	117			0.023	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/9/2020 13:20	YF8359	M	C056282	8.38	585	395	1.8	244	239	150	2.5	177	3.0	<1.0	28.1	0.171	0.369	114			0.019	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/9/2020 13:30	YF8360	D	C056282	8.38	583	377	2.6	232	239	148	2.7	175	3.2	<1.0	27.5	0.169	0.367	117			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/10/2020 11:00	YG0104	M	C056587	8.29	583	334	2.5	253	250	153	<1.0	186	<1.0	<1.0	27.4	0.173	0.355	116			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/11/2020 11:35	YG2364	M	C056973	8.33	577	324	2.2	259	249	149	<1.0	182	<1.0	<1.0	27.6	0.166	0.364	122			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/11/2020 11:45	YG2365	D	C056973	8.31	577	354	2.5	261	249	145	<1.0	177	<1.0	<1.0	27.4	0.167	0.369	122			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/12/2020 16:10	YG4634	M	C057417	8.38	577	322	1.9	252	248	138	2.2	163	2.6	<1.0	28.2	0.162	0.370	122			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/13/2020 11:50	YG7258	M	C057823	8.43	583	432	1.5	255	248	147	3.1	171	3.7	<1.0	26.8	0.165	0.365	120			<0.015	<0.010	<0.050	<0.050	<0.0030
RSEM-R5B-EOP	8/14/2020 12:00	YG7188	M	C057817	8.41	583	326	3.7	244	247	142	3.3	165	3.9	<1.0	27.0	0.165	0.362	120			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/15/2020 13:20	YH0058	M	C058356	8.31	579	319	1.3	245	244	150	<1.0	183	<1.0	<1.0	27.1	0.154	0.351	120			<0.015	<0.010	<0.010	<0.014	0.0048
RSEM-R5B-EOP	8/15/2020 13:30	YH0059	D	C058356	8.34	578	323	1.9	247	242	147	<1.0	180	<1.0	<1.0	28.9	0.151	0.353	120			<0.015	<0.010	<0.010	<0.014	0.0039
RSEM-R5B-EOP	8/16/2020 11:00	YH0171	M	C058389	8.38	582	337	2.1	252	242	152	2.1	180	2.5	<1.0	26.7	0.156	0.347	121			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/17/2020 10:10	YG9871	M	C058326	8.37	581	324	2.1	247	246	145	2.0	172	2.4	<1.0	24.4	0.170	0.287	120			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/18/2020 15:45	YH3310	M	C059056	8.33	580	338	2.8	241	244	149	<1.0	182	<1.0	<1.0	26.2	0.163	0.344	123			<0.015	<0.010	<0.010	<0.010	<0.0030
RSEM-R5B-EOP	8/19/2020 16:00	YH5389	M	C059422	8.24	591	334	3.5	242	244	147	<1.0	179	<1.0	<1.0	26.2	0.167	0.341	125			<0.015	<0.010	<0.010	<0.014	<0.0030
RSEM-R5B-EOP	8/23/2020 15:30	YI0111	M	C060255	8.19	604	346	10.3	233	225	150	<1.0	183	<1.0	<1.0	20.7	0.226	0.280	144			0.019	<0.010	0.033	0.033	0.0037
RSEM-R5B-EOP	8/24/2020 14:40	YI2200	M	C060702	8.23	614	339	17.9	235	228	139	<1.0	169	<1.0	<1.0	20.1	0.229	0.323	141			<0.015	<0.010	0.043	0.043	<0.0030
RSEM-R5B-EOP	8/25/2020 11:30	YI3993	M	C061087	8.17	602	321	5.2	237	237	134	<1.0	163	<1.0	<1.0	19.2	0.241	0.264	146			<0.015	<0.010	0.062	0.062	0.0030
RSEM-R5B-EOP	8/25/2020 11:40	YI3994	D	C061087	8.28	608	296	4.8	236	233	136	<1.0	166	<1.0	<1.0	19.4	0.245	0.253	148			0.016	<0.010	0.063	0.063	<0.0030
RSEM-R5B-EOP	8/26/2020 12:35	YI6262	M	C061565	8.21	611	361	6.6	233	239	132	<1.0	161	<1.0	<1.0	19.2	0.257	0.268	152			<0.015	<0.010	0.057	0.057	<0.0030
RSEM-R5B-EOP	8/27/2020 11:30	YI7771	M	C061827	8.27	622	360	3.5	237	233	128	<1.0	156	<1.0	<1.0	19.2	0.283	0.281	159			<0.015	<0.010	0.061	0.061	<0.0030
RSEM-R5B-EOP	8/27/2020 11:40	YI7772	D	C061827	8.29	620	342	3.6	241	237	131	<1.0	159	<1.0	<1.0	19.2	0.281	0.297	161			<0.015	<0.010	0.051	0.051	<0.0030
RSEM-R5B-EOP	8/28/2020 12:40	YI9492	M	C062013	8.05	619	408	4.0	225	241	136	<1.0	166	<1.0	<1.0	18.8	0.280	0.248	139			<0.015	0.0069	0.061	0.068	<0.0030
RSEM-R5B-EOP	8/29/2020 11:15	YJ1740	M	C062465	8.28	629	400	3.1	231	235	131	<1.0	160	<1.0	<1.0	20.9	0.294	0.256	177			0.021	<0.010	0.051	0.051	<0.0030
RSEM-R5B-EOP	8/30/2020 13:35	YJ1571	M	C062426	8.33	638	348	2.3	226	235	131	<1.0	159	<1.0	<1.0	21.3	0.294	0.260	176			0.021	<0.010	0.077	0.077	<0.0030
RSEM-R5B-EOP	8/31/2020 17:25	YJ3641	M	C062857	8.34	644	408	3.8	241	237	132	<1.0	161	<1.0	<1.0	21.2	0.289	0.264	177			<0.015	<0.010	0.057	0.057	<0.0030
RSEM-R5B-EOP	9/1/2020 12:55	YJ6689	M	C063433	8.40	645	378	4.5	224	236	129	2.3	152	2.8	<1.0	21.1	0.280	0.273	174			0.015	<0.010	0.024	0.024	<0.0030
RSEM-R5B-EOP	9/2/2020 15:35	YJ7833	M	C063666	8.37	633	402	1.1	223	230	126	1.3	151	1.6	<1.0	21.2	0.285	0.257	171			0.031	<0.010	0.015	0.015	<0.0030
RSEM-R5B-EOP	9/3/2020 15:15	YK0032	M	C064047	8.24	633	386	4.3	233	230	124	<1.0	151	<1.0	<1.0	21.8	0.283	0.263	173			<0.015	<0.010	0.011	<0.014	<0.0030
RSEM-R5B-EOP	9/3/2020 15:25	YK0033	D	C064047	8.30	618	388	4.5	225	233	124	<1.0	151	<1.0	<1.0	21.6	0.280	0.260	172			<0.015	<0.010	0.011	<0.014	<0.0030
RSEM-R5B-EOP	9/4/2020 13:30	YK0087	M	C064051	8.38	636	369	1.5	225	228	124	3.1	144	3.7	<1.0	22.1	0.293	0.254	169			0.016	<0.010	0.010	<0.014	<0.0030
RSEM-R5B-SP	2/22/2020 13:20	XL1355	M	C013195	7.05	1430	844	3.5	236	229	232	<1.0	375	<1.0	<1.0	78.1	0.306	1.03	352			0.122	0.037	0.740	0.777	0.0033
RSEM-R5B-SP	2/22/2020 13:30	XL1356	D	C013195	7.95	1390	842	2.3	233	231	244	<1.0	297	<1.0	<1.0	77.6	0.287	1.05	324			0.136	0.047	0.737	0.784	0.0032
RSEM-R5B-SP	5/3/2020 8:20	XS7392	M	C030307	8.09	1710	1060	3.7	222	202	102	<1.0	125	<1.0	<1.0	83.1	0.517	1.13	574			0.408	0.038	0.608	0.646	<0.0030
RSEM-R5B-SP	5/5/2020 14:20	XT0143	M	C030949	8.38	1720	1060	3.1	215	240	102	1.4	121	1.7	<1.0	81.0	0.507	1.18	579			0.151	0.034	0.578	0.612	<0.0030
RSEM-R5B-SP	5/6/2020 14:40	XT1603	D	C031246	7.89	1710	1090	2.6	222	245	104	<1.0	127	<1.0	<1.0	81.1	0.502	1.19	560			0.123	0.030	0.563	0.593	<0.0030
RSEM-R5B-SP	5/6/2020 14:50	XT1601	M	C031246	7.75	1710	1030	2.3	219	259	102	<1.0	125	<1.0	<1.0	81.5	0.502	1.16	570			0.118	0.031	0.564	0.595	<0.0030
RSEM-R5B-SP	5/13/2020 11:35	XT8150	M	C032775	8.41	1610	1010	2.7	234	227	121	2.6	141	3.2	<1.0	73.2	0.439	0.991	462			0.019	0.011	0.374	0.385	<0.0030
RSEM-R5B-SP	5/15/2020 9:35	XU0134	M	C033173	8.15	1590	1010	<1.0	243	252	119	<1.0	146	<1.0	<1.0	72.2	0.431	0.975	528			0.022	<0.010	0.301	0.301	<0.0030
RSEM-R5B-SP	5/23/2020 14:20	XU8588	M	C034993	8.24	1460	902	2.7	224	224	122	<1.0	149	<1.0	<1.0	62.8	0.376	0.893	478			0.097	<0.010	0.144	0.144	<0.0030
RSEM-R5B-SP	5/30/2020 14:45	XV8356	M	C037043	8.16	1420	896	3.3	230	231	142	<1.0	173	<1.0	<1.0	66.9	0.394	0.924	462			0.296	<0.010	0.052	0.052	<0.0030
RSEM-R5B-SP	6/10/2020 14:30	XX4755	M	C040036	7.58	1190	796	14.7	267	260	156	<1.0	191	<1.0	<1.0	60.3	0.312	0.825	370			0.044	<0.010	0.040	0.040	0.0038
RSEM-R5B-SP	8/22/2020 12:20	YI0130	M	C060262	8.02	589	345	24.4	231	224	146	<1.0	178	<1.0	<1.0	19.7	0.202	0.253	126			<0.015	<0.010	0.036	0.036	<0.0030
RSEM-R5B-W	4/8/2020 14:20	XQ4591	M	C024938	7.78	375	247	2060	349	149	60.9	<1.0	74.3	<1.0	<1.0	10.6	0.224	0.137	102			0.395	0.032	0.306	0.338	0.0041
RSEM-R5B-W	7/2/2020 14:45	YA4186	M	C045984	8.20	838	479	1030	453	351	106	<1.0	129	<1.0	<1.0	43.5	0.512	0.731	245			0.095	0.015	0.382	0.397	0.0097
RSEM-R6E-EOP	1/1/2020 13:45	XE7145	M	C000229	7.92	1090	644	2.7	260	268	310	<1.0	379	<1.0	<1.0	68.2	0.285	1.13	149			0.242	0.016	0.630	0.646	<0.0030
RSEM-R6E-EOP	1/2/2020 10:55	XE7180	M	C000238	7.97	1110	676	3.5	261	276	318	<1.0	388	<1.0	<1.0	65.3	0.297	1.15	147			0.241	0.016	0.626	0.642	<0.0030
RSEM-R6E-EOP	1/3/2020 14:05	XE8698	M	C000625	8.27	1080	626	4.8	268	282	306	<1.0	373	<1.0	<1.0	70.7	0.270	1.14	151			0.198	0.0164	0.643	0.659	<0.0030
RSEM-R6E-EOP	1/4/2020 15:30	XE9881	M	C000877	8.03	1080	601	3.7	294	267	315	<1.0	384	<1.0	<1.0	67.7	0.306	1.14	155			0.183	0.016	0.672	0.688	0.0035
RSEM-R6E-EOP	1/5/2020 15:00	XE9852	M	C000870	8.07	1100	592	2.1	309	266	317	<1.0	387	<1.0	<1.0	65.2	0.315	1.13	148			0.098	0.018	0.670	0.688	0.0037
RSEM-R6E-EOP	1/6/2020 13:40	XF0704	M	C001127	8.14	1100	568	4.0	268	266	317	<1.0	386	<1.0	<1.0	70.5	0.315	1.18	170			0.228	0.013	0.671	0.685	<0.0030
RSEM-R6E-EOP	1/7/2020 15:00	XF1934	M	C001464	7.91	1100	676	4.5	279	284	312	<1.0	380	<1.0	<1.0	71.4	0.292	1.18	165			0.267	0.013	0.664	0.677	<0.0030
RSEM-R6E-EOP	1/8/2020 14:45	XF3043	M	C001783	8.04	1100	676	6.0	295	278	324	<1.0	395	<1.0	<1.0	66.7	0.308	1.17	160			0.082	0.014	0.634	0.648	0.0064
RSEM-R6E-EOP	1/9/2020 13:50	XF4213	M	C002074	8.03	1100	632	5.3	273	279	327	<1.0	399	<1.0	<1.0	65.1	0.309	1.14	159			0.113	0.013	0.635	0.647	0.0032
RSEM-R6E-EOP	1/10/2020 11:50	XF5141	M	C002216	8.30	1080		4.8	281	302	309	<1.0	377	<1.0	<1.0	66.9	0.260	1.18	132			0.127	0.0135	0.625	0.639	<0.0030
RSEM-R6E-EOP	1/11/2020 13:15	XF5749	M	C002384	8.04	1090	668	2.7	283	285	324	<1.0	395	<1.0	<1.0	65.6	0.303	1.10	161			0.076	0.016	0.691	0.708	<0.0030
RSEM-R6E-EOP	1/12/2020 14:30	XF5771	M	C002394	7.94	1090	664	3.6	280	284	318	<1.0	388	<1.0	<1.0	66.1	0.295	1.10	157			0.075	0.016	0.687	0.703	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6E-EOP	1/13/2020 13:00	XF7161	M	C002657	8.04	1090	656	2.5	282	289	321	<1.0	392	<1.0	<1.0	65.6	0.295	1.15	149			0.219	0.014	0.668	0.683	0.0044
RSEM-R6E-EOP	1/14/2020 13:05	XF8102	M	C002891	7.99	1110	652	1.7	283	286	318	<1.0	389	<1.0	<1.0	68.5	0.280	1.17	150			0.080	0.032	0.666	0.698	0.0031
RSEM-R6E-EOP	1/15/2020 14:00	XF9572	M	C003144	8.14	1120	652	1.0	287	277	319	<1.0	390	<1.0	<1.0	68.3	0.310	1.18	153			0.078	0.014	0.658	0.672	0.0038
RSEM-R6E-EOP	1/16/2020 15:20	XG0618	M	C003413	7.99	1090	704	3.1	262	266	321	<1.0	391	<1.0	<1.0	68.7	0.304	1.17	154			0.069	0.013	0.642	0.654	0.0031
RSEM-R6E-EOP	1/17/2020 10:20	XG0611	M	C003412	7.90	1120	690	1.5	261	264	321	<1.0	392	<1.0	<1.0	69.4	0.304	1.19	158			0.101	0.013	0.643	0.655	0.0043
RSEM-R6E-EOP	1/17/2020 10:30	XG0612	D	C003412	8.20	1170	699	2.3	268	265	327	<1.0	399	<1.0	<1.0	69.5	0.272	1.19	156			0.110	0.014	0.639	0.653	<0.0030
RSEM-R6E-EOP	1/18/2020 13:15	XG2773	M	C003851	7.98	1120	667	2.8	275	274	320	<1.0	390	<1.0	<1.0	70.8	0.317	1.20	165			0.261	0.016	0.624	0.639	0.0044
RSEM-R6E-EOP	1/18/2020 13:25	XG2774	D	C003851	8.06	1120	666	1.7	278	276	322	<1.0	393	<1.0	<1.0	70.2	0.312	1.21	165			0.150	0.018	0.642	0.660	0.0043
RSEM-R6E-EOP	1/19/2020 16:40	XG2757	M	C003847	8.13	1130	667	2.0	275	280	326	<1.0	398	<1.0	<1.0	71.4	0.316	1.24	169			0.094	0.018	0.628	0.646	0.0051
RSEM-R6E-EOP	1/19/2020 16:50	XG2758	D	C003847	8.11	1120	688	1.6	279	279	323	<1.0	394	<1.0	<1.0	72.6	0.322	1.24	169			0.089	0.014	0.625	0.639	0.0055
RSEM-R6E-EOP	1/20/2020 10:15	XG2702	M	C003843	8.03	1150	719	2.9	277	270	322	<1.0	392	<1.0	<1.0	77.7	0.319	1.28	178			0.196	0.012	0.551	0.563	0.0107
RSEM-R6E-EOP	1/20/2020 10:25	XG2703	D	C003843	7.94	1160	707	3.1	273	270	323	<1.0	394	<1.0	<1.0	77.1	0.317	1.29	178			0.234	0.012	0.550	0.563	0.0125
RSEM-R6E-EOP	1/21/2020 15:00	XG5823	M	C004470	8.18	1210	716	1.9	269	263	324	<1.0	395	<1.0	<1.0	81.0	0.339	1.49	185			0.338	0.016	0.529	0.545	0.0177
RSEM-R6E-EOP	1/22/2020 17:00	XG7451	M	C004860	8.06	1200	689	4.3	265	254	342	<1.0	417	<1.0	<1.0	80.1	0.344	1.41	184			0.247	0.015	0.491	0.505	0.0157
RSEM-R6E-EOP	1/23/2020 17:00	XG9561	M	C005172	8.13	1190	703	2.9	253	265	322	<1.0	392	<1.0	<1.0	77.8	0.319	1.40	174			0.292	0.016	0.519	0.535	0.0072
RSEM-R6E-EOP	1/24/2020 10:20	XG9567	M	C005174	8.11	1210	721	5.6	250	262	332	<1.0	404	<1.0	<1.0	78.3	0.342	1.43	178			0.213	0.017	0.506	0.523	0.0083
RSEM-R6E-EOP	1/25/2020 11:00	XH2065	M	C005631	8.13	1220	716	2.3	246	252	359	<1.0	438	<1.0	<1.0	76	0.318	1.39	190			0.257	0.010	0.462	0.472	0.0146
RSEM-R6E-EOP	1/26/2020 12:30	XH2024	M	C005623	8.16	1210	728	2.5	240	256	356	<1.0	434	<1.0	<1.0	79	0.316	1.38	170			0.178	0.016	0.424	0.440	0.0108
RSEM-R6E-EOP	1/27/2020 16:30	XH3885	M	C005941	8.00	1210	698	4.1	269	252	358	<1.0	437	<1.0	<1.0	75.1	0.315	1.38	181			0.172				0.0096
RSEM-R6E-EOP	1/28/2020 14:05	XH5362	M	C006197	8.02	1220	677	3.7	249	251	360	<1.0	439	<1.0	<1.0	79.2	0.306	1.33	184			0.191	<0.010	0.472	0.472	0.0089
RSEM-R6E-EOP	1/29/2020 12:25	XH6913	M	C006592	8.03	1200	736	1.3	264	256	335	<1.0	408	<1.0	<1.0	77.8	0.323	1.32	179			0.170	0.024	0.557	0.580	0.0078
RSEM-R6E-EOP	1/30/2020 14:15	XH8749	M	C006955	7.99	1190	721	1.5	258	264	336	<1.0	410	<1.0	<1.0	77.8	0.332	1.31	176			0.295	0.016	0.553	0.569	0.0062
RSEM-R6E-EOP	1/31/2020 14:40	XH9852	M	C007079	8.22	1170	688	2.0	268	265	341	<1.0	416	<1.0	<1.0	74.9	0.310	1.31	152			0.138	0.0147	0.573	0.587	<0.0030
RSEM-R6E-EOP	2/1/2020 12:30	XI1805	M	C007448	8.09	1180	718	1.7	255	269	340	<1.0	415	<1.0	<1.0	76.5	0.321	1.29	169			0.122	0.014	0.569	0.583	0.0050
RSEM-R6E-EOP	2/2/2020 15:05	XI1835	M	C007454	8.01	1170	723	1.5	260	263	341	<1.0	416	<1.0	<1.0	73.9	0.307	1.27	166			0.216	0.015	0.564	0.579	0.0037
RSEM-R6E-EOP	2/3/2020 13:10	XI3482	M	C007820	8.23	1190	671	3.1	261	275	335	<1.0	408	<1.0	<1.0	76.5	0.342	1.24	161			0.239	0.025	0.561	0.585	<0.0030
RSEM-R6E-EOP	2/4/2020 12:55	XI3463	M	C007815	8.12	1170	675	2.8	255	272	340	<1.0	414	<1.0	<1.0	74.6	0.334	1.21	163			0.206	0.027	0.551	0.578	0.0031
RSEM-R6E-EOP	2/5/2020 14:15	XI6889	M	C008469	7.91	1160	630	4.1	265	256	336	<1.0	410	<1.0	<1.0	69.1	0.309	1.22	167			0.208	0.017	0.566	0.583	0.0033
RSEM-R6E-EOP	2/6/2020 13:05	XI8760	M	C008772	8.08	1170	5940	2.6	261	257	340	<1.0	415	<1.0	<1.0	70.3	0.321	1.20	165			0.262	0.023	0.520	0.543	0.0031
RSEM-R6E-EOP	2/7/2020 11:15	XI8779	M	C008775	8.05	1150	682	4.3	255	259	333	<1.0	406	<1.0	<1.0	62.9	0.319	1.20	166			0.261	0.018	0.506	0.524	<0.0030
RSEM-R6E-EOP	2/7/2020 11:25	XI8780	D	C008775	8.09	1160	676	3.8	263	267	341	<1.0	416	<1.0	<1.0	65.2	0.319	1.19	164			0.259	0.024	0.507	0.531	<0.0030
RSEM-R6E-EOP	2/8/2020 13:00	XJ1673	M	C009232	8.07	1140	719	1.9	268	264	328	<1.0	401	<1.0	<1.0	67.2	0.300	1.15	165			0.234	0.015	0.493	0.508	<0.0030
RSEM-R6E-EOP	2/9/2020 14:30	XJ1693	M	C009242	8.01	1130	650	3.7	261	266	334	<1.0	408	<1.0	<1.0	70.1	0.313	1.17	170			0.231	0.014	0.496	0.510	<0.0030
RSEM-R6E-EOP	2/10/2020 10:05	XJ1713	M	C009249	8.06	1130	673	<1.0	265	264	337	<1.0	411	<1.0	<1.0	68.5	0.306	1.16	166			0.221	0.014	0.497	0.511	0.0030
RSEM-R6E-EOP	2/11/2020 13:15	XJ6270	M	C010122	7.99	1100	591	3.1	266	223	348	<1.0	424	<1.0	<1.0	66.0	0.292	1.12	163			0.176	0.017	0.496	0.513	0.0034
RSEM-R6E-EOP	2/12/2020 13:50	XJ8070	M	C010503	8.07	1130	677	4.9	273	260	341	<1.0	416	<1.0	<1.0	67.2	0.313	1.14	153			0.159	0.014	0.508	0.522	0.0032
RSEM-R6E-EOP	2/22/2020 14:35	XL1358	M	C013195	7.86	1120	659	1.2	254	257	325	<1.0	396	<1.0	<1.0	65.4	0.288	1.12	166			0.114	0.015	0.483	0.498	0.0044
RSEM-R6E-EOP	2/23/2020 13:00	XL1345	M	C013192	7.88	1130	672	2.4	262	274	333	<1.0	407	<1.0	<1.0	63.8	0.318	1.09	196			0.086	0.021	0.474	0.494	0.0036
RSEM-R6E-EOP	2/24/2020 10:30	XL1314	M	C013183	8.25	1130	683	2.5	265	262	328	<1.0	400	<1.0	<1.0	69.0	0.285	1.09	176			0.107	0.033	0.475	0.507	<0.0030
RSEM-R6E-EOP	2/24/2020 10:40	XL1315	D	C013183	8.26	1120	683	1.5	270	264	327	<1.0	399	<1.0	<1.0	68.3	0.274	1.09	174			0.148	0.032	0.475	0.507	0.0034
RSEM-R6E-EOP	2/25/2020 12:50	XL5026	M	C014003	8.13	1130	680	1.9	289	289	317	<1.0	386	<1.0	<1.0	64.4	0.313	1.11	176			0.167	0.024	0.466	0.490	<0.0030
RSEM-R6E-EOP	2/26/2020 12:15	XL6614	M	C014425	8.23	1130	662	3.2	288	278	317	<1.0	386	<1.0	<1.0	65.9	0.306	1.22	183			0.251	0.021	0.480	0.501	<0.0030
RSEM-R6E-EOP	2/27/2020 10:40	XL6654	M	C014448	8.05	1130	679	3.2	288	293	307	<1.0	375	<1.0	<1.0	62.8	0.302	1.22	181			0.311	0.028	0.455	0.483	<0.0030
RSEM-R6E-EOP	2/27/2020 10:50	XL6655	D	C014448	8.14	1130	681	2.8	297	288	309	<1.0	377	<1.0	<1.0	63.0	0.305	1.22	183			0.334	0.028	0.452	0.480	<0.0030
RSEM-R6E-EOP	2/28/2020 11:10	XL8817	M	C014870	8.04	1110	653	14.8	281	295	289	<1.0	352	<1.0	<1.0	69.0	0.305	1.26	175			0.462	0.038	0.471	0.509	0.0038
RSEM-R6E-EOP	2/28/2020 11:20	XL8818	D	C014870	7.95	1100	651	15.7	295	284	291	<1.0	355	<1.0	<1.0	69.1	0.298	1.25	174			0.447	0.042	0.477	0.518	<0.0030
RSEM-R6E-EOP	2/29/2020 13:30	XM2599	M	C015563	8.04	1020	604	9.6	276	268	257	<1.0	313	<1.0	<1.0	66.0	0.288	1.18	160			0.336	0.051	0.507	0.558	0.0031
RSEM-R6E-EOP	2/29/2020 13:40	XM2600	D	C015563	7.93	1020	604	10.7	281	270	255	<1.0	311	<1.0	<1.0	65.9	0.291	1.18	162			0.374	0.050	0.514	0.564	<0.0030
RSEM-R6E-EOP	3/1/2020 11:50	XM2631	M	C015569	7.92	975	588	7.8	268	262	266	<1.0	325	<1.0	<1.0	67.3	0.319	1.33	176			0.251	0.056	0.525	0.581	<0.0030
RSEM-R6E-EOP	3/1/2020 12:00	XM2632	D	C015569	7.97	983	580	9.7	260	263	254	<1.0	310	<1.0	<1.0	66.2	0.316	1.14	166			0.317	0.056	0.530	0.585	0.0030
RSEM-R6E-EOP	3/2/2020 18:45	XM6320	M	C016408	8.02	986	577	16.9	257	257	235	<1.0	287	<1.0	<1.0	68.6	0.268	1.18	160			0.255	0.057	0.556	0.613	0.0035
RSEM-R6E-EOP	3/3/2020 12:40	XM6546	M	C016468	7.91	951	578	11.6	239	244	237	<1.0	289	<1.0	<1.0	68.2	0.318	1.13	150			0.380	0.064	0.581	0.645	<0.0030
RSEM-R6E-EOP	3/4/2020 14:30	XM8002	M	C016829	8.10	925	538	8.7	236	231	222	<1.0	271	<1.0	<1.0	70.7	0.312	1.11	145			0.329	0.077	0.592	0.670	<0.0030
RSEM-R6E-EOP	3/5/2020 13:45	XN0418	M	C017276	8.13	905	521	8.4	242	229	215	<1.0	262	<1.0	<1.0	69.5	0.312	1.02	137			0.430	0.075	0.599	0.674	<0.0030
RSEM-R6E-EOP	3/10/2020 12:45	XN6089	M	C018396	8.01	867	510	5.3	239	231	184	<1.0	225	<1.0	<1.0	73.6	0.242	0.983	140			0.318	0.077	0.729	0.806	<0.0030
RSEM-R6E-EOP	3/10/2020 12:55	XN6090	D	C018396	7.92	863	512	4.1	233	231	184	<1.0	225	<1.0	<1.0	71.6	0.236	0.991	139			0.340	0.077	0.610	0.688	0.0033
RSEM-R6E-EOP	3/11/2020 14:25	XN7891	M	C018851	8.16	838	516	16.3	232	235	169	<1.0	206	<1.0	<1.0	76.6	0.327	0.980	124			0.464	0.078	0.634	0.712	<0.0030
RSEM-R6E-EOP	3/11/2020 14:35	XN7892	D	C018851	8.16	842	507	13.3	226	229	170	<1.0	207	<1.0	<1.0	77.3	0.332	0.957	126			0.455	0.078	0.647	0.725	<0.0030
RSEM-R6E-EOP	3/12/2020 12:00	XN8894	M	C019027	8.10	840	544	11.1	232	227	174	<1.0	213	<1.0	<1.0	77.2	0.320	0.992	122			0.458	0.083	0.649	0.732	<0.0030
RSEM-R6E-EOP	3/12/2020 12:10	XN8895	D	C019027	8.11	839	538	10.0	230	227	175	<1.0	214	<1.0	<1.0	76.9	0.317	1.10	122			0.469	0.083	0.650	0.733	<0.0030
RSEM-R6E-EOP	3/13/2020 11:30	XN9529	M	C019176	8.13	833	478	8.0	225	232	175	<1.0	214	<1.0	<1.0	77.9	0.300	0.996	137			0.462	0.0885	0.710	0.798	0.0047
RSEM-R6E-EOP	3/13/2020 11:40	XN9530	D	C019176	8.02	826	484	4.8	228	228	176	<1.0	214	<1.0	<1.0	77.4	0.310	0.982	137			0.535	0.0890	0.715	0.804	<0.0030
RSEM-R6E-EOP	3/16/2020 13:45	XO2545	M	C019847	7.98	835	485	4.6	230	228	162	<1.0	197	<1.0	<1.0	80.4	0.282	0.986	142			0.423	0.083	0.676	0.759	<0.0030
RSEM-R6E-EOP	3/17/2020 13:15	XO3910	M	C020169	7.89	872	518	4.9	235	238	171	<1.0	209	<1.0	<1.0	80.3	0.357	1.03	142			0.573	0.081	0.643	0.723	0.0040
RSEM-R6E-EOP	3/18/2020 12:50	XO5560	M	C020445	7.86	917	544	8.0	208	220	202	<1.0	247	<1.0	<1.0	76.7	0.350	1.03	148			0.551	0.069	0.570	0.639	0.0038
RSEM-R6E-EOP	3/21/2020 12:05	XO8300	M	C021037	7.93	926	530	5.0	231	215	193	<1.0	235	<1.0	<1.0	75.9	0.368	1.08	152			0.552	0.069	0.581	0.651	0.0036
RSEM-R6E-EOP	3/22/2020 12:10	XO8422	M	C021064	7.87	932	531	9.5	235	216	205	<1.0	250	<1.0	<1.0	73.9	0.359	1.07	155			0.549	0.058	0.543	0.601	0.0036
RSEM-R6E-EOP	3/23/2020 11:05	XO8462	M	C021073	7.93	912	547	8.0	232	216	215	<1.0	262	<1.0	<1.0	72.6	0.359	1.06	155			0.539	0.062	0.565	0.627	0.0035
RSEM-R6E-EOP	3/23/2020 11:15	XO8463	D	C021073	7.90	909	537	8.4	229	214	205	<1.0	250	<1.0	<1.0	74.6	0.362	1.05	153			0.572	0.060	0.567	0.627	0.0035

Appendix 3-C: 2020 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
					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
RSEM-R6E-EOP	3/24/2020 11:00	XP0443	M	C021618	8.16	838	536	2.8	230	224	169	<1.0	206	<1.0	<1.0	74.4	0.298	1.02	141			0.570	0.068	0.610	0.678	<0.0030
RSEM-R6E-EOP	3/25/2020 11:00	XP1312	M	C021872	8.10	792	462	5.6	223	224	160	<1.0	195	<1.0	<1.0	74.6	0.300	1.06	135			0.606	0.065	0.624	0.688	<0.0030
RSEM-R6E-EOP	3/26/2020 17:50	XP2431	M	C022151	8.00	920	534	5.9	246	241	196	<1.0	239	<1.0	<1.0	72.5	0.292	1.15	162			0.694	0.058	0.553	0.611	<0.0030
RSEM-R6E-EOP	3/27/2020 10:15	XP2501	M	C022160	7.92	830	468	9.1	234	229	167	<1.0	204	<1.0	<1.0	70.2	0.294	1.04	145			0.580	0.055	0.574	0.629	<0.0030
RSEM-R6E-EOP	3/28/2020 11:45	XP3710	M	C022531	8.02	643	356	4.9	196	200	117	<1.0	142	<1.0	<1.0	61.7	0.254	0.857	104			0.484	0.051	0.611	0.662	<0.0030
RSEM-R6E-EOP	4/7/2020 13:30	XQ3417	M	C024753	7.99	903	614	6.5	271	267	176	<1.0	215	<1.0	<1.0	77.0	0.291	1.10	171			0.777	0.060	0.595	0.655	<0.0030
RSEM-R6E-EOP	4/8/2020 12:30	XQ4590	M	C024938	8.14	800	484	11.0	253	245	146	<1.0	178	<1.0	<1.0	73.9	0.296	1.06	140			0.647	0.056	0.576	0.631	<0.0030
RSEM-R6E-EOP	4/9/2020 11:00	XQ4583	M	C024937	8.09	771	434	17.6	253	242	137	<1.0	167	<1.0	<1.0	71.6	0.277	1.09	132			0.658	0.057	0.565	0.622	<0.0030
RSEM-R6E-EOP	4/9/2020 11:10	XQ4584	D	C024937	7.93	779	401	19.0	254	242	134	<1.0	164	<1.0	<1.0	70.5	0.273	1.07	136			0.696	0.054	0.573	0.627	<0.0030
RSEM-R6E-EOP	4/10/2020 12:35	XQ5870	M	C025257	7.91	667	371	26.0	221	223	111	<1.0	135	<1.0	<1.0	64.1	0.230	0.996	113			0.628	0.047	0.514	0.561	<0.0030
RSEM-R6E-EOP	4/11/2020 18:10	XQ5963	M	C025274	7.83	627	349	13.3	205	193	96.1	<1.0	117	<1.0	<1.0	62.6	0.207	0.950	106			0.602	0.046	0.502	0.548	<0.0030
RSEM-R6E-EOP	4/11/2020 18:20	XQ5964	D	C025274	7.98	627	368	15.8	207	197	98.8	<1.0	121	<1.0	<1.0	63.5	0.221	0.944	107			0.620	0.047	0.501	0.547	<0.0030
RSEM-R6E-EOP	4/12/2020 15:15	XQ6096	M	C025305	7.85	596	312	9.9	210	183	92.6	<1.0	113	<1.0	<1.0	62.1	0.216	0.922	98.3			0.540	0.046	0.498	0.544	<0.0030
RSEM-R6E-EOP	4/13/2020 10:30	XQ5690	D	C025217	7.90	548	299	4.1	187	174	81.6	<1.0	99.6	<1.0	<1.0	56.3	0.209	0.825	89.4			0.509	0.042	0.460	0.503	<0.0030
RSEM-R6E-EOP	4/13/2020 10:30	XQ5689	M	C025217	7.95	545	302	2.5	190	208	82.8	<1.0	101	<1.0	<1.0	55.8	0.221	0.821	89.9			0.486	0.041	0.459	0.500	<0.0030
RSEM-R6E-EOP	4/14/2020 18:55	XQ8328	M	C025913	7.97	635	384	9.0	220	211	100	<1.0	122	<1.0	<1.0	61.7	0.234	0.955	123			0.550	0.043	0.525	0.568	<0.0030
RSEM-R6E-EOP	4/15/2020 14:25	XQ9341	M	C026226	7.93	627	315	3.2	202	213	97.3	<1.0	119	<1.0	<1.0	59.5	0.229	0.923	123			0.529	0.043	0.531	0.574	<0.0030
RSEM-R6E-EOP	4/16/2020 13:35	XR0409	M	C026516	7.78	635	390	6.4	212	234	103	<1.0	126	<1.0	<1.0	60.9	0.246	0.902	129			0.532	0.038	0.550	0.588	<0.0030
RSEM-R6E-EOP	4/17/2020 10:30	XR0395	M	C026514	7.90	615	372	4.1	212	216	91.8	<1.0	112	<1.0	<1.0	57.2	0.237	0.871	123			0.499	0.037	0.547	0.585	<0.0030
RSEM-R6E-EOP	4/17/2020 10:40	XR0396	D	C026514	7.79	606	376	3.3	208	202	96.0	<1.0	117	<1.0	<1.0	59.3	0.235	0.859	122			0.473	0.037	0.538	0.575	<0.0030
RSEM-R6E-EOP	4/18/2020 11:40	XR2302	M	C026869	8.08	552	320	1.1	160	181	82.1	<1.0	100	<1.0	<1.0	53.6	0.200	0.783	111			0.431	0.033	0.491	0.524	0.0031
RSEM-R6E-EOP	4/19/2020 12:30	XR2516	M	C026927	7.95	600	342	5.1	178	192	94.1	<1.0	115	<1.0	<1.0	55.3	0.199	0.870	123			0.513	0.032	0.493	0.524	0.0038
RSEM-R6E-EOP	4/20/2020 17:30	XR3426	M	C027099	7.97	594	367	9.1	205	183	95.4	<1.0	116	<1.0	<1.0	55.4	0.201	0.853	119			0.587	0.029	0.445	0.474	<0.0030
RSEM-R6E-EOP	4/21/2020 12:25	XR4953	M	C027465	8.04	572	316	9.8	207	191	94.1	<1.0	115	<1.0	<1.0	51.3	0.187	0.804	110			0.540	0.028	0.417	0.444	<0.0030
RSEM-R6E-EOP	4/22/2020 13:05	XR6356	M	C027799	8.11	531	296	11.7	183	188	90.8	<1.0	111	<1.0	<1.0	44.6	0.180	0.741	92.4			0.514	0.021	0.364	0.385	<0.0030
RSEM-R6E-EOP	4/23/2020 15:05	XR7184	M	C027994	8.07	507	284	11.3	154	155	89.2	<1.0	109	<1.0	<1.0	41.9	0.183	0.685	86.3			0.474	0.022	0.363	0.386	<0.0030
RSEM-R6E-EOP	4/24/2020 12:40	XR7269	M	C028014	7.92	506	273	10.7	161	151	90.9	<1.0	111	<1.0	<1.0	40.6	0.176	0.656	83.1			0.461	0.021	0.361	0.382	<0.0030
RSEM-R6E-EOP	4/25/2020 12:35	XR8896	M	C028412	8.18	494	279	9.5	167	162	94.7	<1.0	115	<1.0	<1.0	37.3	0.174	0.642	73.9			0.419	0.018	0.354	0.373	<0.0030
RSEM-R6E-EOP	4/26/2020 13:25	XR8994	M	C028429	8.16	489	259	8.7	167	151	97.6	<1.0	119	<1.0	<1.0	35.9	0.182	0.612	70.6			0.400	0.019	0.376	0.395	<0.0030
RSEM-R6E-EOP	4/27/2020 14:00	XS0060	M	C028666	8.10	490	261	8.5	181	150	98.6	<1.0	120	<1.0	<1.0	40.9	0.189	0.611	65.6			0.377	0.030	0.384	0.414	<0.0030
RSEM-R6E-EOP	4/28/2020 12:15	XS2084	M	C029151	8.13	496	314	7.3	172	188	103	<1.0	126	<1.0	<1.0	36.8	0.184	0.593	86.7			0.388	0.023	0.389	0.412	<0.0030
RSEM-R6E-EOP	4/28/2020 12:25	XS2085	D	C029151	8.05	499	292	8.9	164	158	104	<1.0	127	<1.0	<1.0	37.3	0.202	0.596	85.2			0.577	0.031	0.389	0.420	<0.0030
RSEM-R6E-EOP	4/29/2020 11:00	XS3516	M	C029452	7.72	504	266	10.9	178	177	117	<1.0	142	<1.0	<1.0	40.0	0.230	0.598	91.1			0.220	0.026	0.394	0.421	<0.0030
RSEM-R6E-EOP	4/29/2020 11:10	XS3517	D	C029452	7.60	501	275	9.1	167	177	114	<1.0	139	<1.0	<1.0	36.2	0.231	0.613	87.3			0.169	0.026	0.402	0.427	0.0033
RSEM-R6E-EOP	4/30/2020 11:10	XS4883	M	C029734	8.16	507	286	6.5	183	179	107	<1.0	130	<1.0	<1.0	37.6	0.214	0.557	75.2			0.568	0.020	0.394	0.414	<0.0030
RSEM-R6E-EOP	5/22/2020 12:50	XU8402	M	C034984	7.92	747	453	3.1	262	249	107	<1.0	130	<1.0	<1.0	114	0.220	1.67	88.5			0.039	<0.010	0.314	0.314	<0.0030
RSEM-R6E-EOP	5/23/2020 14:10	XU8587	M	C034993	8.10	935	621	1.9	328	330	119	<1.0	145	<1.0	<1.0	163	0.221	2.36	89.9			0.122	0.017	0.546	0.563	<0.0030
RSEM-R6E-EOP	5/24/2020 12:50	XU8645	M	C035010	8.06	956	651	<1.0	328	343	116	<1.0	142	<1.0	<1.0	173	0.197	2.42	95.7			0.040	0.015	0.594	0.610	<0.0030
RSEM-R6E-EOP	5/25/2020 8:50	XU8663	M	C035018	8.14	994	2540	2.6	360	346	122	<1.0	149	<1.0	<1.0	182	0.199	2.78	97.1			0.038	0.016	0.658	0.674	<0.0030
RSEM-R6E-EOP	5/26/2020 15:00	XV2882	M	C035941	8.20	1030	606	2.1	363	359	117	<1.0	142	<1.0	<1.0	188	0.231	2.77	96.5			0.096	0.016	0.707	0.723	<0.0030
RSEM-R6E-EOP	5/27/2020 15:10	XV4564	M	C036323	7.95	1040	636	2.3	357	370	133	<1.0	163	<1.0	<1.0	190	0.227	2.79	102			0.072	0.017	0.740	0.758	<0.0030
RSEM-R6E-EOP	5/28/2020 14:30	XV5618	M	C036526	7.66	1030	708	1.7	363	372	128	<1.0	156	<1.0	<1.0	197	0.212	2.80	107			0.083	0.018	0.738	0.756	<0.0030
RSEM-R6E-EOP	5/29/2020 11:40	XV5614	M	C036525	7.58	1030	723	<1.0	363	370	130	<1.0	158	<1.0	<1.0	198	0.212	2.78	108			0.127	0.018	0.800	0.818	<0.0030
RSEM-R6E-EOP	5/30/2020 14:00	XV8353	M	C037043	7.67	1020	692	3.0	357	367	125	<1.0	153	<1.0	<1.0	191	0.232	2.78	106			0.139	0.028	0.763	0.791	<0.0030
RSEM-R6E-EOP	5/31/2020 12:30	XV8399	M	C037057	7.36	1000	680	1.3	344	356	128	<1.0	156	<1.0	<1.0	190	0.218	2.73	86.0			0.135	0.017	0.802	0.819	<0.0030
RSEM-R6E-EOP	5/31/2020 13:00	XV8401	D	C037057	7.60	1010	696	1.2	359	355	124	<1.0	151	<1.0	<1.0	192	0.223	2.73	83.9			0.145	0.019	0.822	0.841	<0.0030
RSEM-R6E-EOP	6/1/2020 14:45	XW0112	M	C037316	7.60	987	511	2.7	347	341	125	<1.0	152	<1.0	<1.0	180	0.216	2.66	74.1			0.035	0.041	0.731	0.772	<0.0030
RSEM-R6E-EOP	6/2/2020 11:45	XW3133	M	C037913	7.89	1010	614	1.8	330	333	125	<1.0	152	<1.0	<1.0	184	0.231	2.54	81.8			0.020	0.019	0.753	0.772	<0.0030
RSEM-R6E-EOP	6/3/2020 13:00	XW5133	M	C038222	7.54	968	522	<1.0	331	335	115	<1.0	141	<1.0	<1.0	176	0.224	2.47	88.9			<0.015	0.015	0.704	0.720	<0.0030
RSEM-R6E-EOP	6/4/2020 12:50	XW6864	M	C038528	7.46	938	588	<1.0	316	328	124	<1.0	151	<1.0	<1.0	175	0.223	2.44	97.1			<0.015	0.045	0.561	0.607	<0.0030
RSEM-R6E-EOP	6/5/2020 16:30	XW9908	M	C039108	7.54	929	628	<1.0	309	315	123	<1.0	150	<1.0	<1.0	172	0.208	2.45	102			0.035	0.016	0.610	0.626	<0.0030
RSEM-R6E-EOP	6/6/2020 11:30	XX0124	M	C039138	7.38	920	636	1.1	307	309	116	<1.0	142	<1.0	<1.0	172	0.209	2.38	99.4			0.039	0.013	0.565	0.579	<0.0030
RSEM-R6E-EOP	6/7/2020 12:10	XW9323	M	C038976	7.44	886	536	1.7	302	309	128	<1.0	156	<1.0	<1.0	159	0.207	2.14	94.3			0.033	0.012	0.560	0.572	<0.0030
RSEM-R6E-EOP	6/8/2020 15:40	XX1066	M	C039370	7.49	870	544	9.6	293	300	128	<1.0	156	<1.0	<1.0	162	0.207	2.12	96.1			0.041	0.014	0.528	0.542	<0.0030
RSEM-R6E-EOP	6/8/2020 15:50	XX1067	D	C039370	7.17	863	548	8.1	298	302	139	<1.0	169	<1.0	<1.0	156	0.210	2.14	91.4			0.041	0.013	0.527	0.540	<0.0030
RSEM-R6E-EOP	6/9/2020 15:20	XX3624	M	C039793	7.49	1010	740	4.5	371	376	126	<1.0	154	<1.0	<1.0	197	0.239	2.65	113			0.182	0.031	0.815	0.847	<0.0030
RSEM-R6E-EOP	6/9/2020 15:30	XX3625	D	C039793	7.33	1000	748	4.9	367	374	128	<1.0	156	<1.0	<1.0	194	0.239	2.63	114			0.151	0.032	0.819	0.851	<0.0030
RSEM-R6E-EOP	6/10/2020 13:20	XX4753	M	C040036	7.51	984	640	4.7	380	360	123	<1.0	150	<1.0	<1.0	176	0.244	2.42	111			0.099	0.031	0.782	0.812	<0.0030
RSEM-R6E-EOP	6/11/2020 13:30	XX7039	M	C040416	7.49	962	624	1.1	346	371	122	<1.0	149	<1.0	<1.0	174	0.243	2.45	110			0.081	0.028	0.707	0.736	<0.0030
RSEM-R6E-EOP	6/11/2020 13:40	XX7040	D	C040416	8.06	961	644	2.1	344	369	115	<1.0	140	<1.0	<1.0	173	0.242	2.54	110			0.115	0.028	0.709	0.737	<0.0030
RSEM-R6E-EOP	6/12/2020 13:55	XX9580	M	C040980	7.34	963	640	1.7	342	358	125	<1.0	153	<1.0	<1.0	173	0.252	2.40	111			0.059	0.030	0.706	0.736	<0.0030
RSEM-R6E-EOP	6/12/2020 14:05	XX9581	D	C040980	7.28	960	648	1.9	340	355	126	<1.0	153	<1.0	<1.0	172	0.253	2.41	112			0.058	0.030	0.703	0.734	<0.0030
RSEM-R6E-EOP	6/13/2020 14:35	XX9598	M	C040986	7.33	934	486	1.5	332	326	120	<1.0	147	<1.0	<1.0	164	0.246	2.33	109			0.045	0.025	0.639	0.664	<0.0030
RSEM-R6E-EOP	6/13/2020 14:45	XX9599	D	C040986	7.07	935	487	1.5	330	324	107	<1.0	131	<1.0	<1.0	165	0.245	2.31	109			0.042	0.025	0.639	0.664	<0.0030
RSEM-R6E-EOP	6/14/2020 14:00	XX9646	M	C040993	7.52	883	478	11.6	327	340	129	<1.0	157	<1.0	<1.0	140	0.258	1.94	107			0.070	0.024	0.607	0.631	<0.0030
RSEM-R6E-EOP	6/15/2020 14:45	XY1602	M	C041415	6.88	825	526	9.6	312	322	106	<1.0	129	<1.0	<1.0	107	0.430	1.51	164			0.172	0.046	0.712	0.758	<0.0030
RSEM-R6E-EOP	6/16/2020 10:45	XY1504	M	C041388	6.77	871	538	4.1	346	350	104	<1.0	127	<1.0	<1.0	104	0.539	1.49	195			0.249	0.043	0.785	0.828	<0.0030
RSEM-R6E-EOP	6/17/2020 15:30	XY6277	M	C042380	8.11	872	514	2.5	353	349	93.4	<1.0	114	<1.0	<1.0	88.9	0.576	1.40	198			0.220	0.034	0.800	0.834	<0.0030
RSEM-R6E-EOP	6/18/2020 16:20	XY6284	M	C042383	8.27	870	560	8.0	350	350	106	<1.0	129	<1.0	<1.0	83.6	0.557	1.26	193			0.168	0.030	0.851	0.881	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6E-EOP	6/19/2020 11:30	XY6263	M	C042375	8.33	856	540	<1.0	349	341	117	<1.0	142	<1.0	<1.0	78.2	0.555	1.12	198			0.144	0.032	0.785	0.816	<0.0030
RSEM-R6E-EOP	6/20/2020 14:00	XY9027	M	C042884	8.31	823	548	2.1	344	335	122	<1.0	149	<1.0	<1.0	74.4	0.563	1.05	194			0.069	0.027	0.804	0.831	<0.0030
RSEM-R6E-EOP	6/21/2020 15:15	XY9120	M	C042904	8.29	801	520	4.1	311	319	138	<1.0	168	<1.0	<1.0	55.2	0.493	0.902	175			0.043	0.019	0.796	0.815	<0.0030
RSEM-R6E-EOP	6/22/2020 13:00	XZ0403	M	C043197	8.26	769	492	2.4	306	308	143	<1.0	175	<1.0	<1.0	59.5	0.457	0.815	158			0.031	0.020	0.750	0.770	0.0034
RSEM-R6E-EOP	6/23/2020 16:00	XZ2249	M	C043604	8.31	705	396	2.7	277	291	154	<1.0	188	<1.0	<1.0	50.6	0.380	0.680	127			0.054	0.012	0.711	0.723	<0.0030
RSEM-R6E-EOP	6/24/2020 13:00	XZ5349	M	C044267	8.24	676		1.1	274	274	148	<1.0	180	<1.0	<1.0	48.9	0.363	0.630	115			0.100	0.013	0.628	0.641	<0.0030
RSEM-R6E-EOP	6/25/2020 15:20	XZ5981	M	C044346	8.29	649	350	3.1	261	260	146	<1.0	179	<1.0	<1.0	46.3	0.354	0.600	113			0.022	0.011	0.535	0.546	<0.0030
RSEM-R6E-EOP	6/25/2020 15:30	XZ5982	D	C044346	8.21	644	328	2.7	259	262	145	<1.0	177	<1.0	<1.0	44.0	0.356	0.602	109			0.022	0.013	0.541	0.554	<0.0030
RSEM-R6E-EOP	6/26/2020 12:20	XZ7315	M	C044624	8.27	627	392	1.2	261	257	153	<1.0	187	<1.0	<1.0	47.0	0.320	0.580	105			0.025	0.0110	0.601	0.612	<0.0030
RSEM-R6E-EOP	6/26/2020 12:30	XZ7316	D	C044624	8.29	628	414	1.6	262	257	154	<1.0	188	<1.0	<1.0	57.1	0.330	0.584	101			0.034	0.0134	0.618	0.632	<0.0030
RSEM-R6E-EOP	6/27/2020 19:00	XZ9069	M	C044897	8.29	597	334	<1.0	254	248	152	<1.0	186	<1.0	<1.0	42.9	0.322	0.549	89.8			0.043	<0.010	0.539	0.539	<0.0030
RSEM-R6E-EOP	6/28/2020 12:40	XZ9159	M	C044916	8.23	612	358	1.1	261	249	159	<1.0	194	<1.0	<1.0	46.1	0.308	0.597	86.8			<0.015	<0.010	0.587	0.587	<0.0030
RSEM-R6E-EOP	6/28/2020 12:50	XZ9160	D	C044916	8.28	612	342	<1.0	256	250	159	<1.0	194	<1.0	<1.0	46.9	0.308	0.596	84.8			0.024	<0.010	0.583	0.583	<0.0030
RSEM-R6E-EOP	6/29/2020 15:55	YA0783	M	C045275	8.24	625	339	1.9	257	252	153	<1.0	187	<1.0	<1.0	52.6	0.291	0.694	83.8			<0.015	0.012	0.696	0.709	<0.0030
RSEM-R6E-EOP	6/30/2020 13:50	YA2738	M	C045692	8.12	617	356	2.9	264	258	160	<1.0	196	<1.0	<1.0	52.8	0.281	0.677	82.0			0.043	0.011	0.713	0.724	<0.0030
RSEM-R6E-EOP	6/30/2020 14:00	YA2739	D	C045692	8.20	624	345	3.1	262	255	159	<1.0	194	<1.0	<1.0	53.6	0.284	0.670	81.3			0.040	0.011	0.716	0.728	<0.0030
RSEM-R6E-EOP	7/1/2020 11:30	YA2706	M	C045689	8.14	601	309	5.1	263	264	178	<1.0	218	<1.0	<1.0	42.4	0.272	0.520	69.3			0.054	0.014	0.753	0.767	<0.0030
RSEM-R6E-EOP	7/1/2020 11:40	YA2707	D	C045689	8.27	604	302	5.8	272	257	182	<1.0	222	<1.0	<1.0	41.2	0.262	0.512	67.4			0.038	0.011	0.762	0.773	0.0030
RSEM-R6E-EOP	7/2/2020 13:30	YA4188	M	C045985	8.19	684	365	8.6	284	290	119	<1.0	146	<1.0	<1.0	74.1	0.391	1.03	122			0.074	0.038	0.823	0.861	<0.0030
RSEM-R6E-EOP	7/2/2020 13:40	YA4189	D	C045985	8.24	687	360	8.1	282	288	120	<1.0	146	<1.0	<1.0	72.5	0.391	1.03	122			0.073	0.039	0.825	0.864	<0.0030
RSEM-R6E-EOP	7/3/2020 16:10	YA5155	M	C046179	7.96	666	426	24.8	272	278	105	<1.0	128	<1.0	<1.0	61.9	0.520	0.838	145			0.103	0.0281	0.799	0.827	<0.0030
RSEM-R6E-EOP	7/4/2020 15:05	YA6735	M	C046470	7.93	647	380	7.3	264	273	94.7	<1.0	115	<1.0	<1.0	42.2	0.563	0.619	173			0.091	0.023	0.661	0.684	<0.0030
RSEM-R6E-EOP	7/5/2020 10:05	YA6916	M	C046500	8.14	676	440	6.9	281	294	120	<1.0	146	<1.0	<1.0	40.1	0.569	0.565	170			0.086	0.020	0.762	0.782	<0.0030
RSEM-R6E-EOP	7/5/2020 10:15	YA6917	D	C046500	8.14	676	436	6.7	275	293	116	<1.0	142	<1.0	<1.0	39.3	0.571	0.566	175			0.085	0.020	0.761	0.781	<0.0030
RSEM-R6E-EOP	7/6/2020 11:30	YA8348	D	C046846	8.36	694	368	4.6	282	299	141	2.0	168	2.4	<1.0	36.2	0.532	0.536	164			0.079	0.016	0.865	0.881	<0.0030
RSEM-R6E-EOP	7/6/2020 23:20	YA8347	M	C046846	8.34	689	428	5.1	284	299	141	1.4	169	1.6	<1.0	36.0	0.545	0.539	163			0.077	0.016	0.862	0.878	<0.0030
RSEM-R6E-EOP	7/7/2020 12:30	YB0051	M	C047206	8.36	684	396	2.9	307	299	161	2.1	191	2.5	<1.0	38.8	0.455	0.490	144			0.051	0.014	0.961	0.976	<0.0030
RSEM-R6E-EOP	7/8/2020 12:30	YB2460	M	C047619	8.37	686	386	2.8	305	308	173	2.5	205	3.0	<1.0	38.4	0.423	0.485	130			0.072	0.013	1.02	1.03	<0.0030
RSEM-R6E-EOP	7/9/2020 14:00	YB4136	M	C047920	8.34	664	420	5.1	297	303	181	1.5	217	1.7	<1.0	39.3	0.377	0.491	108			0.030	<0.010	1.04	1.04	0.0040
RSEM-R6E-EOP	7/9/2020 14:10	YB4139	D	C047920	8.34	668	396	4.5	294	298	183	1.2	220	1.4	<1.0	39.6	0.383	0.499	108			0.028	<0.010	1.04	1.04	<0.0030
RSEM-R6E-EOP	7/10/2020 10:00	YB4116	M	C047917	8.33	659	376	3.1	295	300	187	1.5	225	1.8	<1.0	40.2	0.351	0.498	98.1			0.028	0.011	1.07	1.08	<0.0030
RSEM-R6E-EOP	7/11/2020 15:10	YB7193	M	C048486	8.18	636	373	3.9	282	283	181	<1.0	221	<1.0	<1.0	36.5	0.302	0.501	86.0			0.081	<0.010	0.979	0.979	<0.0030
RSEM-R6E-EOP	7/12/2020 14:00	YB7108	M	C048462	8.20	634	349	2.4	283	288	182	<1.0	222	<1.0	<1.0	37.7	0.273	0.491	85.1			<0.015	<0.010	1.03		<0.0030
RSEM-R6E-EOP	7/13/2020 14:30	YB9219	M	C048875	8.22	625	315	3.3	280	282	176	<1.0	215	<1.0	<1.0	40.5	0.244	0.508	85.0			0.035	<0.010	0.996	0.996	<0.0030
RSEM-R6E-EOP	7/14/2020 14:30	YC1074	M	C049344	8.22	621	376	2.5	285	280	171	<1.0	209	<1.0	<1.0	36.5	0.274	0.665	88.9			0.030	0.010	0.887	0.897	<0.0030
RSEM-R6E-EOP	7/15/2020 12:45	YC2137	M	C049614	8.24	629	341	2.5	284	270	168	<1.0	206	<1.0	<1.0	41.4	0.226	0.506	84.9			<0.015	<0.010	0.892	0.892	<0.0030
RSEM-R6E-EOP	7/16/2020 15:30	YC4665	M	C049952	8.19	624	338	2.6	281	273	171	<1.0	208	<1.0	<1.0	39.8	0.220	0.495	82.3			0.027	<0.010	0.835	0.835	<0.0030
RSEM-R6E-EOP	7/17/2020 13:55	YC5481	M	C050110	8.15	605	388	3.6	268	259	174	<1.0	212	<1.0	<1.0	40.8	0.220	0.522	88.4			0.022	0.0110	0.777	0.788	<0.0030
RSEM-R6E-EOP	7/18/2020 13:05	YC7458	M	C050583	8.20	619	356	2.3	277	267	167	<1.0	204	<1.0	<1.0	38.0	0.238	0.521	87.8			0.027	0.013	0.723	0.736	<0.0030
RSEM-R6E-EOP	7/19/2020 13:30	YC7536	M	C050603	8.26	613	354	2.5	273	258	160	<1.0	195	<1.0	<1.0	39.8	0.208	0.521	88.1			0.028	<0.010	0.646	0.646	<0.0030
RSEM-R6E-EOP	7/20/2020 10:40	YC8542	M	C050811	8.23	627	376	1.4	273	269	164	<1.0	200	<1.0	<1.0	41.4	0.209	0.540	92.9			0.026	<0.010	0.618	0.618	<0.0030
RSEM-R6E-EOP	7/21/2020 13:55	YD0796	M	C051251	8.20	623	358	2.9	270	266	159	<1.0	194	<1.0	<1.0	42.0	0.226	0.553	93.3			0.041	0.012	0.560	0.572	<0.0030
RSEM-R6E-EOP	7/22/2020 13:30	YD2617	M	C051641	8.27	631	374	2.5	260	265	157	<1.0	191	<1.0	<1.0	42.2	0.182	0.557	95.0			0.024	0.011	0.541	0.552	<0.0030
RSEM-R6E-EOP	7/23/2020 11:55	YD4254	M	C051864	8.28	635	378	1.3	265	267	160	<1.0	195	<1.0	<1.0	41.5	0.174	0.555	92.7			0.035	0.011	0.544	0.555	<0.0030
RSEM-R6E-EOP	7/24/2020 15:20	YD5909	M	C052038	8.35	615	404	3.2	272	261	170	1.2	205	1.5	<1.0	44.7	0.210	0.561	101			0.030	0.0066	0.525	0.532	<0.0030
RSEM-R6E-EOP	7/25/2020 11:05	YD7674	M	C052402	8.26	648	344	2.3	279	270	168	<1.0	205	<1.0	<1.0	39.3	0.176	0.607	87.4			0.026	<0.010	0.510	0.510	<0.0030
RSEM-R6E-EOP	7/26/2020 14:15	YD7713	M	C052420	8.25	623	326	2.0	265	252	154	<1.0	187	<1.0	<1.0	41.9	0.169	0.586	86.3			0.017	0.010	0.51	0.52	0.0035
RSEM-R6E-EOP	7/27/2020 10:30	YD7769	M	C052432	8.27	614	319	<1.0	258	249	150	<1.0	183	<1.0	<1.0	43.7	0.170	0.596	91.6			0.028	<0.010	0.52	0.52	0.0032
RSEM-R6E-EOP	7/28/2020 12:30	YE2029	M	C053295	8.21	606	359	3.4	264	240	148	<1.0	180	<1.0	<1.0	42.9	0.164	0.608	95.7			0.039	<0.010	0.430	0.430	0.0032
RSEM-R6E-EOP	7/30/2020 12:30	YE4008	M	C053695	8.29	610	394	2.7	250	248	164	<1.0	200	<1.0	<1.0	40.2	0.160	0.545	85.9			0.043	<0.010	0.420	0.420	0.0031
RSEM-R6E-EOP	7/30/2020 16:30	YE5556	M	C054021	8.30	589	344	2.3	250	238	154	<1.0	188	<1.0	<1.0	36.7	0.178	0.523	84.8			0.020	<0.010	0.371	0.371	<0.0030
RSEM-R6E-EOP	7/31/2020 11:00	YE5650	M	C054023	8.32	591	312	1.9	255	242	158	<1.0	192	<1.0	<1.0	37.0	0.155	0.524	80.7			0.044	<0.010	0.330	0.330	<0.0030
RSEM-R6E-EOP	8/1/2020 12:15	YE6665	M	C054219	8.09	579	340	2.8	252	249	167	<1.0	204	<1.0	<1.0	40.9	0.200	0.503	83.0			0.039	0.0079	0.392	0.400	<0.0030
RSEM-R6E-EOP	8/2/2020 12:40	YE8516	M	C054579	8.13	601	352	1.5	247	247	174	<1.0	213	<1.0	<1.0	41.4	0.198	0.494	76.2			0.036	<0.010	0.343	0.343	<0.0030
RSEM-R6E-EOP	8/3/2020 13:00	YE8524	M	C054582	8.21	588	226	2.6	246	241	161	<1.0	197	<1.0	<1.0	40.4	0.193	0.507	75.6			0.043	<0.010	0.395	0.395	<0.0030
RSEM-R6E-EOP	8/4/2020 12:50	YF1643	M	C055153	8.13	573	372	2.3	240	249	161	<1.0	197	<1.0	<1.0	36.2	0.217	0.462	67.9			0.050	<0.010	0.386	0.386	0.0030
RSEM-R6E-EOP	8/4/2020 13:00	YF1644	D	C055153	8.15	571	353	3.4	241	249	172	<1.0	210	<1.0	<1.0	37.8	0.206	0.473	67.3			0.032	<0.010	0.388	0.388	<0.0030
RSEM-R6E-EOP	8/5/2020 12:20	YF2976	M	C055442	8.08	547	316	1.9	242	245	168	<1.0	205	<1.0	<1.0	39.9	0.202	0.443	70.5			0.027	<0.010	0.292	0.292	<0.0030
RSEM-R6E-EOP	8/5/2020 12:30	YF2977	D	C055442	8.10	550	306	1.7	240	241	163	<1.0	198	<1.0	<1.0	39.9	0.204	0.447	72.6			0.029	<0.010	0.294	0.294	<0.0030
RSEM-R6E-EOP	8/6/2020 11:20	YF2968	M	C055440	8.12	546	288	2.9	242	242	156	<1.0	190	<1.0	<1.0	39.7	0.205	0.439	72.5			0.039	<0.010	0.342	0.342	<0.0030
RSEM-R6E-EOP	8/7/2020 11:55	YF4856	M	C055741	8.25	548	272	1.5	234	233	161	<1.0	197	<1.0	<1.0	38.5	0.215	0.442	72.7			0.168	<0.010	0.321	0.321	<0.0030
RSEM-R6E-EOP	8/7/2020 12:05	YF4857	D	C055741	8.30	544	276	2.0	227	230	160	<1.0	195	<1.0	<1.0	38.9	0.216	0.445	62.4			0.018	<0.010	0.319	0.319	<0.0030
RSEM-R6E-EOP	8/8/2020 12:40	YF8358	M	C056281	8.32	532	383	1.4	222	217	164	<1.0	200	<1.0	<1.0	37.0	0.224	0.428	59.0			0.024	<0.010	0.316	0.316	<0.0030
RSEM-R6E-EOP	8/9/2020 14:10	YF8361	M	C056282	8.31	546	355	1.8	217	223	163	<1.0	199	<1.0	<1.0	37.8	0.217	0.430	57.0			0.037	<0.010	0.315	0.315	0.0030
RSEM-R6E-EOP	8/10/2020 12:50	YG0105	M	C056587	8.36	527	284	1.9	233	218	158	2.1	188	2.5	<1.0	37.2	0.213	0.427	55.8			0.017	<0.010	0.281	0.281	<0.0030
RSEM-R6E-EOP	8/11/2020 13:10	YG2366	M	C056973	8.31	520	301	1.9	224	220	155	<1.0	189	<1.0	<1.0	38.4	0.209	0.445	61.1			<0.015	<0.010	0.302	0.302	<0.0030
RSEM-R6E-EOP	8/12/2020 17:30	YG4635	M	C057417	8.14	506	284	2.1	218	210	133	<1.0	163	<1.0	<1.0	41.1	0.184	0.469	66.6			<0.015	<0.010	0.186	0.186	<0.0030
RSEM-R6E-EOP	8/13/2020 13:20	YG7260	M	C057823	8.39	528	299	1.0	211	210	141	2.6	165	3.1	<1.0	36.5	0.200	0.525	65.2			<0.015	<0.010	0.13	0.13	<0.0030
RSEM-R6E-EOP	8/13/2020 13:30	YG7261	D	C057823	8.39	528	290	<1.0	214	207	141	2.3	166	2.7	<1.0	36.3	0.200	0.492	65.6			<0.015	<0.010	0.15	0.15	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6E-EOP	8/14/2020 12:45	YG7189	M	C057817	8.40	532	288	1.1	214	208	139	2.9	162	3.5	<1.0	38.6	0.205	0.531	69.0			<0.015	<0.010	0.135	0.135	<0.0030
RSEM-R6E-EOP	8/15/2020 14:45	YH0060	M	C058356	8.36	534	303	1.9	205	203	142	1.5	170	1.8	<1.0	46.3	0.189	0.558	73.1			<0.015	<0.010	0.103	0.103	<0.0030
RSEM-R6E-EOP	8/16/2020 11:40	YH0172	M	C058389	8.36	535	306	<1.0	208	201	139	1.1	167	1.3	<1.0	43.0	0.195	0.583	74.9			<0.015	<0.010	0.083	0.083	<0.0030
RSEM-R6E-EOP	8/17/2020 9:20	YG9869	M	C058326	8.33	539	285	2.1	200	199	130	<1.0	159	<1.0	<1.0	49.3	0.209	0.580	77.3			<0.015	<0.010	0.083	0.083	<0.0030
RSEM-R6E-EOP	8/18/2020 16:30	YH3312	M	C059056	8.38	520	289	2.6	182	188	115	1.9	135	2.3	<1.0	49.1	0.192	0.628	80.6			<0.015	0.011	0.050	0.061	0.0033
RSEM-R6E-EOP	8/19/2020 15:00	YH5387	M	C059422	8.29	524	282	2.5	180	182	113	<1.0	137	<1.0	<1.0	48.4	0.197	0.641	80.9			<0.015	<0.010	0.034	0.034	<0.0030
RSEM-R6E-EOP	8/20/2020 14:50	YH7341	M	C059760	8.16	535	298	2.5	189	184	116	<1.0	141	<1.0	<1.0	55.2	0.201	0.664	84.4			<0.015	<0.010	0.013	<0.014	<0.0030
RSEM-R6E-EOP	8/21/2020 11:10	YH7339	M	C059759	8.07	544	268	2.1	192	187	121	<1.0	148	<1.0	<1.0	54.8	0.205	0.668	83.3			0.016	<0.010	0.024	0.024	<0.0030
RSEM-R6E-EOP	8/22/2020 11:30	YI0129	M	C060262	7.86	880	544	4.2	346	336	114	<1.0	139	<1.0	<1.0	119	0.280	1.73	145			0.022	0.014	0.25	0.27	<0.0030
RSEM-R6E-EOP	8/23/2020 14:50	YI0109	M	C060255	8.16	900	530	1.7	340	340	120	<1.0	146	<1.0	<1.0	138	0.301	1.78	159			0.022	0.017	0.24	0.25	<0.0030
RSEM-R6E-EOP	8/23/2020 15:00	YI0112	D	C060255	7.97	904	509	2.1	352	338	120	<1.0	147	<1.0	<1.0	125	0.311	1.77	157			0.029	0.017	0.23	0.25	0.0031
RSEM-R6E-EOP	8/24/2020 13:40	YI2198	M	C060702	8.08	889	576	2.9	339	334	104	<1.0	126	<1.0	<1.0	130	0.307	1.88	158			0.019	0.013	0.272	0.285	<0.0030
RSEM-R6E-EOP	8/25/2020 12:20	YI3995	M	C061087	8.21	854	483	1.6	334	333	104	<1.0	127	<1.0	<1.0	123	0.294	1.72	133			0.037	0.012	0.222	0.234	<0.0030
RSEM-R6E-EOP	8/26/2020 13:50	YI6263	M	C061565	8.23	803	491	1.1	323	324	100	<1.0	122	<1.0	<1.0	120	0.278	1.58	146			0.024	<0.010	0.174	0.174	<0.0030
RSEM-R6E-EOP	8/27/2020 12:40	YI7773	M	C061827	8.14	795	466	3.0	305	301	103	<1.0	126	<1.0	<1.0	114	0.302	1.43	137			0.020	<0.010	0.166	0.166	0.0052
RSEM-R6E-EOP	8/28/2020 13:45	YI9493	M	C062013	7.92	771	506	2.0	299	301	110	<1.0	134	<1.0	<1.0	98.4	0.290	1.45	135			0.016	0.0101	0.161	0.171	<0.0030
RSEM-R6E-EOP	8/29/2020 10:35	YJ1737	M	C062465	8.24	764	464	2.0	280	285	103	<1.0	125	<1.0	<1.0	107	0.294	1.43	138			0.027	<0.010	0.126	0.126	<0.0030
RSEM-R6E-EOP	8/29/2020 10:45	YJ1738	D	C062465	8.22	765	488	2.4	277	287	103	<1.0	125	<1.0	<1.0	100	0.292	1.43	133			0.033	<0.010	0.125	0.125	<0.0030
RSEM-R6E-EOP	8/30/2020 11:50	YJ1569	M	C062426	8.11	745	464	1.0	271	332	102	<1.0	124	<1.0	<1.0	97.2	0.292	1.37	137			0.033	<0.010	0.13	0.13	<0.0030
RSEM-R6E-EOP	8/31/2020 17:00	YJ3638	M	C062857	8.27	731	512	2.3	266	270	101	<1.0	123	<1.0	<1.0	96.9	0.281	1.31	134			0.019	<0.010	0.092	0.092	<0.0030
RSEM-R6E-EOP	8/31/2020 17:10	YJ3639	D	C062857	8.27	733	468	1.7	263	267	101	<1.0	123	<1.0	<1.0	89.9	0.281	1.32	135			0.020	<0.010	0.10	0.10	<0.0030
RSEM-R6E-EOP	9/1/2020 14:10	YJ6690	M	C063433	8.37	724	398	2.4	246	256	102	<1.0	124	<1.0	<1.0	94.4	0.285	1.27	127			0.032	<0.010	0.067	0.067	<0.0030
RSEM-R6E-EOP	9/2/2020 13:45	YJ7830	M	C063666	8.31	698	426	<1.0	248	243	97.8	<1.0	119	<1.0	<1.0	90.7	0.280	1.21	117			0.038	<0.010	0.051	0.051	<0.0030
RSEM-R6E-EOP	9/3/2020 14:20	YK0030	M	C064047	8.34	693	425	<1.0	248	245	97.2	<1.0	119	<1.0	<1.0	90.9	0.275	1.14	114			0.015	<0.010	0.033	0.033	<0.0030
RSEM-R6E-EOP	9/4/2020 11:50	YK0085	M	C064051	8.33	685	398	2.8	241	237	97.3	<1.0	119	<1.0	<1.0	86.7	0.271	1.19	124			0.018	<0.010	0.022	0.022	0.0122
RSEM-R6E-EOP	9/5/2020 12:20	YK1344	M	C064288	7.94	650	374	1.2	244	221	102	<1.0	125	<1.0	<1.0	82.4	0.270	1.09	122			0.031	<0.0050	0.033	0.033	<0.0030
RSEM-R6E-EOP	9/5/2020 12:30	YK1345	D	C064288	7.82	659	388	2.0	229	219	101	<1.0	123	<1.0	<1.0	83.1	0.270	1.11	121			0.029	<0.0050	0.026	0.026	<0.0030
RSEM-R6E-EOP	9/6/2020 10:50	YK2529	M	C064579	8.20	658	386	<1.0	227	232	99.9	<1.0	122	<1.0	<1.0	78.2	0.280	0.999	120			0.016	<0.010	0.020	0.020	<0.0030
RSEM-R6E-EOP	9/6/2020 11:00	YK2530	D	C064579	8.24	660	386	1.2	223	230	99.8	<1.0	122	<1.0	<1.0	79.5	0.272	0.868	121			0.021	<0.010	0.016	0.016	<0.0030
RSEM-R6E-EOP	9/7/2020 10:15	YK2584	M	C064592	8.24	658	404	3.8	224	231	99.0	<1.0	121	<1.0	<1.0	77.8	0.260	1.03	112			0.024	<0.010	0.017	0.017	<0.0030
RSEM-R6E-EOP	9/8/2020 10:45	YK6314	M	C065313	8.24	650	363	2.3	220	230	107	<1.0	131	<1.0	<1.0	79.5	0.267	1.08	114			0.027	<0.010	0.012	<0.014	<0.0030
RSEM-R6E-EOP	9/9/2020 14:30	YK6316	M	C065314	8.36	640	386	1.5	226	221	103	<1.0	125	<1.0	<1.0	73.9	0.264	1.04	109			0.022	<0.010	<0.010	<0.014	<0.0030
RSEM-R6E-EOP	9/10/2020 11:40	YK8213	M	C065709	8.19	632	381	1.4	227	219	112	<1.0	137	<1.0	<1.0	76.4	0.264	1.02	111			0.023	<0.010	0.011	<0.014	<0.0030
RSEM-R6E-EOP	9/11/2020 11:30	YK8182	M	C065706	8.23	632	346	1.7	224	214	116	<1.0	142	<1.0	<1.0	73.5	0.254	1.00	109			<0.015	<0.010	<0.010	<0.014	0.0031
RSEM-R6E-EOP	9/12/2020 14:10	YL1185	M	C066169	8.25	628	352	2.2	218	217	119	<1.0	145	<1.0	<1.0	72.4	0.254	0.972	112			<0.015	<0.010	<0.010	<0.010	<0.0030
RSEM-R6E-EOP	9/13/2020 12:50	YL1414	M	C066239	8.11	632	356	2.3	222	216	124	<1.0	152	<1.0	<1.0	76.4	0.254	0.966	110			<0.015	<0.010	<0.010	<0.010	<0.0030
RSEM-R6E-EOP	9/14/2020 12:30	YL3784	M	C066659	8.17	627	388	2.4	216	212	125	<1.0	153	<1.0	<1.0	64.4	0.246	0.911	102			0.016	<0.010	0.022	0.022	<0.0030
RSEM-R6E-EOP	9/15/2020 14:40	YL6685	M	C067245	8.10	840	516	4.5	319	307	143	<1.0	175	<1.0	<1.0	114	0.269	1.64	121			0.063	0.023	0.510	0.533	<0.0030
RSEM-R6E-EOP	9/15/2020 14:50	YL6686	D	C067245	8.17	847	512	3.1	320	306	145	<1.0	176	<1.0	<1.0	114	0.281	1.63	125			0.067	0.024	0.509	0.534	<0.0030
RSEM-R6E-EOP	9/16/2020 15:20	YL8113	M	C067490	7.83	763	553	1.9	288	293	142	<1.0	174	<1.0	<1.0	97.5	0.293	1.41	114			0.062	0.017	0.378	0.395	0.0033
RSEM-R6E-EOP	9/17/2020 12:50	YL8047	M	C067474	8.08	761	428	2.4	277	290	146	<1.0	178	<1.0	<1.0	92.9	0.291	1.29	112			0.040	0.015	0.312	0.327	<0.0030
RSEM-R6E-EOP	9/17/2020 13:00	YL8048	D	C067474	8.13	764	452	2.2	274	288	147	<1.0	180	<1.0	<1.0	93.0	0.294	1.30	112			0.042	0.016	0.313	0.329	<0.0030
RSEM-R6E-EOP	9/18/2020 9:40	YL9984	M	C067838	8.08	733	452	1.0	272	274	156	<1.0	190	<1.0	<1.0	83.4	0.289	1.16	108			0.056	0.015	0.27	0.29	<0.0030
RSEM-R6E-EOP	9/19/2020 12:30	YM3342	M	C068349	8.09	715	433	1.3	268	264	153	<1.0	186	<1.0	<1.0	79.8	0.286	1.09	110			0.045	<0.010	0.303	0.303	<0.0030
RSEM-R6E-EOP	9/19/2020 12:40	YM3343	D	C068349	8.11	721	438	1.5	265	263	153	<1.0	187	<1.0	<1.0	74.6	0.284	1.09	111			0.069	<0.010	0.306	0.306	<0.0030
RSEM-R6E-EOP	9/20/2020 11:30	YM3373	M	C068353	8.13	709	462	1.1	257	259	154	<1.0	188	<1.0	<1.0	65.0	0.280	1.04	110			0.072	0.014	0.311	0.325	0.0034
RSEM-R6E-EOP	9/21/2020 12:30	YM6391	M	C068837	8.12	688	404	2.9	251	246	160	<1.0	195	<1.0	<1.0	65.7	0.270	0.920	106			0.030	0.013	0.18	0.19	<0.0030
RSEM-R6E-EOP	9/21/2020 12:40	YM6392	D	C068837	8.13	688	464	<1.0	243	248	160	<1.0	195	<1.0	<1.0	65.2	0.271	0.934	107			0.037	0.013	0.18	0.19	<0.0030
RSEM-R6E-EOP	9/22/2020 13:45	YM9230	M	C069318	8.14	687	392	1.3	233	242	159	<1.0	194	<1.0	<1.0	59.8	0.275	0.838	105			0.032	0.010	0.267	0.277	<0.0030
RSEM-R6E-EOP	9/23/2020 15:20	YN0385	M	C069533	8.16	682	483	1.9	233	238	166	<1.0	202	<1.0	<1.0	57.9	0.265	0.781	104			0.026	<0.010	0.262	0.262	<0.0030
RSEM-R6E-EOP	9/23/2020 15:30	YN0386	D	C069533	8.02	683	447	<1.0	239	240	163	<1.0	199	<1.0	<1.0	58.3	0.269	0.819	109			0.024	<0.010	0.265	0.265	<0.0030
RSEM-R6E-EOP	9/24/2020 13:50	YN2678	M	C069910	8.07	675	461	<1.0	244	235	167	<1.0	204	<1.0	<1.0	50.9	0.280	0.791	104			0.031	0.011	0.25	0.26	<0.0030
RSEM-R6E-EOP	9/25/2020 13:10	YN2672	M	C069908	8.15	672	401	1.7	246	239	171	<1.0	208	<1.0	<1.0	48.6	0.271	0.750	109			0.022	<0.010	0.249	0.249	<0.0030
RSEM-R6E-EOP	9/25/2020 13:20	YN2673	D	C069908	8.03	699	370	<1.0	254	239	163	<1.0	199	<1.0	<1.0	47.8	0.269	0.752	105			0.025	<0.010	0.261	0.261	<0.0030
RSEM-R6E-EOP	9/26/2020 13:00	YN7495	M	C070621	8.27	657	336	1.1	245	244	170	<1.0	207	<1.0	<1.0	45.9	0.240	0.710	102			0.017	<0.010	0.305	0.305	<0.0030
RSEM-R6E-EOP	9/27/2020 16:00	YN7528	M	C070629	8.27	645	356	<1.0	244	243	173	<1.0	211	<1.0	<1.0	42.2	0.232	0.669	111			0.102	<0.010	0.242	0.242	<0.0030
RSEM-R6E-EOP	9/27/2020 16:10	YN7529	D	C070629	8.19	640	352	1.6	232	241	170	<1.0	208	<1.0	<1.0	43.8	0.236	0.666	101			0.101	<0.010	0.259	0.259	<0.0030
RSEM-R6E-EOP	9/28/2020 9:30	YN7449	M	C070613	8.20	646	364	1.0	243	249	174	<1.0	213	<1.0	<1.0	41.5	0.235	0.613	96.2			<0.015	<0.010	0.36	0.36	0.0035
RSEM-R6E-EOP	9/29/2020 16:00	YO1377	M	C071354	7.97	627	362	1.9	238	239	175	<1.0	213	<1.0	<1.0	43.2	0.245	0.603	98.4			<0.015	<0.010	0.319	0.319	<0.0030
RSEM-R6E-EOP	9/30/2020 13:00	YO4160	M	C071825	8.32	623	409	2.6	235	239	171	<1.0	209	<1.0	<1.0	41.9	0.242	0.582	97.1			<0.015	0.011	0.288	0.299	<0.0030
RSEM-R6E-EOP	10/1/2020 0:05	YO6613	D	C072228	7.37	617	312	<1.0	228	240	210	<1.0	257	<1.0	<1.0	41.7	0.248	0.603	97.0			<0.015	<0.010	0.273	0.273	<0.0030
RSEM-R6E-EOP	10/1/2020 11:55	YO6611	M	C072228	7.54	625	340	1.5	232	237	210	<1.0	256	<1.0	<1.0	42.1	0.248	0.571	95.1			<0.015	<0.010	0.284	0.284	<0.0030
RSEM-R6E-EOP	10/2/2020 11:20	YO6594	M	C072223	7.50	625	356	<1.0	242	239	209	<1.0	256	<1.0	<1.0	41.2	0.247	0.571	96.6			<0.015	<0.010	0.29	0.29	<0.0030
RSEM-R6E-EOP	10/3/2020 16:00	YP0034	M	C072771	7.37	608	431	2.5	220	228	205	<1.0	250	<1.0	<1.0	39.1	0.228	0.552	94.5			<0.015	<0.010	0.260	0.260	<0.0030
RSEM-R6E-EOP	10/4/2020 16:00	YP0008	M	C072767	7.42	611	424	1.2	219	229	206	<1.0	252	<1.0	<1.0	38.5	0.235	0.541	96.7			0.015	<0.010	0.27	0.27	<0.0030
RSEM-R6E-EOP	10/4/2020 16:10	YP0012	D	C072767	7.40	613	420	1.0	225	225	209	<1.0	255	<1.0	<1.0	38.3	0.229	0.540	99.6			0.015	<0.010	0.27	0.27	<0.0030
RSEM-R6E-EOP	10/5/2020 17:00	YP2998	M	C073260	7.42	610	332	2.5	222	221	209	<1.0	255	<1.0	<1.0	40.7	0.228	0.553	102			0.019	<0.010	0.222	0.222	<0.0030
RSEM-R6E-EOP	10/6/2020 14:50	YP5777	M	C073719	7.32	619	436	1.5	227	222	212	<1.0	258	<1.0	<1.0	43.0	0.228	0.562	103			0.016	<0.010	0.229	0.229	<0.0030
RSEM-R6E-EOP	10/6/2020 15:00	YP5778	D	C073719	7.35	617	452	1.2	227	216	209	<1.0	255	<1.0	<1.0	41.3	0.230	0.568	103			<0.015	<0.010	0.224	0.224	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6E-EOP	10/7/2020 14:10	YP7387	M	C074014	7.36	624	380	<1.0	221	224	216	<1.0	264	<1.0	<1.0	39.2	0.232	0.571	99.1			<0.015	<0.010	0.210	0.210	<0.0030
RSEM-R6E-EOP	10/8/2020 11:10	YP9901	M	C074375	8.16	622	368	2.5	227	230	169	<1.0	206	<1.0	<1.0	40.9	0.255	0.570	100			0.021	<0.010	0.201	0.201	<0.0030
RSEM-R6E-EOP	10/8/2020 11:20	YP9902	D	C074375	8.25	620	444	1.4	233	230	167	<1.0	203	<1.0	<1.0	39.9	0.258	0.558	101			<0.015	<0.010	0.206	0.206	<0.0030
RSEM-R6E-EOP	10/9/2020 11:10	YQ0240	M	C074391	8.22	679	484	1.7	256	257	168	<1.0	205	<1.0	<1.0	70.3	0.245	0.885	101			0.019	<0.010	0.176	0.176	<0.0030
RSEM-R6E-EOP	10/10/2020 11:50	YQ1626	M	C074557	7.96	822	494	1.6	308	319	158	<1.0	192	<1.0	<1.0	115	0.240	1.59	103			0.016	0.0105	0.341	0.351	<0.0030
RSEM-R6E-EOP	10/10/2020 12:00	YQ1627	D	C074557	8.06	821	460	2.4	309	322	161	<1.0	196	<1.0	<1.0	114	0.220	1.61	103			0.022	0.0101	0.338	0.348	<0.0030
RSEM-R6E-EOP	10/11/2020 11:30	YQ4407	M	C075136	7.43	1500	824	2.4	582	608	208	<1.0	253	<1.0	<1.0	314	0.257	4.64	114			0.123	0.032	0.71	0.74	<0.0030
RSEM-R6E-EOP	10/12/2020 13:30	YQ4365	M	C075125	7.33	1670	944	2.1	654	700	202	<1.0	246	<1.0	<1.0	378	0.264	5.46	125			0.149	0.039	0.94	0.98	<0.0030
RSEM-R6E-EOP	10/12/2020 13:40	YQ4366	D	C075125	7.37	1700	984	1.1	663	685	204	<1.0	249	<1.0	<1.0	370	0.263	5.67	124			0.151	0.037	0.95	0.98	<0.0030
RSEM-R6E-EOP	10/13/2020 13:50	YQ8015	M	C075829	7.81	990	640	7.2	416	409	183	<1.0	223	<1.0	<1.0	164	0.213	2.43	70.9			0.088	0.018	0.91	0.93	<0.0030
RSEM-R6E-EOP	10/14/2020 14:50	YQ9242	M	C076027	7.08	950	624	2.6	386	396	218	<1.0	265	<1.0	<1.0	155	0.244	2.16	71.7			0.040	0.016	0.898	0.914	0.0035
RSEM-R6E-EOP	10/15/2020 11:45	YR1302	M	C076291	7.05	934	580	6.1	389	384	178	<1.0	218	<1.0	<1.0	148	0.253	2.03	72.4			0.039	0.015	0.842	0.857	<0.0030
RSEM-R6E-EOP	10/16/2020 11:50	YR1520	M	C076320	7.21	955	512	2.6	387	370	231	<1.0	281	<1.0	<1.0	149	0.240	1.96	75.4			0.029	0.015	0.865	0.880	<0.0030
RSEM-R6E-EOP	10/16/2020 12:00	YR1521	D	C076320	7.26	918	428	2.5	385	358	220	<1.0	268	<1.0	<1.0	138	0.233	1.99	72.8			0.056	0.014	0.882	0.897	<0.0030
RSEM-R6E-EOP	10/17/2020 10:20	YR5391	M	C076925	7.22	868	468	4.6	355	356	227	<1.0	277	<1.0	<1.0	125	0.243	1.79	71.7			0.025	0.013	0.774	0.787	<0.0030
RSEM-R6E-EOP	10/18/2020 12:45	YR5379	M	C076923	7.40	1150	732	5.9	354	360	171	<1.0	209	<1.0	<1.0	179	0.266	2.66	101			0.033	0.017	0.785	0.802	<0.0030
RSEM-R6E-EOP	10/19/2020 10:10	YR5408	M	C076929	7.29	1060	584	2.3	411	412	231	<1.0	281	<1.0	<1.0	171	0.251	2.40	105			0.056	0.028	0.823	0.851	<0.0030
RSEM-R6E-EOP	10/20/2020 14:40	YR8828	M	C077551	8.05	992	576	2.8	395	387	188	<1.0	230	<1.0	<1.0	138	0.221	1.95	100			0.034	0.017	0.814	0.832	<0.0030
RSEM-R6E-EOP	10/21/2020 16:00	YS1500	M	C077998	7.48	953	588	2.9	368	380	236	<1.0	288	<1.0	<1.0	121	0.249	1.70	96.5			0.029	<0.010	0.041	0.041	<0.0030
RSEM-R6E-EOP	10/22/2020 12:20	YS3854	M	C078323	7.59	951	548	3.3	362	373	234	<1.0	285	<1.0	<1.0	117	0.253	1.66	101			0.044	0.013	0.737	0.750	<0.0030
RSEM-R6E-EOP	10/22/2020 12:30	YS3856	D	C078323	7.56	942	528	1.3	360	382	234	<1.0	286	<1.0	<1.0	113	0.249	1.68	99.8			0.046	0.014	0.748	0.762	<0.0030
RSEM-R6E-EOP	10/23/2020 10:20	YS3573	M	C078301	7.36	930	532	2.2	370	378	240	<1.0	293	<1.0	<1.0	136	0.257	1.38	94.5			0.059	0.012	0.720	0.732	0.0049
RSEM-R6E-EOP	10/24/2020 15:20	YS7915	M	C078871	7.62	919	520	3.5	346	347	234	<1.0	286	<1.0	<1.0	118	0.255	1.31	102			0.032	0.010	0.742	0.752	<0.0030
RSEM-R6E-EOP	10/25/2020 13:40	YS7913	M	C078870	7.43	911	500	3.7	347	357	226	<1.0	275	<1.0	<1.0	114	0.255	1.22	103			0.025	0.012	0.733	0.744	<0.0030
RSEM-R6E-EOP	10/26/2020 14:25	YT0276	M	C079297	8.05	877	492	<1.0	349	346	210	<1.0	256	<1.0	<1.0	98.2	0.244	0.925	103			0.025	<0.010	0.702	0.702	<0.0030
RSEM-R6E-EOP	10/26/2020 14:35	YT0278	D	C079297	8.06	885	520	<1.0	345	350	203	<1.0	247	<1.0	<1.0	101	0.254	0.954	101			0.027	<0.010	0.694	0.694	<0.0030
RSEM-R6E-EOP	10/27/2020 12:30	YT3320	M	C079639	7.44	881	560	1.9	355	324	247	<1.0	301	<1.0	<1.0	97.6	0.260	1.41	101			0.023	0.012	0.68	0.69	<0.0030
RSEM-R6E-EOP	10/28/2020 14:10	YT5232	M	C079984	8.13	867	432	<1.0	325	328	213	<1.0	260	<1.0	<1.0	101	0.237	1.20	102			0.034	0.011	0.65	0.66	<0.0030
RSEM-R6E-EOP	10/29/2020 14:15	YT7960	M	C080439	8.08	853	436	2.2	353	344	217	<1.0	265	<1.0	<1.0	96.0	0.247	1.19	107			0.023	0.014	0.652	0.666	<0.0030
RSEM-R6E-EOP	10/30/2020 12:00	YT7954	M	C080436	8.11	835	428	1.9	334	344	221	<1.0	270	<1.0	<1.0	86.1	0.231	1.14	101			0.025	0.015	0.654	0.670	<0.0030
RSEM-R6E-EOP	10/31/2020 14:20	YU1484	M	C081008	7.68	841	456	1.5	307	313	241	<1.0	295	<1.0	<1.0	79.2	0.214	0.997	102			0.031	0.010	0.67	0.68	<0.0030
RSEM-R6E-EOP	10/31/2020 14:30	YU1487	D	C081008	7.71	844		1.8	302	311	241	<1.0	294	<1.0	<1.0	78.8	0.220	0.993	102			0.032	0.010	0.68	0.69	<0.0030
RSEM-R6E-EOP	11/1/2020 13:10	YU1489	M	C081010	7.97	795	472	1.5	303	306	221	<1.0	269	<1.0	<1.0	77.4	0.224	0.900	110			0.032	<0.010	0.679	0.679	<0.0030
RSEM-R6E-EOP	11/2/2020 13:40	YU2810	M	C081296	8.17	918	492	7.4	295	289	181	<1.0	220	<1.0	<1.0	74.1	0.244	0.778	179			0.083	0.019	0.641	0.660	<0.0030
RSEM-R6E-EOP	11/3/2020 14:10	YU4781	M	C081741	7.04	1040	608	6.1	258	260	211	<1.0	258	<1.0	<1.0	58.1	0.252	0.770	270			0.073	0.020	0.635	0.655	<0.0030
RSEM-R6E-EOP	11/3/2020 14:20	YU4782	D	C081741	7.17	1060	572	6.0	266	256	209	<1.0	255	<1.0	<1.0	58.0	0.250	1.26	274			0.096	0.023	0.644	0.668	<0.0030
RSEM-R6E-EOP	11/4/2020 14:25	YU7151	M	C082156	7.86	1150	644	6.5	252	251	156	<1.0	190	<1.0	<1.0	61.9	0.257	0.777	356			0.137	0.021	0.644	0.665	<0.0030
RSEM-R6E-EOP	11/5/2020 13:20	YU9363	M	C082511	7.92	1190	776	11.3	242	256	147	<1.0	179	<1.0	<1.0	57.4	0.253	0.616	348			0.069	0.032	0.699	0.731	<0.0030
RSEM-R6E-EOP	11/5/2020 13:30	YU9364	D	C082511	7.93	1190	720	11.0	241	258	144	<1.0	176	<1.0	<1.0	62.2	0.256	0.621	397			0.054	0.032	0.710	0.742	<0.0030
RSEM-R6E-EOP	11/6/2020 13:10	YU9362	M	C082510	8.09	1220	724	7.7	251	257	150	<1.0	183	<1.0	<1.0	57.9	0.261	0.621	371			0.109	0.033	0.713	0.746	<0.0030
RSEM-R6E-EOP	11/7/2020 13:10	YV3091	M	C082988	7.83	1220	784	4.9	264	243	155	<1.0	189	<1.0	<1.0	61.6	0.263	0.630	367			0.085	0.014	0.627	0.641	<0.0030
RSEM-R6E-EOP	11/7/2020 13:20	YV3092	D	C082988	7.80	1220	792	5.2	255	240	149	<1.0	182	<1.0	<1.0	61.3	0.262	0.521	359			0.101	0.014	0.620	0.634	<0.0030
RSEM-R6E-EOP	11/8/2020 13:27	YV3108	M	C082994	7.84	1210	692	4.2	260	262	210	<1.0	257	<1.0	<1.0	60.5	0.282	0.572	357			0.078	0.013	0.634	0.647	<0.0030
RSEM-R6E-EOP	11/9/2020 10:30	YV4611	M	C083253	8.02	1190	740	3.6	266	255	212	<1.0	259	<1.0	<1.0	53.9	0.275	0.595	340			0.175	0.026	0.695	0.721	<0.0030
RSEM-R6E-EOP	11/9/2020 10:40	YV4612	D	C083253	8.00	1200	736	3.4	273	250	211	<1.0	257	<1.0	<1.0	57.6	0.279	0.731	343			0.180	0.029	0.696	0.725	<0.0030
RSEM-R6E-EOP	11/10/2020 13:30	YV4533	M	C083245	7.98	1160	724	1.4	261	254	213	<1.0	260	<1.0	<1.0	57.2	0.279	0.600	331			0.134	0.028	0.662	0.691	<0.0030
RSEM-R6E-EOP	11/11/2020 12:50	YV8316	M	C083838	7.57	1130	724	2.6	269	264	222	<1.0	271	<1.0	<1.0	52.2	0.268	0.598	320			0.157	0.027	0.699	0.726	<0.0030
RSEM-R6E-EOP	11/11/2020 13:00	YV8317	D	C083838	7.79	1130	664	1.1	272	261	223	<1.0	272	<1.0	<1.0	53.0	0.271	0.573	319			0.154	0.027	0.698	0.725	<0.0030
RSEM-R6E-EOP	11/12/2020 10:35	YV9792	M	C084025	7.36	1090	704	2.6	253	246	220	<1.0	268	<1.0	<1.0	54.8	0.267	0.653	323			0.146	0.026	0.682	0.708	0.0101
RSEM-R6E-EOP	11/13/2020 9:40	YV9728	M	C084016	8.09	1080	728	1.3	269	263	223	<1.0	271	<1.0	<1.0	53.2	0.266	0.664	321			0.138	0.025	0.656	0.681	0.0102
RSEM-R6E-EOP	11/13/2020 9:50	YV9729	D	C084016	7.31	1080	688	1.1	266	271	220	<1.0	268	<1.0	<1.0	51.4	0.272	0.657	326			0.139	0.025	0.651	0.676	0.0101
RSEM-R6E-EOP	11/14/2020 12:05	YW2819	M	C084420	7.94	1070	668	1.9	279	275	186	<1.0	226	<1.0	<1.0	53.6	0.286	0.697	308			0.040	0.022	0.715	0.737	<0.0030
RSEM-R6E-EOP	11/15/2020 12:30	YW2809	M	C084417	7.85	1070	660	<1.0	297	292	194	<1.0	236	<1.0	<1.0	50.0	0.257	0.681	286			0.037	0.018	0.672	0.690	<0.0030
RSEM-R6E-EOP	11/15/2020 12:40	YW2810	D	C084417	7.93	1070	636	2.9	303	294	197	<1.0	240	<1.0	<1.0	52.4	0.256	0.678	275			0.031	0.019	0.671	0.689	<0.0030
RSEM-R6E-EOP	11/16/2020 10:20	YW2813	M	C084418	8.04	1060	620	<1.0	307	305	208	<1.0	254	<1.0	<1.0	47.2	0.256	0.710	264			0.031	0.016	0.673	0.689	<0.0030
RSEM-R6E-EOP	11/17/2020 12:45	YW6847	M	C085190	7.85	1010	764	<1.0	309	314	250	<1.0	305	<1.0	<1.0	50.4	0.257	0.596	239			0.026	0.014	0.657	0.671	<0.0030
RSEM-R6E-EOP	11/18/2020 16:00	YW9288	M	C085621	7.93	940	636	1.3	317	327	258	<1.0	315	<1.0	<1.0	44.5	0.294	0.649	230			0.024	0.014	0.705	0.719	<0.0030
RSEM-R6E-EOP	11/19/2020 13:30	YX1119	M	C085951	7.18	911	628	1.5	325	326	268	<1.0	327	<1.0	<1.0	41.7	0.280	0.692	220			0.035	0.012	0.719	0.731	<0.0030
RSEM-R6E-EOP	11/19/2020 13:40	YX1121	D	C085951	7.39	918	548	1.5	332	329	270	<1.0	329	<1.0	<1.0	42.9	0.280	0.656	236			0.033	0.011	0.723	0.735	<0.0030
RSEM-R6E-EOP	11/20/2020 11:30	YX1116	M	C085949	7.87	955	600	<1.0	328	331	239	<1.0	291	<1.0	<1.0	41.2	0.255	0.643	215			0.061	0.011	0.706	0.716	0.0031
RSEM-R6E-EOP	11/21/2020 13:30	YX3969	M	C086434	8.10	963	620	<1.0	348	348	245	<1.0	299	<1.0	<1.0	43.1	0.265	0.663	209			0.079	<0.010	0.709	0.709	<0.0030
RSEM-R6E-EOP	11/22/2020 13:45	YX3965	M	C086433	8.13	949	628	1.2	354	357	251	<1.0	306	<1.0	<1.0	43.2	0.263	0.653	201			0.073	<0.010	0.721	0.721	<0.0030
RSEM-R6E-EOP	11/22/2020 13:55	YX3968	D	C086433	7.94	939	580	1.7	344	353	246	<1.0	300	<1.0	<1.0	42.7	0.262	0.655	202			0.073	<0.010	0.719	0.719	<0.0030
RSEM-R6E-EOP	11/23/2020 13:30	YX5756	M	C086734	8.13	934	636	<1.0	342	355	250	<1.0	305	<1.0	<1.0	41.7	0.270	0.631	188			0.069	0.015	0.732	0.746	0.0032
RSEM-R6E-EOP	11/24/2020 13:45	YX7832	M	C087146	7.98	903	616	1.7	325	359	286	<1.0	349	<1.0	<1.0	45.1	0.248	0.533	190			0.068	0.012	0.719	0.731	0.0035
RSEM-R6E-EOP	11/24/2020 13:55	YX7833	D	C087146	7.87	902	648	1.2	328	353	265	<1.0	323	<1.0	<1.0	46.3	0.256	0.542	190			0.068	0.011	0.715	0.726	0.0033
RSEM-R6E-EOP	11/25/2020 14:00	YY0221	M	C087472	7.85	904	584	1.2	335	337	266	<1.0	325	<1.0	<1.0	42.2	0.253	0.465	195			0.069	0.013	0.705	0.718	0.0031
RSEM-R6E-EOP	11/26/2020 11:40	YY2047	M	C087819	7.88	890	536	<1.0	328	339	260	<1.0	317	<1.0	<1.0	46.8	0.243	0.554	181			0.073	0.013	0.704	0.717	<0.0030
RSEM-R6E-EOP	11/26/2020 11:50	YY2048	D	C087819	7.81	890	572	1.3	325	349	269	<1.0	328	<1.0	<1.0	44.5	0.249	0.545	183			0.074	0.012	0.696	0.708	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6E-EOP	11/27/2020 11:20	YY2095	M	C087822	7.75	874	464	1.5	329	343	277	<1.0	338	<1.0	<1.0	44.1	0.249	0.525	172			0.066	0.013	0.715	0.728	<0.0030
RSEM-R6E-EOP	11/28/2020 12:50	YY5267	M	C088400	7.81	840	528	2.1	355	326	275	<1.0	336	<1.0	<1.0	38.4	0.256	0.549	168			0.117	0.010	0.676	0.686	<0.0030
RSEM-R6E-EOP	11/28/2020 13:00	YY5268	D	C088400	7.64	835	548	1.1	349	324	278	<1.0	339	<1.0	<1.0	38.3	0.253	0.548	160			0.074	<0.010	0.669	0.669	<0.0030
RSEM-R6E-EOP	11/29/2020 12:35	YY5334	M	C088408	7.82	828	516	2.7	323	321	272	<1.0	331	<1.0	<1.0	36.5	0.246	0.516	154			0.117	<0.010	0.640	0.640	<0.0030
RSEM-R6E-EOP	11/30/2020 14:00	YY7386	M	C088703	8.06	834	508	1.9	321	325	251	<1.0	306	<1.0	<1.0	41.2	0.240	0.506	151			0.119	<0.010	0.617	0.617	0.0030
RSEM-R6E-EOP	11/30/2020 14:10	YY7387	D	C088703	8.04	829	532	1.5	314	321	260	<1.0	317	<1.0	<1.0	40.5	0.238	0.507	151			0.116	<0.010	0.617	0.617	<0.0030
RSEM-R6E-EOP	12/1/2020 13:45	YY9247	M	C089096	7.82	814	524	1.6	317	320	245	<1.0	299	<1.0	<1.0	41.0	0.231	0.491	144			0.127	<0.010	0.546	0.546	0.0039
RSEM-R6E-EOP	12/2/2020 13:00	YZ1565	M	C089572	7.83	811	496	1.8	323	332	256	<1.0	312	<1.0	<1.0	35.4	0.256	0.514	148			0.130	<0.010	0.551	0.551	<0.0030
RSEM-R6E-EOP	12/2/2020 13:10	YZ1566	D	C089572	7.86	810	544	1.5	326	330	255	<1.0	311	<1.0	<1.0	35.6	0.255	0.511	144			0.128	<0.010	0.518	0.518	<0.0030
RSEM-R6E-EOP	12/3/2020 12:40	YZ2306	M	C089704	7.66	809	512	2.3	334	335	243	<1.0	297	<1.0	<1.0	34.6	0.250	0.477	143			0.128	<0.010	0.658	0.658	<0.0030
RSEM-R6E-EOP	12/4/2020 13:20	YZ4236	M	C089912	7.58	795	460	<1.0	334	326	264	<1.0	322	<1.0	<1.0	33.7	0.257	0.488	147			0.126	<0.010	0.622	0.622	<0.0030
RSEM-R6E-EOP	12/4/2020 13:30	YZ4237	D	C089912	7.55	796	520	1.7	323	323	261	<1.0	318	<1.0	<1.0	34.5	0.258	0.489	147			0.131	<0.010	0.597	0.597	<0.0030
RSEM-R6E-EOP	12/5/2020 13:20	YZ8273	M	C090368	7.86	795	460	2.6	326	314	278	<1.0	340	<1.0	<1.0	32.5	0.252	0.387	142			0.118	0.011	0.671	0.682	0.0032
RSEM-R6E-EOP	12/6/2020 12:50	YZ8304	M	C090376	7.76	799	524	2.1	322	310	278	<1.0	339	<1.0	<1.0	32.7	0.251	0.389	143			0.152	0.011	0.681	0.692	0.0035
RSEM-R6E-EOP	12/6/2020 13:00	YZ8305	D	C090376	7.69	796	540	<1.0	320	318	309	<1.0	377	<1.0	<1.0	32.5	0.256	0.369	138			0.115	0.011	0.681	0.692	0.0037
RSEM-R6E-EOP	12/7/2020 10:05	YZ8152	M	C090358	7.79	798	480	1.9	326	319	301	<1.0	367	<1.0	<1.0	31.6	0.244	0.356	143			0.108	0.012	0.750	0.762	0.0139
RSEM-R6E-EOP	12/8/2020 15:10	ZA2149	M	C091061	7.99	863	484	2.3	343	349	292	<1.0	356	<1.0	<1.0	49.2	0.281	0.521	179			0.075	0.014	0.900	0.914	<0.0030
RSEM-R6E-EOP	12/9/2020 15:30	ZA6284	M	C091815	7.93	884	508	1.3	361	363	254	<1.0	310	<1.0	<1.0	51.0	0.316	0.793	189			0.135	0.016	0.918	0.934	<0.0030
RSEM-R6E-EOP	12/10/2020 14:20	ZA6276	D	C091812	7.95	877	556	<1.0	360	354	254	<1.0	310	<1.0	<1.0	52.7	0.332	0.773	191			0.127	0.016	0.900	0.916	<0.0030
RSEM-R6E-EOP	12/10/2020 14:30	ZA6277	M	C091812	7.94	883	528	<1.0	366	359	253	<1.0	308	<1.0	<1.0	51.2	0.335	0.773	189			0.129	0.016	0.893	0.909	<0.0030
RSEM-R6E-EOP	12/11/2020 23:40	ZA6280	M	C091813	7.91	886	540	<1.0	355	354	253	<1.0	309	<1.0	<1.0	52.5	0.337	0.725	186			0.125	0.016	0.871	0.887	0.0032
RSEM-R6E-EOP	12/13/2020 15:10	ZA8556	M	C092267	7.96	889	492	1.1	357	358	258	<1.0	315	<1.0	<1.0	47.3	0.324	0.714	186			0.125	0.018	0.93	0.95	0.0032
RSEM-R6E-EOP	12/13/2020 16:50	ZA8523	M	C092261	7.94	880	664	1.3	347	355	252	<1.0	307	<1.0	<1.0	47.8	0.324	0.727	186			0.120	0.014	0.859	0.873	<0.0030
RSEM-R6E-EOP	12/14/2020 13:00	ZA8428	M	C092250	7.96	887	564	<1.0	349	358	258	<1.0	315	<1.0	<1.0	47.2	0.327	0.696	186			0.123	0.017	0.90	0.92	<0.0030
RSEM-R6E-EOP	12/15/2020 15:10	ZB1647	M	C092932	7.84	868	548	1.3	367	362	299	<1.0	364	<1.0	<1.0	46.8	0.347	0.672	187			0.138	0.015	0.86	0.88	<0.0030
RSEM-R6E-EOP	12/15/2020 15:20	ZB1648	D	C092932	7.79	875	588	<1.0	364	357	286	<1.0	349	<1.0	<1.0	46.3	0.349	0.682	185			0.144	0.015	0.86	0.87	<0.0030
RSEM-R6E-EOP	12/16/2020 14:10	ZB3421	M	C093364	7.86	904	632	<1.0	344	346	281	<1.0	343	<1.0	<1.0	44.3	0.305	0.672	183			0.216	0.013	0.806	0.818	<0.0030
RSEM-R6E-EOP	12/17/2020 14:30	ZB5911	M	C093625	7.91	899	580	1.1	332	344	301	<1.0	367	<1.0	<1.0	43.6	0.299	0.675	176			0.155	<0.010	0.782	0.782	0.0032
RSEM-R6E-EOP	12/17/2020 14:40	ZB5912	D	C093625	7.98	901	560	<1.0	322	346	299	<1.0	364	<1.0	<1.0	46.4	0.298	0.683	178			0.199	<0.010	0.763	0.763	<0.0030
RSEM-R6E-EOP	12/18/2020 13:25	ZB5852	M	C093610	7.80	900	600	1.3	331	350	308	<1.0	376	<1.0	<1.0	44.4	0.291	0.658	174			0.167	<0.010	0.765	0.765	0.0030
RSEM-R6E-EOP	12/19/2020 12:50	ZB8418	M	C094046	7.77	904	552	1.0	348	357	311	<1.0	380	<1.0	<1.0	42.0	0.302	0.633	166			0.156	<0.010	0.698	0.698	<0.0030
RSEM-R6E-EOP	12/20/2020 12:45	ZB8513	M	C094070	7.82	893	580	<1.0	348	358	311	<1.0	379	<1.0	<1.0	38.4	0.296	0.599	163			0.147	<0.010	0.683	0.683	<0.0030
RSEM-R6E-EOP	12/20/2020 12:55	ZB8514	D	C094070	7.78	884	532	<1.0	353	356	307	<1.0	374	<1.0	<1.0	38.3	0.295	0.628	161			0.150	<0.010	0.678	0.678	0.0036
RSEM-R6E-EOP	12/21/2020 10:40	ZB8328	M	C094023	7.91	873	520	1.4	341	356	303	<1.0	369	<1.0	<1.0	38.8	0.292	0.565	155			0.153	<0.010	0.657	0.657	0.0035
RSEM-R6E-EOP	12/22/2020 11:30	ZC0503	M	C094296	7.90	872	532	1.3	335	348	309	<1.0	377	<1.0	<1.0	37.6	0.292	0.548	151			0.161	<0.010	0.618	0.618	0.0032
RSEM-R6E-EOP	12/23/2020 13:00	ZC1950	M	C094642	8.01	857	512	<1.0	345	342	289	<1.0	353	<1.0	<1.0	36.9	0.273	0.567	146			0.154	<0.010	0.658	0.658	<0.0030
RSEM-R6E-EOP	12/24/2020 9:30	ZC3450	M	C094856	7.98	851	512	1.5	335	342	310	<1.0	379	<1.0	<1.0	35.7	0.275	0.558	142			0.162	0.011	0.657	0.669	<0.0030
RSEM-R6E-EOP	12/24/2020 9:40	ZC3451	D	C094856	7.87	855	584	2.0	340	343	312	<1.0	381	<1.0	<1.0	36.3	0.270	0.529	144			0.160	0.011	0.666	0.677	<0.0030
RSEM-R6E-EOP	12/25/2020 15:00	ZC3693	M	C094909	7.91	849	600	<1.0	340	337	306	<1.0	373	<1.0	<1.0	35.7	0.259	0.552	144			0.164	0.011	0.641	0.651	<0.0030
RSEM-R6E-EOP	12/26/2020 16:00	ZC3699	M	C094911	7.79	839	660	2.8	334	331	314	<1.0	383	<1.0	<1.0	34.3	0.254	0.494	141			0.165	<0.010	0.606	0.606	0.0039
RSEM-R6E-EOP	12/27/2020 16:10	ZC4643	M	C095191	7.83	845	508	<1.0	330	343	311	<1.0	380	<1.0	<1.0	34.4	0.263	0.510	143			0.182	0.010	0.628	0.638	0.0044
RSEM-R6E-EOP	12/27/2020 16:20	ZC4645	D	C095191	7.80	846	492	<1.0	338	340	314	<1.0	383	<1.0	<1.0	34.1	0.259	0.528	142			0.169	<0.010	0.618	0.618	0.0038
RSEM-R6E-EOP	12/28/2020 9:30	ZC4618	M	C095179	8.07	820	528	<1.0	341	338	310	<1.0	378	<1.0	<1.0	34.6	0.240	0.495	141			0.175	<0.010	0.605	0.605	0.0038
RSEM-R6E-EOP	12/29/2020 13:55	ZC5602	M	C095537	7.76	815	568	1.1	333	348	322	<1.0	393	<1.0	<1.0	33.6	0.233	0.459	139			0.162	<0.010	0.560	0.560	0.0048
RSEM-R6E-EOP	12/30/2020 14:50	ZC6411	M	C100028	8.29	848	508	<1.0	344	344	268	<1.0	327	<1.0	<1.0	35.1	0.250	0.462	138			0.165	0.0092	0.631	0.640	<0.0030
RSEM-R6E-EOP	12/30/2020 14:55	ZC6410	D	C100028	8.25	841	520	<1.0	343	341	270	<1.0	329	<1.0	<1.0	36.0	0.260	0.461	139			0.165	0.0090	0.632	0.641	<0.0030
RSEM-R6E-EOP	12/31/2020 14:45	ZC6408	M	C100027	8.28	846	516	<1.0	337	341	268	<1.0	327	<1.0	<1.0	36.7	0.270	0.475	141			0.164	0.0094	0.638	0.647	<0.0030
RSEM-R6-EP-US-SD	4/8/2020 14:40	XQ4592	M	C024938	8.14	475	284	331	231	171	96.4	<1.0	118	<1.0	<1.0	37.0	0.241	0.530	76.3			0.302	0.021	0.454	0.475	0.0033
RSEM-R6-EP-US-SD	6/15/2020 15:20	XY1606	M	C041415	6.72	1510	994	7850	1660	622	106	<1.0	129	<1.0	<1.0	150	1.14	2.41	472			0.733	0.030	1.26	1.29	<0.0030
RSEM-R6-EP-US-SD	10/11/2020 12:10	YQ4409	M	C075136	7.69	890	432	39.8	373	366	246	<1.0	301	<1.0	<1.0	76.7	0.397	0.823	151			0.236	0.044	1.3	1.4	<0.0030
RSEM-R6W-EOP	4/27/2020 14:10	XS0061	M	C028666	8.35	740	436	10.3	95.6	88.4	161	<1.0	196	<1.0	<1.0	50.5	0.219	0.894	120			0.065	0.023	0.349	0.372	<0.0030
RSEM-R6W-EOP	4/28/2020 12:45	XS2087	M	C029151	8.32	774	456	8.8	109	122	169	<1.0	206	<1.0	<1.0	49.3	0.229	0.923	151			0.040	0.032	0.364	0.396	<0.0030
RSEM-R6W-EOP	4/29/2020 11:30	XS3519	M	C029452	7.99	787	466	24.5	114	106	182	<1.0	222	<1.0	<1.0	49.7	0.253	0.932	155			0.042	0.032	0.412	0.444	0.0031
RSEM-R6W-EOP	4/30/2020 10:40	XS4880	M	C029734	8.28	792	457	10.9	105	107	171	<1.0	208	<1.0	<1.0	50.1	0.235	0.928	149			0.029	0.029	0.382	0.411	<0.0030
RSEM-R6W-EOP	4/30/2020 10:50	XS4881	D	C029734	8.28	790	455	6.9	118	107	172	<1.0	210	<1.0	<1.0	48.8	0.252	0.910	148			0.029	0.029	0.377	0.405	<0.0030
RSEM-R6W-EOP	5/1/2020 11:25	XS5995	M	C029956	8.36	808	477	8.7	124	102	175	1.4	210	1.6	<1.0	49.3	0.241	0.955	148			0.027	0.030	0.379	0.409	<0.0030
RSEM-R6W-EOP	5/1/2020 11:35	XS5996	D	C029956	8.38	805	477	7.5	106	111	175	1.9	209	2.2	<1.0	50.1	0.249	0.947	151			0.031	0.030	0.378	0.408	<0.0030
RSEM-R6W-EOP	5/2/2020 11:40	XS7460	M	C030328	8.24	829	463	15.0	107	107	180	<1.0	219	<1.0	<1.0	51.4	0.261	0.956	152			0.133	0.034	0.377	0.411	<0.0030
RSEM-R6W-EOP	5/2/2020 11:50	XS7461	D	C030328	8.25	822	489	15.5	110	104	180	<1.0	219	<1.0	<1.0	52.0	0.258	0.959	153			0.321	0.038	0.376	0.415	<0.0030
RSEM-R6W-EOP	5/3/2020 7:40	XS7389	M	C030307	8.35	835	462	14.0	119	97.9	181	<1.0	221	<1.0	<1.0	51.7	0.246	1.01	119			0.099	0.034	0.379	0.412	<0.0030
RSEM-R6W-EOP	5/3/2020 7:50	XS7390	D	C030307	8.31	834	482	14.5	117	109	178	<1.0	218	<1.0	<1.0	51.5	0.248	1.02	119			0.081	0.047	0.380	0.426	0.0043
RSEM-R6W-EOP	5/4/2020 13:00	XS8355	M	C030506	8.32	834	508	7.3	114	108	181	<1.0	221	<1.0	<1.0	51.6	0.261	1.01	150			0.037	0.039	0.416	0.455	<0.0030
RSEM-R6W-EOP	5/5/2020 16:45	XT0141	M	C030949	7.66	850	501	10.3	121	117	182	<1.0	222	<1.0	<1.0	49.9	0.274	1.07	119			0.026	0.030	0.345	0.375	<0.0030
RSEM-R6W-EOP	5/6/2020 13:15	XT1600	M	C031246	8.18	850	504	5.9	138	125	183	<1.0	224	<1.0	<1.0	48.6	0.258	1.06	122			0.023	0.031	0.346	0.377	<0.0030
RSEM-R6W-EOP	5/7/2020 11:30	XT2576	M	C031444	8.36	849	496	4.0	136	141	182	1.4	219	1.6	<1.0	52.5	0.261	1.04	164			0.017	0.027	0.330	0.357	0.0042
RSEM-R6W-EOP	5/8/2020 12:45	XT2570	M	C031442	8.44	850	496	6.7	128	136	181	3.2	213	3.9	<1.0	52.6	0.258	1.07	166			<0.015	0.025	0.301	0.326	<0.0030
RSEM-R6W-EOP	5/9/2020 11:15	XT4486	M	C031859	8.37	877	505	4.6	128	132	188	1.4	226	1.6	<1.0	54.7	0.234	1.05	160			<0.015	0.024	0.299	0.323	<0.0030
RSEM-R6W-EOP	5/10/2020 15:30	XT4527	M	C031867	8.32	1020	602	4.2	133	122	191	<1.0	233	<1.0	<1.0	61.4	0.283	1.14	159			0.039	0.037	0.331	0.368	<0.0030
RSEM-R6W-EOP	5/11/2020 11:30	XT5200	M	C032074	8.46	1130	656	4.3	132	147	193	3.9	227	4.6	<1.0	64.1	0.300	1.10	232			0.075	0.037	0.345	0.383	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6W-EOP	5/12/2020 12:55	XT7070	M	C032509	8.27	1220	767	4.8	140	149	189	<1.0	231	<1.0	<1.0	69.0	0.350	1.15	252			0.098	0.036	0.362	0.398	<0.0030
RSEM-R6W-EOP	5/12/2020 13:05	XT7071	D	C032509	8.25	1210	744	5.2	143	151	189	<1.0	231	<1.0	<1.0	70.1	0.343	1.16	222			0.211	0.036	0.361	0.397	<0.0030
RSEM-R6W-EOP	5/13/2020 13:20	XT8153	M	C032775	8.40	1300	721	4.0	125	122	190	2.7	225	3.2	<1.0	72.8	0.387	1.19	236			0.085	0.037	0.372	0.409	<0.0030
RSEM-R6W-EOP	5/13/2020 13:30	XT8154	D	C032775	8.42	1300	776	3.8	125	120	190	3.0	224	3.6	<1.0	72.7	0.384	1.18	245			0.075	0.037	0.367	0.404	<0.0030
RSEM-R6W-EOP	5/14/2020 12:40	XU0098	M	C033161	8.38	1370	836	3.3	119	139	187	2.9	221	3.5	<1.0	72.8	0.399	1.20	352			0.051	0.036	0.364	0.400	<0.0030
RSEM-R6W-EOP	5/14/2020 12:50	XU0099	D	C033161	8.42	1370	820	3.2	119	145	187	3.3	221	3.9	<1.0	73.3	0.401	1.21	355			0.046	0.036	0.370	0.406	<0.0030
RSEM-R6W-EOP	5/15/2020 9:05	XU0130	M	C033173	8.35	1410	849	5.7	126	136	184	1.3	221	1.6	<1.0	78.5	0.427	1.22	367			0.070	0.042	0.372	0.413	<0.0030
RSEM-R6W-EOP	5/15/2020 9:15	XU0131	D	C033173	8.40	1410	843	5.4	128	135	185	2.5	220	3.0	<1.0	79.6	0.409	1.22	371			0.058	0.036	0.373	0.409	<0.0030
RSEM-R6W-EOP	5/16/2020 13:30	XU2650	M	C033733	8.36	1480	894	5.8	153	149	182	1.5	218	1.8	<1.0	80.4	0.438	1.33	407			0.319	0.035	0.365	0.399	<0.0030
RSEM-R6W-EOP	5/16/2020 13:40	XU2651	D	C033733	8.35	1480	886	5.7	148	141	180	1.6	216	2.0	<1.0	77.9	0.442	1.37	396			0.312	0.034	0.363	0.397	<0.0030
RSEM-R6W-EOP	5/17/2020 12:10	XU2516	M	C033704	8.39	1510	861	3.63	132	148	177	2.8	210	3.3	<1.0	82.2	0.453	1.31	408			0.314	0.036	0.370	0.406	<0.0030
RSEM-R6W-EOP	5/17/2020 12:20	XU2517	D	C033704	8.39	1520	895	3.2	159	142	177	2.5	210	3.0	<1.0	81.8	0.449	1.32	410			0.339	0.039	0.368	0.408	<0.0030
RSEM-R6W-EOP	5/18/2020 13:50	XU2637	M	C033728	8.32	1560	976	1.7	152	143	165	<1.0	201	<1.0	<1.0	83.1	0.474	1.33	435			0.108	0.033	0.382	0.416	<0.0030
RSEM-R6W-EOP	5/18/2020 14:00	XU2638	D	C033728	8.29	1560	1000	1.5	162	150	166	<1.0	202	<1.0	<1.0	82.4	0.469	1.38	434			0.150	0.033	0.381	0.414	<0.0030
RSEM-R6W-EOP	5/19/2020 14:20	XU3584	M	C033944	8.38	1610	1030	2.9	159	151	162	1.9	193	2.3	<1.0	84.0	0.476	1.39	444			0.075	0.037	0.437	0.474	<0.0030
RSEM-R6W-EOP	5/19/2020 14:30	XU3585	D	C033944	8.35	1610	1050	3.4	175	160	160	1.5	192	1.8	<1.0	83.4	0.481	1.38	436			0.083	0.037	0.440	0.476	<0.0030
RSEM-R6W-EOP	5/20/2020 12:50	XU5558	M	C034306	8.33	1630	923	<1.0	130	123	157	<1.0	192	<1.0	<1.0	82.9	0.478	1.40	447			0.100	0.040	0.449	0.489	<0.0030
RSEM-R6W-EOP	5/20/2020 13:00	XU5559	D	C034306	8.26	1630	978	2.2	143	145	156	<1.0	190	<1.0	<1.0	96.9	0.488	1.40	441			0.142	0.039	0.452	0.491	<0.0030
RSEM-R6W-EOP	5/21/2020 11:55	XU6997	M	C034623	8.19	1600	941	2.9	132	142	150	<1.0	183	<1.0	<1.0	81.2	0.515	1.38	460			0.224	0.039	0.452	0.491	<0.0030
RSEM-R6W-EOP	5/21/2020 12:05	XU6998	D	C034623	8.22	1600	948	2.5	132	143	149	<1.0	182	<1.0	<1.0	83.1	0.515	1.37	471			0.241	0.039	0.450	0.488	<0.0030
RSEM-R6W-EOP	5/22/2020 12:20	XU8399	M	C034984	8.20	1630	1010	3.3	142	139	149	<1.0	182	<1.0	<1.0	79.8	0.490	1.27	500			0.063	0.053	0.474	0.527	<0.0030
RSEM-R6W-EOP	5/22/2020 12:30	XU8400	D	C034984	8.23	1630	1020	3.5	140	134	153	<1.0	187	<1.0	<1.0	79.1	0.490	1.27	495			0.045	0.044	0.473	0.516	<0.0030
RSEM-R6W-EOP	5/23/2020 13:40	XU8584	M	C034993	8.10	1650	1020	4.7	156	154	151	<1.0	184	<1.0	<1.0	79.2	0.500	1.30	506			0.062	0.044	0.528	0.573	<0.0030
RSEM-R6W-EOP	5/23/2020 13:50	XU8585	D	C034993	8.14	1650	988	4.3	157	156	153	<1.0	187	<1.0	<1.0	77.4	0.495	1.30	503			0.077	0.056	0.525	0.582	<0.0030
RSEM-R6W-EOP	5/24/2020 13:00	XU8646	M	C035010	7.97	1660	1020	2.5	160	159	149	<1.0	181	<1.0	<1.0	80.1	0.435	1.46	516			0.077	0.055	0.547	0.602	<0.0030
RSEM-R6W-EOP	5/24/2020 13:10	XU8647	D	C035010	8.05	1670	987	2.5	153	160	148	<1.0	180	<1.0	<1.0	81.7	0.448	1.44	519			0.070	0.057	0.548	0.605	<0.0030
RSEM-R6W-EOP	5/25/2020 9:00	XU8664	M	C035018	8.15	1700	2560	3.7	157	158	149	<1.0	182	<1.0	<1.0	85.4	0.457	1.48	533			0.112	0.058	0.581	0.640	<0.0030
RSEM-R6W-EOP	5/25/2020 9:10	XU8665	D	C035018	8.11	1710	6230	4.5	160	162	150	<1.0	183	<1.0	<1.0	85.4	0.460	1.54	529			0.112	0.059	0.583	0.642	<0.0030
RSEM-R6W-EOP	5/26/2020 15:10	XV2883	M	C035941	8.26	1770	1060	2.8	165	161	152	<1.0	186	<1.0	<1.0	87.7	0.532	1.49	557			0.386	0.059	0.605	0.664	<0.0030
RSEM-R6W-EOP	5/27/2020 15:00	XV4565	M	C036323	8.23	1830	5500	6.8	159	161	170	<1.0	208	<1.0	<1.0	94.6	0.535	1.50	563			0.374	0.062	0.633	0.695	0.0032
RSEM-R6W-EOP	5/28/2020 14:15	XV5619	M	C036526	7.57	1830	1160	1.5	164	163	165	<1.0	201	<1.0	<1.0	105	0.522	1.53	588			0.230	0.070	0.606	0.676	0.0034
RSEM-R6W-EOP	5/28/2020 14:40	XV5620	D	C036526	7.58	1830	1140	2.7	160	160	162	<1.0	198	<1.0	<1.0	106	0.527	1.56	596			0.220	0.071	0.603	0.673	<0.0030
RSEM-R6W-EOP	5/29/2020 11:30	XV5615	M	C036525	7.41	1860	1170	2.2	158	158	160	<1.0	196	<1.0	<1.0	104	0.525	1.59	603			0.626	0.064	0.662	0.726	<0.0030
RSEM-R6W-EOP	5/30/2020 13:45	XV8354	M	C037043	8.18	1880	1180	4.9	158	158	172	<1.0	210	<1.0	<1.0	108	0.555	1.63	606			0.139	0.074	0.632	0.707	0.0036
RSEM-R6W-EOP	5/31/2020 12:45	XV8400	M	C037057	8.09	1910	1180	2.4	157	157	172	<1.0	210	<1.0	<1.0	110	0.534	1.67	530			0.169	0.069	0.698	0.767	0.0032
RSEM-R6W-EOP	6/1/2020 15:00	XW0113	M	C037316	8.13	1930	1170	4.4	158	158	172	<1.0	210	<1.0	<1.0	107	0.534	1.69	473			0.147	0.092	0.630	0.723	<0.0030
RSEM-R6W-EOP	6/2/2020 12:00	XW3134	M	C037913	8.30	1950	1220	5.3	158	157	172	3.1	202	3.7	<1.0	110	0.560	1.66	497			0.190	0.067	0.694	0.761	<0.0030
RSEM-R6W-EOP	6/3/2020 12:45	XW5134	M	C038222	8.42	1980	1190	2.4	153	154	170	4.0	198	4.8	<1.0	112	0.555	1.68	518			0.109	0.082	0.676	0.758	<0.0030
RSEM-R6W-EOP	6/4/2020 12:20	XW6861	M	C038528	8.28	1950	1240	1.1	155	155	172	<1.0	210	<1.0	<1.0	112	0.555	1.67	605			0.116	0.092	0.609	0.702	<0.0030
RSEM-R6W-EOP	6/4/2020 12:30	XW6862	D	C038528	8.27	1950	1360	<1.0	156	156	171	<1.0	209	<1.0	<1.0	112	0.555	1.67	619			0.094	0.094	0.596	0.690	<0.0030
RSEM-R6W-EOP	6/5/2020 16:40	XW9909	M	C039108	8.37	1970	1270	1.6	154	155	172	<1.0	210	<1.0	<1.0	116	0.512	1.72	645			0.222	0.065	0.690	0.756	<0.0030
RSEM-R6W-EOP	6/5/2020 16:50	XW9910	D	C039108	8.21	1990	1290	2.3	157	159	172	<1.0	210	<1.0	<1.0	114	0.522	1.71	640			0.253	0.065	0.710	0.775	<0.0030
RSEM-R6W-EOP	6/6/2020 11:40	XX0125	M	C039138	8.12	1970	1270	2.8	149	163	173	<1.0	212	<1.0	<1.0	109	0.507	1.76	609			0.246	0.061	0.673	0.734	<0.0030
RSEM-R6W-EOP	6/6/2020 11:50	XX0126	D	C039138	8.11	1970	1250	2.6	157	164	172	<1.0	210	<1.0	<1.0	110	0.505	1.80	588			0.235	0.061	0.673	0.735	<0.0030
RSEM-R6W-EOP	6/7/2020 12:20	XW9324	M	C038976	8.03	1950	1200	6.9	158	156	174	<1.0	212	<1.0	<1.0	114	0.500	1.71	645			0.143	0.066	0.671	0.737	<0.0030
RSEM-R6W-EOP	6/7/2020 12:30	XW9325	D	C038976	7.87	1950	1210	7.9	159	156	172	<1.0	210	<1.0	<1.0	110	0.500	1.72	653			0.138	0.066	0.672	0.738	<0.0030
RSEM-R6W-EOP	6/8/2020 16:00	XX1068	M	C039370	7.91	1900	1220	6.7	144	161	172	<1.0	210	<1.0	<1.0	113	0.498	1.60	616			0.235	0.072	0.666	0.739	<0.0030
RSEM-R6W-EOP	6/9/2020 15:40	XX3626	M	C039793	7.90	1860	1230	12.5	166	172	174	<1.0	213	<1.0	<1.0	111	0.476	1.67	590			0.267	0.071	0.667	0.739	<0.0030
RSEM-R6W-EOP	6/10/2020 13:30	XX4754	M	C040036	7.80	1830	1140	13.3	175	162	173	<1.0	210	<1.0	<1.0	106	0.476	1.62	572			0.231	0.077	0.720	0.797	<0.0030
RSEM-R6W-EOP	6/11/2020 13:50	XX7041	M	C040416	7.89	1830	1150	6.1	162	168	177	<1.0	215	<1.0	<1.0	106	0.482	1.59	554			0.190	0.083	0.755	0.838	0.0034
RSEM-R6W-EOP	6/12/2020 14:15	XX9582	M	C040980	7.74	1850	1150	5.5	161	172	176	<1.0	214	<1.0	<1.0	99.9	0.502	1.58	591			0.207	0.101	0.853	0.955	<0.0030
RSEM-R6W-EOP	6/13/2020 14:55	XX9600	M	C040986	7.70	1870	738	3.9	154	157	172	<1.0	210	<1.0	<1.0	97.1	0.480	1.54	627			0.223	0.114	0.872	0.986	0.0030
RSEM-R6W-EOP	6/14/2020 14:10	XX9647	M	C040993	7.38	1860	965	14.7	157	167	172	<1.0	209	<1.0	<1.0	96.0	0.505	1.51	608			0.214	0.111	0.926	1.04	0.0030
RSEM-R6W-EOP	6/15/2020 14:55	XY1603	M	C041415	7.31	1750	1110	48.5	185	175	150	<1.0	183	<1.0	<1.0	86.5	0.507	1.40	574			0.294	0.122	0.926	1.05	0.0031
RSEM-R6W-EOP	6/15/2020 15:05	XY1604	D	C041415	7.36	1750	1110	50.1	178	174	147	<1.0	180	<1.0	<1.0	85.6	0.502	1.41	569			0.296	0.121	0.928	1.05	0.0035
RSEM-R6W-EOP	6/16/2020 10:55	XY1505	M	C041388	7.32	1710	1120	21.1	217	219	145	<1.0	177	<1.0	<1.0	72.7	0.544	1.22	598			0.318	0.122	1.01	1.13	0.0034
RSEM-R6W-EOP	6/16/2020 11:05	XY1506	D	C041388	7.13	1730	1130	22.3	222	215	142	<1.0	173	<1.0	<1.0	72.5	0.542	1.21	604			0.342	0.122	1.01	1.13	0.0037
RSEM-R6W-EOP	6/17/2020 15:15	XY6280	M	C042380	8.11	1740	1100	16.5	212	229	126	<1.0	154	<1.0	<1.0	65.7	0.544	1.15	627			0.358	0.135	1.15	1.29	0.0041
RSEM-R6W-EOP	6/18/2020 16:15	XY6285	M	C042383	8.10	1720	1120	14.5	240	236	120	<1.0	146	<1.0	<1.0	61.0	0.542	1.10	620			0.307	0.137	1.16	1.30	0.0035
RSEM-R6W-EOP	6/19/2020 11:40	XY6264	M	C042375	8.19	1790	1200	6.5	251	255	112	<1.0	137	<1.0	<1.0	64.6	0.576	1.08	669			0.359	0.163	1.28	1.44	<0.0030
RSEM-R6W-EOP	6/20/2020 14:15	XY9028	M	C042884	8.26	1860	1280	4.6	283	278	109	<1.0	133	<1.0	<1.0	66.3	0.627	1.10	717			0.274	0.161	1.33	1.49	0.0036
RSEM-R6W-EOP	6/21/2020 15:30	XY9118	M	C042904	8.26	2020	1410	6.3	330	345	99.0	<1.0	121	<1.0	<1.0	58.1	0.676	1.10	837			0.247	0.154	1.35	1.51	<0.0030
RSEM-R6W-EOP	6/22/2020 13:10	XZ0404	M	C043197	7.86	2080	1430	4.4	378	377	98.1	<1.0	120	<1.0	<1.0	66.2	0.699	1.11	855			0.313	0.139	1.32	1.46	0.0032
RSEM-R6W-EOP	6/22/2020 13:30	XZ0407	D	C043197	7.88	2080	1420	4.5	375	374	96.8	<1.0	118	<1.0	<1.0	65.8	0.692	1.12	854			0.334	0.138	1.31	1.45	<0.0030
RSEM-R6W-EOP	6/23/2020 16:10	XZ2250	M	C043604	7.94	2140	1470	4.2	410	433	87.5	<1.0	107	<1.0	<1.0	63.4	0.736	1.06	941			0.313	0.124	1.31	1.44	<0.0030
RSEM-R6W-EOP	6/24/2020 12:50	XZ5348	M	C044267	7.94	2170		3.9	427	438	84.8	<1.0	103	<1.0	<1.0	60.6	0.768	1.03	925			0.285	0.109	1.28	1.39	<0.0030
RSEM-R6W-EOP	6/25/2020 15:40	XZ5983	M	C044346	7.95	2140	1480	5.3	458	450	83.5	<1.0	102	<1.0	<1.0	55.7	0.798	1.03	964			0.240	0.092	1.22	1.31	<0.0030
RSEM-R6W-EOP	6/26/2020 12:40	XZ7317	M	C044624	7.82	2130	1540	2.8	465	453	81.7	<1.0	99.6	<1.0	<1.0	59.3	0.800	0.988	995			0.260	0.0906	1.26	1.35	<0.0030
RSEM-R6W-EOP	6/27/2020 18:50	XZ9068	M	C044897	7.78	2090	1480	2.4	480	456	77.2	<1.0	94.1	<1.0	<1.0	53.8	0.832	0.953	923			0.291	0.075	1.19	1.27	<0.0030

Appendix 3-C: 2020 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
					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
RSEM-R6W-EOP	6/28/2020 12:30	XZ9158	M	C044916	7.80	2110	1520	2.0	457	462	73.9	<1.0	90.1	<1.0	<1.0	53.1	0.876	0.933	941			0.330	0.076	1.20	1.27	<0.0030
RSEM-R6W-EOP	6/29/2020 16:05	YA0784	M	C045275	7.72	2130	1520	7.9	469	466	76.8	<1.0	93.6	<1.0	<1.0	53.4	0.868	0.885	932			0.330	0.089	1.25	1.34	<0.0030
RSEM-R6W-EOP	6/30/2020 14:20	YA2741	M	C045692	7.35	2110	1470	2.1	453	457	92.3	<1.0	113	<1.0	<1.0	54.3	0.876	0.884	958			0.331	0.086	1.21	1.30	<0.0030
RSEM-R6W-EOP	7/1/2020 11:50	YA2708	M	C045689	7.82	2100	1410	5.1	437	441	68.5	<1.0	83.6	<1.0	<1.0	54.4	0.852	0.880	952			0.334	0.091	1.20	1.30	<0.0030
RSEM-R6W-EOP	7/3/2020 16:20	YA5156	M	C046179	7.76	1750	1240	12.8	355	335	74.1	<1.0	90.4	<1.0	<1.0	50.2	0.720	0.820	715			0.242	0.0683	1.08	1.15	<0.0030
RSEM-R6W-EOP	7/4/2020 15:15	YA6736	M	C046470	8.04	1540	987	6.8	305	309	82.5	<1.0	101	<1.0	<1.0	40.4	0.558	0.726	625			0.192	0.072	0.999	1.07	0.0054
RSEM-R6W-EOP	7/5/2020 10:25	YA6918	M	C046500	7.67	1550	1070	4.7	318	322	78.3	<1.0	95.5	<1.0	<1.0	38.9	0.591	0.721	648			0.195	0.073	0.981	1.05	<0.0030
RSEM-R6W-EOP	7/6/2020 11:40	YA8349	M	C046846	7.83	1600	1040	3.5	308	325	80.0	<1.0	97.6	<1.0	<1.0	39.5	0.644	0.703	660			0.226	0.072	0.997	1.07	<0.0030
RSEM-R6W-EOP	7/7/2020 12:15	YB0050	M	C047206	7.86	1670	1140	3.5	342	337	85.4	<1.0	104	<1.0	<1.0	38.9	0.659	0.748	704			0.188	0.073	1.01	1.08	<0.0030
RSEM-R6W-EOP	7/8/2020 12:40	YB2461	M	C047619	8.07	1710	1140	2.6	335	333	93.2	<1.0	114	<1.0	<1.0	39.4	0.688	0.726	721			0.135	0.070	1.04	1.11	<0.0030
RSEM-R6W-EOP	7/9/2020 14:20	YB4137	M	C047920	8.14	1630	1080	4.0	321	318	98.9	<1.0	121	<1.0	<1.0	40.3	0.669	0.716	641			0.145	0.060	0.970	1.03	<0.0030
RSEM-R6W-EOP	7/10/2020 10:10	YB4117	M	C047917	8.21	1650	1100	4.3	324	319	100	<1.0	122	<1.0	<1.0	41.4	0.662	0.701	645			0.181	0.062	0.967	1.03	<0.0030
RSEM-R6W-EOP	7/12/2020 14:10	YB7109	M	C048462	8.20	1660	1100	3.5	304	318	110	<1.0	134	<1.0	<1.0	37.0	0.676	0.671	663			0.163	0.070	0.93	1.0	<0.0030
RSEM-R6W-EOP	7/12/2020 15:00	YB7194	M	C048486	8.04	1650	1080	3.3	309	325	102	<1.0	125	<1.0	<1.0	36.7	0.686	0.663	646			0.173	0.058	0.922	0.980	<0.0030
RSEM-R6W-EOP	7/13/2020 14:45	YB9220	M	C048875	8.20	1720	1080	6.1	305	318	111	<1.0	136	<1.0	<1.0	41.6	0.689	0.721	680			0.195	0.083	1.06	1.14	<0.0030
RSEM-R6W-EOP	7/14/2020 14:10	YC1072	M	C049344	8.19	1720	1180	10.5	312	321	117	<1.0	143	<1.0	<1.0	40.8	0.736	0.759	669			0.201	0.084	1.05	1.14	<0.0030
RSEM-R6W-EOP	7/14/2020 14:20	YC1073	D	C049344	8.20	1730	1160	5.9	317	316	117	<1.0	143	<1.0	<1.0	40.8	0.743	0.736	674			0.212	0.084	1.05	1.14	<0.0030
RSEM-R6W-EOP	7/15/2020 12:55	YC2138	M	C049614	8.13	1720	1130	4.1	310	304	125	<1.0	152	<1.0	<1.0	39.9	0.622	0.729	629			0.202	0.084	1.05	1.13	<0.0030
RSEM-R6W-EOP	7/15/2020 13:05	YC2139	D	C049614	8.03	1720	1120	4.2	313	305	123	<1.0	150	<1.0	<1.0	40.9	0.646	0.728	651			0.207	0.084	1.05	1.14	<0.0030
RSEM-R6W-EOP	7/16/2020 15:40	YC4666	M	C049952	8.11	1710	1140	1.3	302	306	129	<1.0	157	<1.0	<1.0	39.7	0.659	0.728	647			0.163	0.081	1.06	1.14	<0.0030
RSEM-R6W-EOP	7/17/2020 14:05	YC5482	M	C050110	8.20	1680	1170	2.8	303	301	145	<1.0	177	<1.0	<1.0	41.5	0.670	0.772	681			0.145	0.0789	1.11	1.19	<0.0030
RSEM-R6W-EOP	7/18/2020 13:15	YC7459	M	C050583	8.24	1810	1190	1.5	342	325	127	<1.0	154	<1.0	<1.0	42.0	0.665	0.785	721			0.228	0.092	1.23	1.32	0.0031
RSEM-R6W-EOP	7/19/2020 13:40	YC7537	M	C050603	8.27	1800	1230	1.8	335	335	122	<1.0	149	<1.0	<1.0	41.6	0.675	0.783	727			0.210	0.088	1.26	1.35	<0.0030
RSEM-R6W-EOP	7/20/2020 10:50	YC8543	M	C050811	8.15	1830	1220	<1.0	349	343	115	<1.0	141	<1.0	<1.0	42.1	0.736	0.770	715			0.224	0.093	1.28	1.38	0.0058
RSEM-R6W-EOP	7/20/2020 11:00	YC8544	D	C050811	8.12	1830	1250	1.8	350	343	115	<1.0	141	<1.0	<1.0	43.4	0.787	0.768	722			0.200	0.088	1.29	1.37	<0.0030
RSEM-R6W-EOP	7/21/2020 13:35	YD0794	M	C051251	8.07	1810	1230	2.4	344	356	114	<1.0	139	<1.0	<1.0	42.1	0.739	0.766	700			0.175	0.084	1.29	1.37	<0.0030
RSEM-R6W-EOP	7/21/2020 13:45	YD0795	D	C051251	8.23	1800	1230	3.1	341	344	115	<1.0	140	<1.0	<1.0	42.9	0.743	0.773	718			0.205	0.084	1.32	1.40	<0.0030
RSEM-R6W-EOP	7/22/2020 13:40	YD2618	M	C051641	8.17	1780	1210	2.1	335	339	114	<1.0	139	<1.0	<1.0	41.8	0.652	0.711	695			0.157	0.078	1.30	1.37	0.0033
RSEM-R6W-EOP	7/23/2020 12:05	YD4255	M	C051864	8.17	1800	1250	1.5	320	355	115	<1.0	140	<1.0	<1.0	41.0	0.646	0.765	705			0.196	0.079	1.33	1.41	<0.0030
RSEM-R6W-EOP	7/24/2020 15:30	YD5910	M	C052038	8.19	1760	1260	2.4	346	352	127	<1.0	155	<1.0	<1.0	44.6	0.720	0.775	755			0.144	0.0696	1.34	1.41	<0.0030
RSEM-R6W-EOP	7/25/2020 11:15	YD7675	M	C052402	8.20	1800	1140	2.2	352	351	123	<1.0	150	<1.0	<1.0	41.7	0.660	0.751	665			0.158	0.071	1.34	1.41	<0.0030
RSEM-R6W-EOP	7/26/2020 14:25	YD7714	M	C052420	8.23	1780	1120	2.5	342	346	123	<1.0	150	<1.0	<1.0	42.3	0.632	0.775	659			0.144	0.078	1.4	1.4	<0.0030
RSEM-R6W-EOP	7/27/2020 10:20	YD7768	M	C052432	8.26	1810	1160	1.4	346	349	115	<1.0	141	<1.0	<1.0	43.6	0.599	0.785	700			0.073	0.081	1.3	1.4	<0.0030
RSEM-R6W-EOP	7/28/2020 12:20	YE2030	M	C053295	8.09	1790	1170	3.4	366	342	112	<1.0	137	<1.0	<1.0	44.5	0.593	0.788	707			0.182	0.076	1.27	1.34	<0.0030
RSEM-R6W-EOP	7/29/2020 12:20	YE4006	M	C053695	8.25	1790	1180	<1.0	327	336	116	<1.0	141	<1.0	<1.0	46.8	0.530	0.775	708			0.282	0.076	1.22	1.29	<0.0030
RSEM-R6W-EOP	7/30/2020 15:00	YE5557	M	C054021	8.39	618	352	2.7	279	267	165	3.4	194	4.0	<1.0	27.6	0.123	0.366	117			<0.015	<0.010	0.066	0.066	<0.0030
RSEM-R6W-EOP	7/30/2020 16:20	YE5558	M	C054021	8.29	1780	1200	2.3	348	334	120	<1.0	146	<1.0	<1.0	46.2	0.513	0.781	684			0.112	0.070	1.15	1.22	<0.0030
RSEM-R6W-EOP	7/31/2020 11:10	YE5651	M	C054023	8.27	1750	1150	1.3	335	324	129	<1.0	157	<1.0	<1.0	46.6	0.500	0.789	672			0.112	0.071	1.08	1.15	0.0033
RSEM-R6W-EOP	8/1/2020 12:30	YE6666	M	C054219	8.15	1700	1160	2.0	328	324	129	<1.0	158	<1.0	<1.0	46.8	0.630	0.788	625			0.093	0.0686	1.09	1.16	<0.0030
RSEM-R6W-EOP	8/2/2020 12:50	YE8517	M	C054579	8.26	1730	1140	1.9	302	311	120	<1.0	147	<1.0	<1.0	50.4	0.573	0.806	654			0.088	0.062	0.992	1.05	<0.0030
RSEM-R6W-EOP	8/3/2020 13:10	YE8525	M	C054582	8.29	1710	1070	1.7	300	297	129	<1.0	157	<1.0	<1.0	50.8	0.546	0.807	634			0.080	0.072	1.02	1.10	<0.0030
RSEM-R6W-EOP	8/4/2020 13:10	YF1645	M	C055153	8.35	1650	1130	5.3	267	282	131	<1.0	160	<1.0	<1.0	51.7	0.551	0.794	619			0.078	0.073	0.971	1.04	<0.0030
RSEM-R6W-EOP	8/5/2020 12:40	YF2978	M	C055442	8.27	1630	1060	4.3	264	278	123	<1.0	150	<1.0	<1.0	50.5	0.508	0.802	603			0.073	0.073	0.865	0.938	0.0030
RSEM-R6W-EOP	8/6/2020 11:30	YF2969	M	C055440	8.29	1610	1070	3.0	265	276	126	<1.0	154	<1.0	<1.0	53.0	0.500	0.810	606			0.074	0.076	0.887	0.963	0.0034
RSEM-R6W-EOP	8/7/2020 12:15	YF4858	M	C055741	8.39	1660	1020	2.7	255	266	132	2.4	155	2.9	<1.0	53.1	0.532	0.853	581			0.069	0.074	0.851	0.926	<0.0030
RSEM-R6W-EOP	8/8/2020 12:50	YF8357	M	C056281	8.17	1650	1120	2.8	263	263	128	<1.0	156	<1.0	<1.0	47.7	0.520	0.845	595			0.077	0.069	0.793	0.861	<0.0030
RSEM-R6W-EOP	8/9/2020 14:20	YF8362	M	C056282	8.37	1690	1120	3.0	259	258	132	2.1	156	2.5	<1.0	54.1	0.524	0.865	641			0.093	0.068	0.767	0.835	<0.0030
RSEM-R6W-EOP	8/10/2020 13:00	YG0106	M	C056587	8.29	1690	1120	2.8	271	268	126	<1.0	153	<1.0	<1.0	54.3	0.524	0.852	667			0.081	0.066	0.777	0.843	<0.0030
RSEM-R6W-EOP	8/11/2020 13:20	YG2367	M	C056973	8.25	1680	1090	3.9	269	267	126	<1.0	154	<1.0	<1.0	54.3	0.502	0.837	627			0.065	0.062	0.761	0.824	<0.0030
RSEM-R6W-EOP	8/12/2020 17:40	YG4636	M	C057417	8.31	1710	1110	2.1	268	272	124	<1.0	152	<1.0	<1.0	58.4	0.455	0.899	642			0.072	0.057	0.764	0.821	<0.0030
RSEM-R6W-EOP	8/13/2020 13:40	YG7262	M	C057823	8.33	1750	1130	2.4	285	265	129	<1.0	157	<1.0	<1.0	55.0	0.485	0.933	653			0.075	0.055	0.84	0.90	<0.0030
RSEM-R6W-EOP	8/14/2020 12:55	YG7190	M	C057817	8.37	1750	1110	5.2	266	270	130	2.0	154	2.4	<1.0	54.6	0.485	0.934	648			0.095	0.049	0.748	0.798	<0.0030
RSEM-R6W-EOP	8/15/2020 14:55	YH0061	M	C058356	8.25	1750	1140	1.5	262	261	131	<1.0	160	<1.0	<1.0	56.1	0.444	0.912	645			0.068	0.046	0.719	0.765	<0.0030
RSEM-R6W-EOP	8/16/2020 11:50	YH0173	M	C058389	8.10	1740	1130	<1.0	290	260	130	<1.0	159	<1.0	<1.0	62.5	0.429	0.922	631			0.086	0.045	0.696	0.741	<0.0030
RSEM-R6W-EOP	8/17/2020 9:30	YG9870	M	C058326	8.28	1710	1080	1.6	252	253	129	<1.0	158	<1.0	<1.0	58.3	0.481	0.836	621			0.072	0.041	0.695	0.736	<0.0030
RSEM-R6W-EOP	8/18/2020 16:20	YH3311	M	C059056	8.32	1680	1070	2.1	246	249	136	<1.0	166	<1.0	<1.0	60.0	0.436	0.989	616			0.109	0.044	0.76	0.80	0.0033
RSEM-R6W-EOP	8/19/2020 14:50	YH5388	M	C059422	8.25	1640	1020	4.1	242	242	135	<1.0	165	<1.0	<1.0	58.0	0.413	0.994	579			0.095	0.040	0.645	0.684	<0.0030
RSEM-R6W-EOP	8/20/2020 14:40	YH7342	M	C059760	8.18	1570	984	5.0	235	232	141	<1.0	172	<1.0	<1.0	63.5	0.400	0.724	550			0.083	0.039	0.582	0.621	<0.0030
RSEM-R6W-EOP	8/21/2020 12:00	YH7340	M	C059759	8.11	1440	940	5.9	219	215	154	<1.0	187	<1.0	<1.0	59.8	0.370	0.886	472			0.082	0.040	0.67	0.71	<0.0030
RSEM-R6W-EOP	8/22/2020 11:20	YI0128	M	C060262	8.06	1240	762	2.2	189	185	145	<1.0	176	<1.0	<1.0	51.8	0.313	0.644	374			0.094	0.042	0.62	0.66	0.0051
RSEM-R6W-EOP	8/23/2020 14:40	YI0110	M	C060255	8.18	1170	682	5.5	185	176	145	<1.0	178	<1.0	<1.0	50.3	0.338	0.623	344			0.089	0.052	0.60	0.65	0.0045
RSEM-R6W-EOP	8/24/2020 13:50	YI2199	M	C060702	8.25	1180	716	2.1	178	176	140	<1.0	171	<1.0	<1.0	50.4	0.334	0.672	346			0.062	0.048	0.537	0.586	0.0054
RSEM-R6W-EOP	8/25/2020 12:30	YI3996	M	C061087	8.28	1180	731	1.9	178	177	139	<1.0	169	<1.0	<1.0	47.1	0.348	0.646	357			0.095	0.050	0.579	0.629	0.0044
RSEM-R6W-EOP	8/26/2020 14:00	YI6264	M	C061565	8.25	1220	754	1.1	193	195	132	<1.0	162	<1.0	<1.0	46.8	0.359	0.652	395			0.077	0.052	0.628	0.680	0.0030
RSEM-R6W-EOP	8/27/2020 12:50	YI7774	M	C061827	8.20	1330	841	1.2	219	210	124	<1.0	152	<1.0	<1.0	50.7	0.433	0.681	447			0.115	0.055	0.743	0.798	0.0045
RSEM-R6W-EOP	8/28/2020 13:55	YI9494	M	C062013	8.16	1350	900	1.2	222	230	136	<1.0	166	<1.0	<1.0	47.7	0.440	0.815	431			0.037	0.0555	0.796	0.851	<0.0030
RSEM-R6W-EOP	8/29/2020 10:55	YJ1739	M	C062465	8.30	1400	916	<1.0	223	228	129	<1.0	157	<1.0	<1.0	49.4	0.459	0.732	476			0.145	0.055	0.863	0.918	0.0035
RSEM-R6W-EOP	8/30/2020 12:00	YJ1570	M	C062426	8.26	1420	880	1.3	229	232	128	<1.0	157	<1.0	<1.0	56.4	0.454	0.825	492			0.168	0.059	0.91	0.97	0.0036
RSEM-R6W-EOP	8/31/2020 17:20	YJ3640	M	C062857	8.19	1480	1020	<1.0	256	257	131	<1.0	159	<1.0	<1.0	57.2	0.470	0.823	508			0.160	0.067	1.0	1.1	0.0207

Appendix 3-C: 2020 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
					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
RSEM-R6W-EOP	9/1/2020 14:20	YJ6691	M	C063433	8.37	1540	986	2.7	249	261	128	1.0	154	1.2	<1.0	55.4	0.481	0.774	516			0.136	0.073	1.12	1.19	<0.0030
RSEM-R6W-EOP	9/2/2020 13:55	YJ7831	M	C063666	8.27	1550	1020	1.3	252	261	123	<1.0	150	<1.0	<1.0	56.1	0.483	0.806	538			0.222	0.081	1.20	1.28	<0.0030
RSEM-R6W-EOP	9/3/2020 14:30	YK0031	M	C064047	8.31	1590	1020	1.6	266	264	121	<1.0	148	<1.0	<1.0	57.1	0.502	0.809	523			0.115	0.082	1.23	1.31	<0.0030
RSEM-R6W-EOP	9/4/2020 12:00	YK0086	M	C064051	8.32	1600	1030	2.1	260	264	120	<1.0	146	<1.0	<1.0	57.8	0.500	0.795	525			0.118	0.084	1.23	1.32	<0.0030
RSEM-R6W-EOP	9/5/2020 12:40	YK1346	M	C064288	7.76	1570	1070	1.6	256	245	124	<1.0	152	<1.0	<1.0	55.3	0.500	0.767	546			0.123	0.0748	1.23	1.31	<0.0030
RSEM-R6W-EOP	9/6/2020 11:10	YK2531	M	C064579	8.25	1590	1080	1.3	256	258	120	<1.0	146	<1.0	<1.0	55.3	0.483	0.512	578			0.106	0.078	1.24	1.32	<0.0030
RSEM-R6W-EOP	9/7/2020 10:25	YK2585	M	C064592	8.26	1590	1050	1.7	252	257	122	<1.0	148	<1.0	<1.0	57.4	0.463	0.802	557			0.117	0.074	1.24	1.31	<0.0030
RSEM-R6W-EOP	9/8/2020 11:00	YK6315	M	C065313	8.17	1550	980	1.6	250	246	136	<1.0	166	<1.0	<1.0	55.7	0.449	0.892	549			0.153	0.074	1.24	1.31	0.0032
RSEM-R6W-EOP	9/9/2020 14:15	YK6317	M	C065314	8.24	1490	980	<1.0	238	237	142	<1.0	174	<1.0	<1.0	52.2	0.442	0.868	512			0.141	0.068	1.20	1.27	<0.0030
RSEM-R6W-EOP	9/10/2020 11:50	YK8214	M	C065709	8.22	1450	984	1.3	240	229	145	<1.0	177	<1.0	<1.0	57.6	0.426	0.824	493			0.130	0.071	1.15	1.22	<0.0030
RSEM-R6W-EOP	9/10/2020 12:00	YK8215	D	C065709	8.25	1450	968	1.3	244	230	146	<1.0	178	<1.0	<1.0	60.3	0.416	0.824	494			0.135	0.070	1.14	1.21	<0.0030
RSEM-R6W-EOP	9/11/2020 11:40	YK8183	M	C065706	8.22	1400	885	3.2	233	219	149	<1.0	181	<1.0	<1.0	55.5	0.386	0.828	412			0.149	0.065	1.04	1.11	<0.0030
RSEM-R6W-EOP	9/12/2020 14:20	YL1186	M	C066169	8.30	1370	891	4.8	224	209	157	<1.0	192	<1.0	<1.0	54.0	0.366	0.781	435			0.088	0.062	0.92	0.98	<0.0030
RSEM-R6W-EOP	9/13/2020 12:40	YL1415	M	C066239	8.13	1340	865	5.6	211	207	157	<1.0	191	<1.0	<1.0	54.6	0.373	0.768	446			0.109	0.063	0.91	0.97	<0.0030
RSEM-R6W-EOP	9/14/2020 12:40	YL3785	M	C066659	8.09	1330	848	7.5	212	206	158	<1.0	193	<1.0	<1.0	49.6	0.371	0.786	437			0.140	0.055	0.945	1.00	<0.0030
RSEM-R6W-EOP	9/15/2020 15:00	YL6687	M	C067245	8.23	1350	865	9.5	208	211	159	<1.0	194	<1.0	<1.0	51.1	0.351	0.753	437			0.206	0.059	0.944	1.00	<0.0030
RSEM-R6W-EOP	9/16/2020 15:30	YL8114	M	C067490	8.03	1330	867	7.1	208	216	161	<1.0	196	<1.0	<1.0	51.4	0.385	0.766	424			0.169	0.062	0.956	1.02	<0.0030
RSEM-R6W-EOP	9/17/2020 13:10	YL8049	M	C067474	8.19	1360	872	5.6	209	217	162	<1.0	198	<1.0	<1.0	52.5	0.385	0.757	426			0.156	0.059	0.940	0.999	0.0033
RSEM-R6W-EOP	9/18/2020 9:50	YL9985	M	C067838	7.98	1360	887	3.5	219	213	161	<1.0	196	<1.0	<1.0	53.2	0.383	0.806	440			0.167	0.060	0.95	1.0	<0.0030
RSEM-R6W-EOP	9/19/2020 12:50	YM3344	M	C068349	8.08	1420	919	2.7	215	213	152	<1.0	185	<1.0	<1.0	50.4	0.376	0.804	477			0.156	0.056	1.01	1.07	<0.0030
RSEM-R6W-EOP	9/20/2020 11:40	YM3374	M	C068353	8.15	1400	920	2.9	215	213	159	<1.0	193	<1.0	<1.0	48.2	0.365	0.773	442			0.213	0.065	1.02	1.09	<0.0030
RSEM-R6W-EOP	9/21/2020 12:50	YM6393	M	C068837	7.86	1350	916	3.7	211	215	169	<1.0	206	<1.0	<1.0	52.3	0.352	0.737	428			0.138	0.060	0.92	0.98	<0.0030
RSEM-R6W-EOP	9/22/2020 13:55	YM9231	M	C069318	8.13	1360	824	3.7	210	218	165	<1.0	201	<1.0	<1.0	50.8	0.345	0.585	416			0.173	0.061	1.00	1.06	<0.0030
RSEM-R6W-EOP	9/23/2020 15:40	YN0387	M	C069533	8.09	1360	927	2.7	214	219	168	<1.0	205	<1.0	<1.0	51.7	0.355	0.641	407			0.183	0.057	1.01	1.07	<0.0030
RSEM-R6W-EOP	9/24/2020 14:00	YN2679	M	C069910	8.13	1330	930	3.1	226	218	173	<1.0	211	<1.0	<1.0	47.2	0.359	0.705	379			0.169	0.060	0.97	1.0	0.0035
RSEM-R6W-EOP	9/25/2020 13:30	YN2674	M	C069908	8.18	1310	795	2.6	217	218	171	<1.0	208	<1.0	<1.0	43.5	0.347	0.688	462			0.196	0.064	1.14	1.20	<0.0030
RSEM-R6W-EOP	9/26/2020 13:10	YN7496	M	C070621	8.24	1260	720	2.3	215	212	174	<1.0	212	<1.0	<1.0	45.1	0.310	0.682	349			0.159	0.052	1.03	1.08	<0.0030
RSEM-R6W-EOP	9/27/2020 16:20	YN7530	M	C070629	8.25	1210	732	2.8	209	215	175	<1.0	214	<1.0	<1.0	42.9	0.293	0.644	350			0.075	0.040	0.840	0.880	<0.0030
RSEM-R6W-EOP	9/28/2020 9:40	YN7450	M	C070613	8.21	1180	732	2.7	209	218	176	<1.0	215	<1.0	<1.0	42.9	0.291	0.601	333			0.093	0.046	0.94	0.99	<0.0030
RSEM-R6W-EOP	9/29/2020 16:10	YO1378	M	C071354	8.16	1140	722	3.1	209	213	174	<1.0	213	<1.0	<1.0	43.8	0.301	0.599	334			0.103	0.039	0.910	0.949	<0.0030
RSEM-R6W-EOP	9/30/2020 13:10	YO4161	M	C071825	8.32	1150	789	2.4	226	211	174	1.1	209	1.3	<1.0	43.2	0.295	0.591	332			0.119	0.034	0.831	0.866	<0.0030
RSEM-R6W-EOP	10/1/2020 12:15	YO6612	M	C072228	7.41	1160	692	<1.0	219	217	217	<1.0	265	<1.0	<1.0	43.3	0.304	0.595	323			0.118	0.037	0.857	0.894	<0.0030
RSEM-R6W-EOP	10/2/2020 11:30	YO6595	M	C072223	7.52	1180	728	1.6	219	218	214	<1.0	261	<1.0	<1.0	43.9	0.300	0.600	335			0.128	0.045	0.95	1.0	<0.0030
RSEM-R6W-EOP	10/3/2020 16:10	YP0035	M	C072771	7.31	1180	796	1.6	202	218	218	<1.0	266	<1.0	<1.0	40.0	0.289	0.572	343			0.134	0.039	0.920	0.959	<0.0030
RSEM-R6W-EOP	10/4/2020 16:20	YP0009	M	C072767	7.40	1190	776	2.7	204	217	224	<1.0	274	<1.0	<1.0	41.6	0.290	0.601	351			0.130	0.041	0.93	0.97	0.0033
RSEM-R6W-EOP	10/5/2020 17:10	YP2999	M	C073260	7.38	1200	692	1.9	220	208	233	<1.0	284	<1.0	<1.0	47.3	0.286	0.574	331			0.139	0.036	0.866	0.902	<0.0030
RSEM-R6W-EOP	10/6/2020 15:10	YP5779	M	C073719	7.43	1200	536	4.6	213	206	235	<1.0	287	<1.0	<1.0	47.9	0.289	0.611	326			0.121	0.032	0.851	0.883	<0.0030
RSEM-R6W-EOP	10/7/2020 14:20	YP7388	M	C074014	7.52	1190	772	3.4	202	219	238	<1.0	290	<1.0	<1.0	41.7	0.278	0.607	329			0.135	0.029	0.782	0.811	<0.0030
RSEM-R6W-EOP	10/8/2020 11:30	YP9903	M	C074375	8.25	1160	712	3.0	214	218	191	<1.0	234	<1.0	<1.0	44.2	0.307	0.589	330			0.136	0.031	0.763	0.794	<0.0030
RSEM-R6W-EOP	10/9/2020 11:20	YQ0241	M	C074391	8.25	1160	768	2.7	216	215	187	<1.0	229	<1.0	<1.0	48.6	0.306	0.612	315			0.138	0.020	0.658	0.678	<0.0030
RSEM-R6W-EOP	10/10/2020 12:10	YQ1628	M	C074557	8.05	1130	706	12.0	207	219	184	<1.0	225	<1.0	<1.0	44.0	0.280	0.606	275			0.099	0.0384	0.751	0.789	<0.0030
RSEM-R6W-EOP	10/11/2020 11:40	YQ4408	M	C075136	7.50	1110	608	7.7	208	219	236	<1.0	287	<1.0	<1.0	44.2	0.300	0.524	319			0.162	0.039	0.76	0.80	<0.0030
RSEM-R6W-EOP	10/12/2020 13:50	YQ4367	M	C075125	7.38	1150	724	8.5	222	231	226	<1.0	276	<1.0	<1.0	51.1	0.316	0.740	331			0.161	0.039	0.80	0.84	<0.0030
RSEM-R6W-EOP	10/13/2020 14:00	YQ8016	M	C075829	7.97	1210	796	8.7	213	225	188	<1.0	229	<1.0	<1.0	53.4	0.301	0.748	344			0.129	0.042	0.82	0.86	0.0046
RSEM-R6W-EOP	10/14/2020 15:00	YQ9243	M	C076027	7.14	1230	736	6.1	216	225	231	<1.0	282	<1.0	<1.0	55.1	0.340	0.782	352			0.176	0.045	0.806	0.851	0.0036
RSEM-R6W-EOP	10/14/2020 15:10	YQ9244	D	C076027	7.18	1220	744	7.7	221	227	233	<1.0	285	<1.0	<1.0	54.6	0.339	0.807	350			0.147	0.043	0.804	0.848	<0.0030
RSEM-R6W-EOP	10/15/2020 11:55	YR1303	M	C076291	7.22	1260	824	6.2	224	216	228	<1.0	279	<1.0	<1.0	57.1	0.358	0.833	359			0.130	0.043	0.808	0.851	<0.0030
RSEM-R6W-EOP	10/16/2020 12:10	YR1522	M	C076320	7.21	1300	788	4.7	232	212	240	<1.0	292	<1.0	<1.0	61.0	0.343	0.853	376			0.134	0.061	0.902	0.962	<0.0030
RSEM-R6W-EOP	10/17/2020 10:30	YR5392	M	C076925	7.22	1340	812	3.4	221	220	224	<1.0	273	<1.0	<1.0	62.0	0.345	0.859	398			0.165	0.055	0.931	0.985	0.0250
RSEM-R6W-EOP	10/18/2020 12:55	YR5380	M	C076923	7.24	1390	732	4.5	228	224	222	<1.0	271	<1.0	<1.0	65.7	0.352	0.893	409			0.206	0.068	0.921	0.989	0.0034
RSEM-R6W-EOP	10/18/2020 13:05	YR5381	D	C076923	7.19	1400	804	4.1	230	223	216	<1.0	263	<1.0	<1.0	63.7	0.358	0.911	408			0.203	0.056	0.919	0.974	0.0034
RSEM-R6W-EOP	10/19/2020 10:20	YR5409	M	C076929	7.19	1430	880	4.3	232	222	211	<1.0	257	<1.0	<1.0	69.8	0.365	1.02	392			0.193	0.073	1.00	1.08	0.0031
RSEM-R6W-EOP	10/20/2020 14:50	YR8829	M	C077551	8.08	1460	912	2.4	231	238	171	<1.0	208	<1.0	<1.0	70.8	0.321	0.876	432			0.219	0.069	1.03	1.10	<0.0030
RSEM-R6W-EOP	10/21/2020 16:10	YS1501	M	C077998	7.14	1510	944	1.9	231	243	207	<1.0	253	<1.0	<1.0	65.6	0.362	0.894	462			0.144	0.069	1.04	1.11	<0.0030
RSEM-R6W-EOP	10/22/2020 12:40	YS3855	M	C078323	7.19	1550	968	1.7	238	257	213	<1.0	260	<1.0	<1.0	76.7	0.374	0.930	459			0.224	0.071	1.03	1.10	<0.0030
RSEM-R6W-EOP	10/23/2020 10:30	YS3574	M	C078301	7.08	1580	980	1.3	235	260	220	<1.0	268	<1.0	<1.0	81.3	0.380	0.728	476			0.245	0.071	1.03	1.10	0.0040
RSEM-R6W-EOP	10/24/2020 15:10	YS7916	M	C078871	7.39	1650	1040	<1.0	247	245	208	<1.0	254	<1.0	<1.0	77.0	0.389	0.738	524			0.175	0.072	1.07	1.15	<0.0030
RSEM-R6W-EOP	10/25/2020 13:50	YS7914	M	C078870	6.81	1620	1050	2.9	258	258	191	<1.0	233	<1.0	<1.0	72.3	0.343	0.726	530			0.244	0.072	1.04	1.11	<0.0030
RSEM-R6W-EOP	10/26/2020 14:45	YT0277	M	C079297	7.77	1580	992	1.6	272	268	157	<1.0	191	<1.0	<1.0	67.4	0.338	0.828	520			0.186	0.067	0.973	1.04	<0.0030
RSEM-R6W-EOP	10/27/2020 12:40	YT3321	M	C079639	6.68	1490	948	4.9	270	252	178	<1.0	218	<1.0	<1.0	61.7	0.304	0.905	484			0.103	0.064	0.91	0.98	<0.0030
RSEM-R6W-EOP	10/28/2020 14:20	YT5233	M	C079984	7.71	1420	852	4.7	269	259	148	<1.0	180	<1.0	<1.0	58.8	0.274	0.718	455			0.128	0.056	0.84	0.90	<0.0030
RSEM-R6W-EOP	10/29/2020 14:30	YT7961	M	C080439	7.26	1350	808	4.1	269	266	148	<1.0	181	<1.0	<1.0	62.0	0.252	0.751	438			0.141	0.051	0.809	0.860	<0.0030
RSEM-R6W-EOP	10/30/2020 12:10	YT7955	M	C080436	7.47	1320	676	3.1	253	263	150	<1.0	183	<1.0	<1.0	52.2	0.243	0.726	422			0.116	0.049	0.772	0.821	<0.0030
RSEM-R6W-EOP	10/31/2020 14:40	YU1485	M	C081008	6.74	1330	824	2.8	260	251	169	<1.0	206	<1.0	<1.0	50.9	0.214	0.664	417			0.204	0.045	0.90	0.94	<0.0030
RSEM-R6W-EOP	11/1/2020 13:00	YU1490	M	C081010	7.40	1290	800	4.2	254	247	142	<1.0	174	<1.0	<1.0	56.2	0.215	0.565	413			0.204	0.042	0.791	0.833	<0.0030
RSEM-R6W-EOP	11/15/2020 13:00	YW2812	M	C084417	7.37	1460	932	3.0	217	216	132	<1.0	162	<1.0	<1.0	56.4	0.282	0.759	501			0.144	0.059	0.933	0.992	0.0033
RSEM-R6W-EOP	11/16/2020 10:30	YW2814	M	C084418	7.13	1450	892	2.9	221	218	129	<1.0	158	<1.0	<1.0	58.2	0.275	0.779	489			0.216	0.058	0.935	0.993	0.0031
RSEM-R6W-EOP	11/17/2020 13:00	YW6848	M	C085190	6.98	1480	1000	2.3	212	218	167	<1.0	204	<1.0	<1.0	60.1	0.283	0.677	516			0.071	0.054	0.923	0.977	<0.0030
RSEM-R6W-EOP	11/18/2020 16:10	YW9289	M	C085621	6.95	1450	984	3.2	223	219	163	<1.0	199	<1.0	<1.0	57.5	0.317	0.794	526			0.061	0.058	0.962	1.02	0.0031

Appendix 3-C: 2020 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
					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
RSEM-R6W-EOP	11/19/2020 13:50	YX1120	M	C085951	6.79	1460	960	2.9	220	223	187	<1.0	228	<1.0	<1.0	59.0	0.320	0.950	548			0.075	0.058	0.976	1.03	<0.0030
RSEM-R6W-EOP	11/20/2020 11:40	YX1117	M	C085949	7.50	1580	1020	2.8	219	226	153	<1.0	187	<1.0	<1.0	60.9	0.300	0.987	560			0.171	0.059	0.972	1.03	0.0036
RSEM-R6W-EOP	11/21/2020 13:40	YX3970	M	C086434	7.74	1610	1090	1.0	234	235	161	<1.0	197	<1.0	<1.0	63.7	0.319	1.03	552			0.195	0.058	0.955	1.01	<0.0030
RSEM-R6W-EOP	11/22/2020 14:05	YX3966	M	C086433	7.69	1610	1040	2.8	238	239	163	<1.0	199	<1.0	<1.0	65.2	0.318	1.04	562			0.232	0.057	0.941	0.998	<0.0030
RSEM-R6W-EOP	11/23/2020 13:40	YX5757	M	C086734	7.67	1600	1040	2.7	231	237	168	<1.0	205	<1.0	<1.0	63.3	0.315	1.03	534			0.291	0.061	0.899	0.960	0.0032
RSEM-R6W-EOP	11/24/2020 14:05	YX7834	M	C087146	7.32	1570	1020	1.7	225	241	180	<1.0	220	<1.0	<1.0	70.7	0.294	1.02	509			0.200	0.054	0.865	0.919	0.0037
RSEM-R6W-EOP	11/25/2020 14:10	YY0222	M	C087472	7.07	1540	1010	2.9	224	220	178	<1.0	217	<1.0	<1.0	61.4	0.287	0.787	523			0.220	0.054	0.843	0.897	0.0030
RSEM-R6W-EOP	11/26/2020 12:10	YY2050	M	C087819	7.07	1510	948	2.1	212	231	179	<1.0	219	<1.0	<1.0	68.4	0.279	0.902	485			0.215	0.051	0.831	0.882	<0.0030
RSEM-R6W-EOP	11/27/2020 11:30	YY2096	M	C087822	7.13	1490	872	2.5	211	227	183	<1.0	223	<1.0	<1.0	65.3	0.275	0.887	485			0.520	0.050	0.812	0.862	<0.0030
RSEM-R6W-EOP	11/28/2020 13:10	YY5269	M	C088400	7.03	1420	980	1.9	221	205	179	<1.0	218	<1.0	<1.0	63.3	0.278	0.908	487			0.468	0.048	0.799	0.847	<0.0030
RSEM-R6W-EOP	11/29/2020 12:45	YY5335	M	C088408	7.00	1420	900	2.4	213	203	171	<1.0	209	<1.0	<1.0	60.5	0.278	0.922	481			0.467	0.049	0.805	0.853	<0.0030
RSEM-R6W-EOP	11/30/2020 14:20	YY7388	M	C088703	7.38	1470	944	2.1	202	210	170	<1.0	208	<1.0	<1.0	66.9	0.279	0.931	470			0.457	0.050	0.812	0.862	<0.0030
RSEM-R6W-EOP	12/1/2020 13:55	YY9248	M	C089096	7.35	1480	948	2.4	205	209	167	<1.0	203	<1.0	<1.0	66.5	0.274	0.954	479			0.480	0.039	0.738	0.778	<0.0030
RSEM-R6W-EOP	12/2/2020 13:20	YZ1567	M	C089572	7.05	1470	940	1.9	213	211	158	<1.0	193	<1.0	<1.0	68.5	0.294	0.970	500			0.487	0.038	0.714	0.753	<0.0030
RSEM-R6W-EOP	12/3/2020 12:50	YZ2307	M	C089704	7.02	1530	984	2.4	226	219	163	<1.0	199	<1.0	<1.0	70.2	0.316	1.00	500			0.499	0.049	0.805	0.854	0.0034
RSEM-R6W-EOP	12/4/2020 13:40	YZ4238	M	C089912	6.75	1570	1050	1.6	223	225	161	<1.0	196	<1.0	<1.0	74.6	0.322	1.05	530			0.501	0.049	0.802	0.852	<0.0030
RSEM-R6W-EOP	12/5/2020 13:30	YZ8274	M	C090368	6.92	1610	1030	1.9	239	234	184	<1.0	224	<1.0	<1.0	69.3	0.308	0.731	564			0.485	0.050	0.854	0.904	<0.0030
RSEM-R6W-EOP	12/6/2020 13:10	YZ8306	M	C090376	6.90	1640	1080	2.4	234	233	200	<1.0	244	<1.0	<1.0	68.6	0.320	0.863	571			0.521	0.055	0.847	0.903	<0.0030
RSEM-R6W-EOP	12/7/2020 10:15	YZ8153	M	C090358	6.77	1640	1080	3.2	232	237	183	<1.0	224	<1.0	<1.0	68.5	0.323	0.743	577			0.531	0.056	0.834	0.890	<0.0030
RSEM-R6W-EOP	12/8/2020 15:20	ZA2150	M	C091061	7.41	1680	984	2.7	218	228	202	<1.0	246	<1.0	<1.0	76.3	0.335	0.848	572			0.209	0.058	0.882	0.940	<0.0030
RSEM-R6W-EOP	12/9/2020 15:40	ZA6285	M	C091815	6.99	1650	1060	2.8	229	231	179	<1.0	218	<1.0	<1.0	73.1	0.335	1.15	572			0.532	0.058	0.925	0.983	0.0031
RSEM-R6W-EOP	12/10/2020 14:40	ZA6278	M	C091812	7.15	1680	1080	2.1	238	233	192	<1.0	234	<1.0	<1.0	73.7	0.344	1.07	577			0.531	0.058	0.923	0.981	<0.0030
RSEM-R6W-EOP	12/11/2020 23:50	ZA6281	M	C091813	7.17	1710	1060	2.6	238	233	189	<1.0	231	<1.0	<1.0	77.2	0.344	1.07	598			0.541	0.058	0.943	1.00	<0.0030
RSEM-R6W-EOP	12/13/2020 15:20	ZA8557	M	C092267	7.15	1770	1140	2.7	244	249	210	<1.0	256	<1.0	<1.0	71.7	0.345	1.12	633			0.480	0.054	0.975	1.03	<0.0030
RSEM-R6W-EOP	12/13/2020 17:10	ZA8524	M	C092261	7.08	1730	1150	2.9	239	240	175	<1.0	214	<1.0	<1.0	71.8	0.334	1.11	617			0.503	0.055	0.956	1.01	<0.0030
RSEM-R6W-EOP	12/14/2020 13:10	ZA8429	M	C092250	7.17	1810	1210	1.1	251	257	191	<1.0	233	<1.0	<1.0	68.7	0.373	1.11	658			0.528	0.066	1.1	1.1	<0.0030
RSEM-R6W-EOP	12/15/2020 15:30	ZB1649	M	C092932	7.00	1800	1170	2.4	275	264	186	<1.0	226	<1.0	<1.0	70.1	0.438	1.02	682			0.631	0.077	1.1	1.2	<0.0030
RSEM-R6W-EOP	12/16/2020 14:20	ZB3422	M	C093364	7.25	1870	1220	3.1	261	258	207	<1.0	253	<1.0	<1.0	65.8	0.389	0.995	687			0.637	0.075	1.18	1.25	<0.0030
RSEM-R6W-EOP	12/17/2020 14:50	ZB5913	M	C093625	7.17	1850	1210	2.5	255	263	205	<1.0	250	<1.0	<1.0	67.2	0.385	1.00	688			0.640	0.070	1.13	1.20	<0.0030
RSEM-R6W-EOP	12/18/2020 13:35	ZB5853	M	C093610	7.03	1810	1190	2.3	267	269	169	<1.0	206	<1.0	<1.0	42.3	0.372	0.959	601			0.645	0.072	1.11	1.18	0.0032
RSEM-R6W-EOP	12/19/2020 13:00	ZB8419	M	C094046	6.80	1740	1130	3.5	267	270	182	<1.0	222	<1.0	<1.0	59.0	0.365	0.941	630			0.623	0.065	1.01	1.07	<0.0030
RSEM-R6W-EOP	12/20/2020 13:05	ZB8515	M	C094070	6.87	1650	1070	4.3	249	259	252	<1.0	307	<1.0	<1.0	58.4	0.339	0.886	589			0.596	0.063	0.917	0.980	<0.0030
RSEM-R6W-EOP	12/21/2020 10:50	ZB8329	M	C094023	6.90	1560	972	4.8	235	243	181	<1.0	221	<1.0	<1.0	57.6	0.322	0.901	548			0.586	0.066	0.823	0.889	<0.0030
RSEM-R6W-EOP	12/22/2020 11:40	ZC0504	M	C094296	6.77	1480	968	5.1	216	223	179	<1.0	219	<1.0	<1.0	57.0	0.296	0.865	515			0.584	0.058	0.732	0.790	<0.0030
RSEM-R6W-EOP	12/23/2020 13:10	ZC1951	M	C094642	7.15	1430	812	3.3	214	208	162	<1.0	198	<1.0	<1.0	60.1	0.278	0.861	474			0.543	0.054	0.707	0.761	<0.0030
RSEM-R6W-EOP	12/24/2020 9:50	ZC3452	M	C094856	6.90	1390	848	1.7	203	206	183	<1.0	223	<1.0	<1.0	58.1	0.272	0.828	454			0.097	0.056	0.680	0.736	<0.0030
RSEM-R6W-EOP	12/25/2020 15:10	ZC3694	M	C094909	6.89	1330	956	2.7	195	196	182	<1.0	222	<1.0	<1.0	58.0	0.250	0.870	432			0.508	0.050	0.619	0.670	<0.0030
RSEM-R6W-EOP	12/26/2020 16:10	ZC3700	M	C094911	6.94	1310	864	2.3	186	191	165	<1.0	201	<1.0	<1.0	57.9	0.254	0.849	415			0.555	0.042	0.571	0.612	<0.0030
RSEM-R6W-EOP	12/27/2020 16:30	ZC4644	M	C095191	6.87	1320	800	2.7	188	190	183	<1.0	224	<1.0	<1.0	57.0	0.248	0.861	419			0.483	0.039	0.573	0.612	<0.0030
RSEM-R6W-EOP	12/28/2020 9:40	ZC4619	M	C095179	7.11	1300	828	1.3	195	192	167	<1.0	204	<1.0	<1.0	59.1	0.233	0.884	424			0.482	0.039	0.579	0.618	<0.0030
RSEM-R6W-EOP	12/29/2020 13:45	ZC5603	M	C095537	6.92	1330	924	2.2	195	203	159	<1.0	194	<1.0	<1.0	60.8	0.234	0.759	429			0.479	0.028	0.533	0.561	0.0033
RSEM-R6W-EOP	12/30/2020 14:45	ZC6412	M	C100028	8.15	1350	834	1.6	195	194	137	<1.0	167	<1.0	<1.0	64.4	0.250	0.851	419			0.275	0.0403	0.594	0.634	<0.0030
RSEM-R6W-EOP	12/31/2020 14:35	ZC6409	M	C100027	8.10	1390	858	1.2	201	201	135	<1.0	165	<1.0	<1.0	63.8	0.260	0.864	428			0.438	0.0392	0.609	0.648	<0.0030
RSEM-R6W-SP	4/22/2020 15:05	XR6358	M	C027799	8.15	588	344	18.1	93.3	92.8	125	<1.0	153	<1.0	<1.0	35.8	0.178	0.732	97.3			0.153	0.019	0.278	0.297	0.0030
RSEM-R6W-SP	4/26/2020 13:05	XR8993	M	C028429	8.31	711	382	9.6	107	89.8	154	<1.0	188	<1.0	<1.0	46.6	0.201	0.881	130			0.117	0.021	0.343	0.364	<0.0030
West-Buffer-Creek	4/28/2020 17:35	XS1883	M	C029097	4.97	1970	1530	9.4	641	670	<1.0	<1.0	<1.0	<1.0	<1.0	4.39	0.983	0.261	1070			0.827	<0.010	0.059	0.059	<0.0030

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: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
85-WP	8/22/2020 16:15	YI0135	M	C060262																							
AC_E_HAIRPIN_DITCH	5/18/2020 10:45	XU2634	M	C033728	1.10	1.19	0.196	<0.0005	0.00064	0.0695	<0.0001	<0.001	0.143	0.000158	121	<0.001	0.00223	0.00199	0.506	0.0004	0.0256	33.5	0.0453	<0.0000019	0.0029	0.013	
AC-E-GW-Sump	5/18/2020 15:30	XU2641	M	C033728	1.45	1.16	0.36	0.0036	0.00189	0.0968	<0.0001	<0.001	0.409	0.000052	25.3	0.0017	0.00467	0.00181	0.461	0.00054	0.232	8.32	0.127	0.0000055	0.033	0.0192	
AC-E-GW-Sump	6/8/2020 11:20	XX1070	M	C039370	1.41	1.15	0.784	0.0019	0.00139	0.0521	<0.0002	<0.002	0.338	0.000028	8.05	<0.002	0.00109	0.0013	0.457	<0.0004	0.172	2.50	0.0188	0.0000028	0.0119	0.0058	
AC-E-Sump	5/18/2020 11:05	XU2635	M	C033728	1.41	1.22	0.419	<0.0005	0.00023	0.0318	<0.0001	<0.001	0.302	0.00247	170	<0.001	0.101	0.00509	0.356	<0.0002	0.167	82.9	1.51	<0.0000019	0.004	0.343	
AC-E-Sump	11/2/2020	YU2811	M	C081296	1.56	1.39	4.68	<0.0005	0.00616	0.219	0.00054	<0.001	0.067	0.00159	132	0.0059	0.0237	0.029	11.1	0.00379	0.0324	43.6	0.447	<0.000019	0.0034	0.0833	
AC-W-Sump	5/19/2020 16:35	XU3589	M	C033944	1.38	1.10	0.185	<0.0005	0.00032	0.0304	<0.0001	<0.001	0.223	0.000194	122	<0.001	0.00517	0.00439	0.748	<0.0002	0.0538	58.5	0.0515	<0.0000019	0.0044	0.0357	
AC-W-Sump	11/4/2020 12:45	YU7150	M	C082156	1.36	1.52	0.135	<0.0005	0.00029	0.0289	<0.0001	<0.001	0.077	0.00015	130	<0.001	0.0042	0.00172	0.201	<0.0002	0.0345	52.4	0.0678	<0.0000019	0.0023	0.0215	
AC-W-Sump	11/13/2020 10:50	YV9731	M	C084016	1.08	1.44	0.0817	<0.0005	0.0003	0.0272	<0.0001	<0.001	0.074	0.000085	123	<0.001	0.00177	0.00093	0.127	<0.0002	0.0291	50.2	0.0236	<0.0000019	0.0024	0.0142	
Area_21_Sump	7/16/2020 16:50	YC4667	M	C049952	1.29	0.92	0.0505	<0.0005	0.00028	0.238	<0.0001	<0.001	0.089	0.000034	75.9	<0.001	<0.0002	0.00056	0.082	<0.0002	0.153	16.7	0.0095	<0.0000019	0.0022	0.0014	
Area_30_SP	8/22/2020 22:45	YI0134	M	C060262																							
Area_A_N_Ditch	1/8/2020 11:15	XF3038	M	C001783	3.03	1.79	0.0735	<0.0005	0.00044	0.281	<0.0001	<0.001	<0.05	0.000011	104	<0.001	0.00027	0.00062	0.454	<0.0002	0.0041	18.7	0.103	<0.000002	<0.001	<0.001	
Area_A_N_Ditch	2/6/2020 14:40	XI8762	M	C008772	2.55	2.32	0.0729	<0.0005	0.00053	0.29	<0.0001	<0.001	<0.05	0.000016	101	<0.001	0.00026	0.00077	0.613	<0.0002	0.0037	20.0	0.0732	<0.000002	<0.001	<0.001	
Area_A_N_Ditch	3/11/2020 11:30	XN7889	M	C018851	4.36	4.76	0.825	<0.0005	0.00074	0.145	<0.0001	<0.001	<0.05	0.000051	48.0	0.0015	0.00059	0.0021	1.01	0.00048	0.0035	8.68	0.0784	<0.0000019	0.0031	0.0025	
Area_A_N_Ditch	4/3/2020 12:15	XP9114	M	C023756	3.06	2.84	0.0272	<0.0005	0.00046	0.256	<0.0001	<0.001	<0.05	0.000012	86.7	<0.001	0.00058	0.00083	0.33	<0.0002	0.0034	18.6	0.189	<0.0000019	0.0015	0.0014	
Area_A_N_Ditch	5/7/2020 13:45	XT2579	M	C031444	2.32	2.64	0.0967	<0.0005	0.00068	0.343	<0.0001	<0.001	<0.05	0.00002	109	<0.001	0.00034	0.0007	0.237	<0.0002	0.0045	25.7	0.0448	<0.0000019	0.0012	0.0017	
Area_A_N_Ditch	5/29/2020 12:00	XV5616	M	C036525	3.73	3.77	0.0249	<0.0005	0.00038	0.116	<0.0001	<0.001	<0.05	<0.00001	62.8	<0.001	<0.0002	0.00074	0.028	<0.0002	0.0108	28.8	0.0046	<0.0000019	0.002	0.0015	
Area_A_N_Ditch	6/5/2020 13:55	XW9906	M	C039108	2.82	2.95	0.0668	<0.0005	0.00036	0.34	<0.0001	<0.001	<0.05	0.000012	102	<0.001	<0.0002	0.00067	0.193	<0.0002	0.0043	21.8	0.0271	<0.0000019	<0.001	<0.001	
Area_A_N_Ditch	7/9/2020 14:45	YB4140	M	C047920	3.07	2.66	0.052	<0.0005	0.00024	0.247	<0.0001	<0.001	<0.05	<0.00001	80.9	<0.001	<0.0002	0.0006	0.079	<0.0002	0.0036	15.9	0.0093	<0.0000019	<0.001	<0.001	
Crusher-FeedPitPond2	3/13/2020 13:45	XN9533	M	C019176	6.40	6.00	0.189	<0.0005	0.00085	0.199	<0.0001	<0.001	<0.05	0.000038	124	<0.001	0.00073	0.00137	0.42	0.00024	0.0204	47.3	0.304	<0.0000019	0.0034	0.0036	
DIC_Sump	5/2/2020 10:10	XS7458	M	C030328	0.79	<0.50	0.929	<0.0005	0.00068	0.114	<0.0001	<0.001	<0.05	0.000038	34.0	0.0019	0.00046	0.00146	0.893	0.00044	0.0031	7.45	0.0183	0.0000034	0.0023	0.0021	
DIC_Sump	5/13/2020 14:10	XT8156	M	C032775	1.62	1.24	0.552	<0.0005	0.00046	0.0796	<0.0001	<0.001	<0.05	0.000099	114	0.001	0.00077	0.00406	1.1	0.00053	0.0056	24.8	0.326	<0.0000019	0.0015	0.0025	
DIC_Sump	7/11/2020	YB7198	M	C048486																							
DIC-DIP	8/19/2020 12:45	YH3196	M	C059023	2.59	2.40	0.362	<0.0005	0.00034	0.0522	<0.0001	<0.001	<0.05	0.000018	28.0	<0.001	0.00032	0.00107	0.249	<0.0002	0.0026	6.75	0.0089	<0.0000019	0.0012	0.0018	
DIC-DIP	9/5/2020 10:35	YK1343	M	C064288	2.77	2.70	0.126	0.00061	0.00086	0.0691	<0.0001	<0.001	<0.05	0.000043	38.2	<0.001	0.00023	0.00175	0.176	0.00029	0.003	7.73	0.0268	<0.0000019	0.0019	0.0014	
DIC-DIP	9/10/2020 14:45	YK8217	M	C065709	3.05	3.02	0.772	0.00176	0.00214	0.0664	<0.0001	<0.001	<0.05	0.000068	40.5	0.0013	0.00065	0.00293	1.38	0.00084	0.0039	8.37	0.0326	0.0000047	0.0034	0.0029	
DIC-DIP	9/21/2020 16:50	YM6398	M	C068837	2.50	2.80	0.142	<0.0005	0.00027	0.0419	<0.0001	<0.001	<0.05	0.000033	29.1	<0.001	<0.0002	0.00095	0.27	<0.0002	<0.002	6.44	0.0071	0.0000021	<0.001	0.0012	
DIC-DIP	9/23/2020 16:30	YN0389	M	C069533	2.60	2.44	0.203	<0.0005	0.00036	0.0438	<0.0001	<0.001	<0.05	0.000034	27.6	<0.001	<0.0002	0.00107	0.422	0.0002	<0.002	6.65	0.0107	<0.0000019	<0.001	0.0013	
DIC-DIP	9/27/2020 11:30	YN7523	M	C070629	2.53	2.96	0.128	<0.0005	0.00021	0.0381	<0.0001	<0.001	<0.05	0.000024	28.4	<0.001	<0.0002	0.00088	0.198	<0.0002	<0.002	6.59	0.0059	<0.0000019	<0.001	<0.001	
DIC-DIP	10/2/2020 12:30	YO6601	M	C072223	2.07	2.66	0.186	<0.0005	0.00032	0.047	<0.0001	<0.001	<0.05	0.000037	30.5	<0.001	<0.0002	0.00108	0.333	<0.0002	0.0022	7.54	0.009	<0.0000019	0.0011	0.0013	
DIC-DIP	10/9/2020 11:30	YQ0193	M	C074387	2.65	2.19	0.135	<0.0005	0.00026	0.0388	<0.0001	<0.001	<0.05	0.000028	26.3	<0.001	<0.0002	0.00091	0.243	<0.0002	<0.002	6.36	0.0061	0.0000019	<0.001	0.001	
DIP-Seep	8/12/2020 13:30	YG4639	M	C057419	4.1		0.525	0.0075	0.00315	0.0531	<0.0005	<0.005	0.928	0.000075	278	0.0078	0.0099	0.0046	2.17	<0.001	0.239	142	1.06	<0.000019	0.0158	0.0334	
DOC_S_Sump	1/8/2020 15:15	XF3044	M	C001783	0.95	1.39	0.0299	<0.0005	0.00012	0.0183	<0.0001	<0.001	0.21	0.000042	53.2	<0.001	0.00061	<0.0005	0.024	<0.0002	0.0438	19.1	0.0208	<0.000002	0.0022	0.004	
DOC_S_Sump	2/6/2020 13:30	XI8761	M	C008772	1.10	0.97	0.0247	<0.0005	<0.0001	0.0191	<0.0001	<0.001	0.22	0.000028	47.9	<0.001	0.00042	<0.0005	0.013	<0.0002	0.0379	17.1	0.0216	<0.000002	0.0024	0.0029	
DOC_S_Sump	6/6/2020 12:30	XX0128	M	C039138	22.1	20.0	3.86	0.0055	0.00355	0.177	<0.0002	<0.002	0.3	0.000071	63.3	0.085	0.00217	0.0158	3.01	0.00179	0.0971	3.33	0.0514	<0.000019	0.0557	0.005	
DOC-DOP	8/19/2020 12:15	YH3195	M	C059023	2.53	2.64	0.526	<0.0005	0.00054	0.0523	<0.0001	<0.001	<0.05	0.00004	29.3	0.0011	0.00045	0.00168	0.653	0.00041	0.0032	7.27	0.0239	<0.0000019	0.0012	0.0021	
DOC-DOP	9/5/2020 10:10	YK1342	M	C064288	2.84	2.76	0.173	<0.0005	0.00048	0.0691	<0.0001	<0.001	<0.05	0.000053	29.3	<0.001	0.00072	0.00183	0.314	0.00054	0.0026	6.92	0.0333	<0.0000019	0.0011	0.0019	
DOC-DOP	9/11/2020 9:00	YK8184	M	C065706	3.15	2.72	1.43	<0.0005	0.00231	0.117	0.00011	<0.001	<0.05	0.00011	33.2	0.0028	0.00177	0.0053	3.23	0.00186	0.0034	7.83	0.064	<0.000019	0.0021	0.0049	
DOC-DOP	9/11/2020 9:10	YK8185	D	C065706	3.45	2.93	1.36	<0.0005	0.00217	0.113	<0.0001	<0.001	<0.05	0.000101	32.2	0.0027	0.00164	0.00502	3.04	0.00177	0.0032	7.29	0.0596	<0.000019	0.002	0.0047	
DOC-DOP	9/21/2020 16:20	YM6396	M	C068837	3.13	2.74	0.563	<0.0005	0.00055	0.0552	<0.0001	<0.001	<0.05	0.000048	30.0	0.0011	0.00033	0.00153	0.857	0.00039	<0.002	6.64	0.0182	0.0000029	0.0011	0.0018	
DOC-DOP	9/23/2020 15:55	YN0388	M	C069533	2.89	2.62	1.07	<0.0005	0.00123	0.08	<0.0001	<0.001	<0.05	0.000102	30.5	0.0019	0.00104	0.00327	2.33	0.00112	0.0027	7.42	0.0513	<0.000019	0.0012	0.0035	
DOC-DOP	9/27/2020 12:55	YN7526	M	C070629	2.43	0.93	0.501	<0.0005	0.00055	0.0588	<0.0001	<0.001	<0.05	0.000052	31.1	<0.001	0.0004	0.00155	0.861	0.00041	<0.002	7.01	0.0186	<0.0000019	0.0011	0.0018	
DOC-DOP	10/2/2020 12:10	YO6600	M	C072223	2.70	2.90	0.196	<0.0005	0.00033	0.0473	<0.0001	<0.001	<0.05	0.000036	30.5	<0.001	<0.0002	0.00108	0.362	0.0002	0.0022	7.58	0.0099	<0.0000019	0.0011	0.0013	
DOC-DOP	10/9/2020 11:00	YQ0194	M	C074387	2.06	2.00	0.131	<0.0005	0.00026	0.0367	<0.0001	<0.001	<0.05	0.00003	26.6	<0.001	<0.0002	0.00091	0.234	<0.0002	<0.002	6.29	0.0057	<0.0000019	<0.001	<0.001	
DOP_BT_East	1/8/2020 15:40	XF3045	M	C001783	1.97	1.37	1.23	0.0015	0.00086	0.0465	<0.0002	<0.002	0.514	0.000085	200	0.0025	0.00623	0.0017	1.1	0.00044	0.149	136	0.239	<0.000002	0.0043	0.0279	
DOP-Seep	8/12/2020 13:00	YG4638	M	C057419	9.0	7.8	2.29	0.006	0.00609	0.16	<0.0005	<0.005	1.11	0.000165	89.9	0.0233	0.0101	0.0178	4.75	0.0024	0.318	133	0.362	0.000019	0.0183	0.0313	
East-Buffer-Creek	4/28/2020 17:15	XS1882	M	C029097	2.14	2.43	2.33	<0.0005	<0.0001	0.0302	0.00064	<0.001	0.169	0.000512	172	<0.001	0.0394	0.00237	8.73	0.00022	0.0312	57.8	2.16	<0.0000019	<0.001	0.109	
GC-Debris-US	5/7/2020 15:00	XT2582	M	C031444																							
GC-Debris-US	5/28/2020 17:15	XV7333	M	C036873																							
GC-Debris-US	6/2/2020 14:00	XW3136	M	C037913																							
GC-Debris-US	6/18/2020 12:30	XY6291	M	C042383																							
GC-Debris-US	7/11/2020 18:00	YB7197	M	C048486																							
GC-Debris-US	8/1/2020 13:15	YE6671	M	C054219																							
GC-Debris-US	8/22/2020 14:45	YI0133	M	C060262																							
GC-Debris-US	9/13/2020 16:30	YL1417	M	C066239																							
GC-Debris-US	10/4/2020 13:20	YP0011	M	C072767																							
GC-Debris-US	11/1/2020 14:50	YU1491	M	C081010																							
L3-DC-DS	4/19/2020 17:35	XR2522	M	C026927																							
L3-DC-DS	6/18/2020 17:30	XY6289	M	C042383																							
L3-DC-US	4/19/2020 17:30	XR2521	M	C026927																							
L3-DC-US	6/18/2020 18:00	XY6292	M	C042383																							
LBCD_Trench	4/20/2020 15:20	XR3419	M	C027096	1.85	1.84	0.704	0.00491	0.00593	0.0632	<0.0001	<0.001	0.227	<0.00001	20.9	0.0064	0.00104	0.00141	0.529	0.00028	0.11	19.5	0.0244	0.0000026	0.0435	0.0029	
LBCD-Sump-BT	1/4/2020 13:00	XE9882	M	C000877	0.88	1.05	0.01	<0.0005	0.00048	0.049	<0.0001	<0.001	<0.05	0.000027	130	<0.001	0.00062	<0.0005	0.117	<0.0002	0.0107	29.7	0.144	<0.000002	<0.001	0.0025	
LBCD-Sump-BT	1/7/2020 15:40	XF1935	M	C001464	1.33	0.79	0.0075	<0.0005	0.00035	0.0407	<0.0001	<0.001	<0.05	0.00002	124	<0.001	0.00046	<0.0005	0.103	<0.0002	0.0114	26.0	0.113	<0.000002	<0.001	0.002	
LBCD-Sump-BT	1/14/2020 13:35	XF8103	M	C002891	0.99	0.76	0.0062	<0.0005	0.00031	0.0388	<0.0001	<0.001	<0.05	0.000016	107	<0.001	0.00046	<0.0005	0.05	<0.0002	0.0097	25.2	0.0945	<0.000002	<0.001	0.002	
LBCD-Sump-BT	1/22/2020 14:00	XG7455	M	C004860	0.95	0.95	0.0038	<0.0005	0.00032	0.0373	<0.0001	<0.001	<0.05	0.000012	104	<0.001	0.00042	<0.0005	0.03	<0.0002	0.009	23.1	0.0806	0.0000022	<0.001	0.0019	
LBCD-Sump-BT	1/28/2020 14:40	XH5363	M	C006197	<0.50	0.75	<0.003	<0.0005	0.00027	0.0375	<0.0001	<0.001	<0.05	0.00001	94.3	<0.001	0.00034	<0.0005	0.033	<0.0002	0.0094	21.2	0.0628	<0.000002	<0.001	0.0018	
LBCD-Sump-BT	2/5/2020 14:45	XI6890	M	C008469	1.02	0.82	0.005	<0.0005	0.0003	0.0395	<0.0001	<0.001	<0.05	<0.00001	92.9	<0.001	0.00026	<0.0005	0.07	<0.0002	0.0101	23.2	0.0634	<0.000002	<0.001	0.0015	
LBCD-Sump-BT	2/11/2020 12:30	XJ6275	M	C010122	1.22	1.10	0.231	<0.0005	0.00033	0.0476	<0.0001	<0.001	<0.05	0.000011	90.6	<0.001	0.00038	<0.0005	0.156	<0.0002	0.0106	21.6	0.0552	<0.0000019	<0.001	0.0019	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
LBCD-Sump-BT	2/14/2020 9:50	XJ9481	M	C010793	22.5	21.9	0.0596	0.00106	0.00097	0.0532	<0.0001	<0.001	0.125	<0.00001	153	0.0023	0.00076	0.00072	0.074	<0.0002	0.0536	59.3	0.0879	<0.0000019	0.0039	0.0038	
LBCD-Sump-BT	2/18/2020 14:20	XK4686	M	C011881	1.31	0.77	0.0102	<0.0005	0.00049	0.0627	<0.0001	<0.001	<0.05	0.000012	110	<0.001	0.00051	<0.0005	0.093	<0.0002	0.024	27.0	0.106	<0.0000019	0.0015	0.0026	
LBCD-Sump-BT	2/25/2020 13:40	XL5027	M	C014003	1.21	1.03	0.0376	<0.0005	0.00044	0.0544	<0.0001	<0.001	<0.05	0.00001	103	<0.001	0.00043	<0.0005	0.088	<0.0002	0.0172	25.0	0.0692	<0.0000019	0.0016	0.0025	
LBCD-Sump-BT	3/5/2020 16:20	XN0423	M	C017276	0.96	1.00	0.652	0.00073	0.00086	0.065	<0.0001	<0.001	<0.05	0.000026	87.9	0.0015	0.00064	0.00135	0.619	0.00036	0.0199	22.6	0.065	<0.0000019	0.0028	0.0028	
LBCD-Sump-BT	3/11/2020 14:55	XN7894	M	C018851	1.16	1.08	0.785	0.00068	0.00087	0.0847	<0.0001	<0.001	<0.05	0.000035	87.9	0.0014	0.00082	0.0015	0.846	0.00045	0.0192	21.2	0.0792	<0.0000019	0.0026	0.0034	
LBCD-Sump-BT	3/17/2020 13:45	XO3911	M	C020169	1.35	0.91	0.0249	<0.0005	0.00046	0.0552	<0.0001	<0.001	<0.05	0.000016	97.0	<0.001	0.00062	<0.0005	0.042	<0.0002	0.0217	23.1	0.0836	<0.0000019	0.0017	0.0027	
LBCD-Sump-BT	3/27/2020 13:00	XP2506	M	C022160	1.29	1.29	0.038	<0.0005	0.00035	0.0505	<0.0001	<0.001	<0.05	0.000013	84.0	<0.001	0.00031	<0.0005	0.037	<0.0002	0.0104	20.2	0.0238	<0.0000019	0.0014	0.0023	
LBCD-Sump-BT	3/31/2020 13:15	XP6327	M	C023153	2.15	2.04	0.178	0.00057	0.00047	0.0589	<0.0001	<0.001	<0.05	0.00002	73.8	<0.001	0.00045	0.00141	0.201	<0.0002	0.0144	22.8	0.041	<0.0000019	0.0018	0.0029	
LBCD-Sump-BT	4/10/2020 13:05	XQ5871	M	C025257	2.17	1.69	0.691	0.00229	0.00321	0.11	<0.0001	<0.001	0.114	0.000024	24.1	0.0074	0.00103	0.00308	1.03	0.00082	0.0339	12.7	0.0164	0.000003	0.0132	0.003	
LBCD-Sump-BT	4/15/2020 14:55	XQ9342	M	C026226	2.33	1.47	1.03	0.00212	0.00329	0.143	<0.0001	<0.001	0.081	0.000025	12.1	0.0066	0.00108	0.00335	1.08	0.001	0.0276	7.04	0.0125	0.000005	0.0121	0.0031	
LBCD-Sump-BT	4/29/2020 13:05	XS3521	M	C029452	2.47	1.74	0.267	0.00448	0.00547	0.046	<0.0001	<0.001	0.226	<0.00001	32.9	0.0032	0.00089	0.00101	0.366	0.00021	0.0827	18.7	0.0265	0.000002	0.0268	0.0039	
LBCD-Sump-BT	5/7/2020 14:00	XT2578	M	C031444	2.3	1.84	5.81	0.00459	0.00552	0.235	0.00021	<0.001	0.313	0.00003	55.3	0.0116	0.00271	0.00429	2.5	0.00163	0.114	23.1	0.0589	<0.0000019	0.0232	0.009	
LBCD-Sump-BT	5/19/2020 14:35	XU3586	M	C033944	2.46	2.12	0.704	0.00636	0.0098	0.0983	<0.0001	<0.001	0.434	0.000011	41.7	0.0034	0.00107	0.00307	0.696	0.00079	0.171	24.8	0.0185	<0.0000019	0.0428	0.0044	
LBCD-Sump-BT	5/30/2020 17:30	XV8358	M	C037043	2.31	2.05	0.76	0.00179	0.00324	0.0962	<0.0001	<0.001	0.323	0.000014	40.0	0.0014	0.00038	0.00188	0.304	0.00029	0.042	15.2	0.0155	0.0000041	0.0256	0.002	
LBCD-Sump-BT	6/13/2020 15:30	XX9602	M	C040986	1.77	1.74	0.938	0.00202	0.00314	0.0702	<0.0001	<0.001	0.275	0.000023	90.2	0.0015	0.00088	0.00146	0.633	0.00041	0.0865	29.1	0.0356	<0.0000019	0.0122	0.004	
LBCD-Sump-BT	6/20/2020 13:00	XY9025	M	C042884	1.83	1.16	0.139	0.00245	0.0015	0.0529	<0.0001	<0.001	0.248	0.000177	90.6	<0.001	0.00451	0.00816	0.149	<0.0002	0.0707	33.5	0.0687	<0.0000019	0.0087	0.0199	
LBCD-Sump-BT	6/27/2020 19:45	XZ9073	M	C044897	1.96	1.65	0.174	0.00084	0.00063	0.0664	<0.0001	<0.001	0.114	0.000061	129	<0.001	0.00086	0.00127	0.278	<0.0002	0.028	31.8	0.0284	<0.0000019	0.0024	0.0063	
LBCD-Sump-BT	6/30/2020 15:45	YA2742	M	C045692	<2.5	3.51	5.38	<0.0025	0.005	0.546	<0.0005	<0.005	0.585	0.00388	123	0.0084	0.103	0.0173	8.72	0.0047	0.261	81.8	1.33	<0.00019	0.011	0.273	
LBCD-Sump-BT	8/1/2020 13:00	YE6669	M	C054219	1.97	1.79	0.269	0.00115	0.00069	0.043	<0.0001	<0.001	0.27	0.000333	118	<0.001	0.00913	0.00296	0.087	<0.0002	0.0851	54.1	0.117	<0.0000019	0.0042	0.0262	
LBCD-Sump-BT	11/4/2020 11:30	YU7149	M	C082156	2.25	2.45	0.13	0.00244	0.0026	0.0437	<0.0001	<0.001	0.152	0.000016	45.2	0.0067	0.0006	0.00391	0.221	0.00031	0.0574	22.1	0.0067	<0.0000019	0.0167	0.0036	
LBCD-Sump-BT	11/10/2020 10:40	YV4534	M	C083245	1.96	1.93	0.911	0.00146	0.0023	0.0948	<0.0001	<0.001	0.145	0.000084	148	0.005	0.00287	0.00575	1.86	0.00105	0.0642	43.9	0.0874	0.0000041	0.0093	0.0121	
LBCD-Sump-BT	11/25/2020 11:30	YY0220	M	C087472	1.81	1.97	0.0127	<0.0005	0.00023	0.0343	<0.0001	<0.001	0.067	0.000044	167	<0.001	0.00055	0.00061	0.022	<0.0002	0.0252	43.9	0.0227	<0.0000019	0.0015	0.0076	
LBEX_B1	2/23/2020 14:00	XL1346	M	C013192	2.87	2.79	0.757	0.00095	0.00171	0.0759	<0.0001	<0.001	0.062	0.000041	89.3	0.0015	0.00073	0.00235	1.1	0.00061	0.0097	38.9	0.0698	<0.0000019	0.0125	0.0031	
LBEX_B1	4/8/2020 15:40	XQ4593	M	C024938	3.71	2.59	3.62	0.00172	0.00874	0.607	0.00096	<0.001	<0.05	0.00475	248	0.004	0.00958	0.114	9.73	0.0393	0.01	45.9	1.07	0.00065	0.0085	0.0347	
LBEX_B1	5/14/2020 14:10	XU0102	M	C033161	4.58	3.05	0.255	<0.0005	0.00057	0.0312	<0.0001	<0.001	0.162	<0.00001	102	<0.001	0.00046	0.00179	0.373	0.00024	0.0448	81.3	0.0378	<0.0000019	0.004	0.0038	
LBEX_B1	6/8/2020 16:45	XX1071	M	C039370	7.13	2.46	160	<0.005	0.0907	2.9	0.0139	<0.01	<0.5	0.0291	731	0.297	0.33	0.803	433	0.232	0.305	198	11.2	0.00115	0.011	1.04	
LBEX_B1	7/1/2020 16:10	YA2711	M	C045689	<5.0	2.81	13.1	<0.001	0.0139	0.547	0.0008	<0.002	<0.1	0.00104	130	0.0244	0.0129	0.043	32.6	0.018	0.0248	41.2	0.777	<0.00019	0.0087	0.0445	
LBEX_B1	10/22/2020 14:15	YS3858	M	C078323	3.31	3.63	0.271	<0.0005	0.00055	0.0394	<0.0001	<0.001	0.191	0.000049	140	<0.001	0.00043	0.00219	0.616	0.0004	0.0462	83.8	0.0333	<0.0000019	0.0023	0.0034	
LBEX_Bench_0	5/19/2020 16:30	XU3832	M	C034012	2.26	1.38	0.0298	0.00058	0.0005	0.0212	<0.0001	<0.001	0.473	0.000152	252	0.007	0.00276	0.00078	0.26	<0.0002	0.14	115	0.332	<0.0000019	0.0163	0.0259	
LBGC-OUT	3/2/2020 20:20	XM6323	M	C016408																							
LBGC-OUT	3/3/2020 13:00	XM6550	M	C016468																							
LBGC-OUT	3/4/2020 17:30	XM7999	M	C016826																							
LBGC-OUT	3/5/2020 16:40	XN0422	M	C017276																							
LBGC-OUT	3/26/2020 18:00	XP2435	M	C022151																							
LBGC-OUT	3/27/2020 0:45	XP2507	M	C022160																							
LBGC-OUT	4/19/2020 17:00	XR2520	M	C026927																							
LBGC-OUT	5/4/2020 15:20	XS8358	M	C030506																							
LBGC-OUT	5/5/2020 13:45	XT0144	M	C030949																							
LBGC-OUT	5/6/2020 17:00	XT1607	M	C031246																							
LBGC-OUT	5/7/2020 14:30	XT2581	M	C031444																							
LBGC-OUT	5/8/2020 12:30	XT2573	M	C031442																							
LBGC-OUT	5/9/2020 15:00	XT4492	M	C031859																							
LBGC-OUT	5/10/2020 16:10	XT4531	M	C031867																							
LBGC-OUT	5/11/2020 13:30	XT5202	M	C032074																							
LBGC-OUT	5/18/2020 14:15	XU2595	M	C033718																							
LBGC-OUT	5/28/2020 16:45	XV7332	M	C036873																							
LBGC-OUT	6/2/2020 13:50	XW3135	M	C037913																							
LBGC-OUT	6/18/2020 12:10	XY6290	M	C042383																							
LBGC-OUT	7/11/2020 17:45	YB7196	M	C048486																							
LBGC-OUT	8/1/2020 13:05	YE6670	M	C054219																							
LBGC-OUT	8/22/2020 14:30	YI0132	M	C060262																							
LBGC-OUT	9/13/2020 16:20	YL1416	M	C066239																							
LBGC-OUT	10/4/2020 13:30	YP0010	M	C072767																							
LBGC-OUT	11/1/2020 15:10	YU1492	M	C081010																							
LBL3C-1.65	3/26/2020 18:30	XP2436	M	C022151																							
Mustard-Creek	8/10/2020 13:35	YG0107	M	C056587	7.75	7.16	0.143	<0.0005	0.00073	0.0671	<0.0001	<0.001	0.076	0.00005	79.1	<0.001	0.00483	<0.0005	2.63	<0.0002	0.0201	31.0	0.564	<0.0000019	0.0011	0.0173	
PR_DIC	8/13/2020 19:50	YG7226	M	C057822	2.46	2.91	0.186	<0.0005	0.00037	0.045	<0.0001	<0.001	<0.05	0.000044	29.4	<0.001	<0.0002	0.00116	0.39	0.00023	<0.002	6.36	0.0106	<0.0000019	<0.001	0.0012	
PR_DIC	8/14/2020 9:50	YG7191	M	C057817	1.93	2.39	0.195	<0.0005	0.00036	0.0437	<0.0001	<0.001	<0.05	0.000036	28.5	<0.001	<0.0002	0.00113	0.395	0.00023	<0.002	6.29	0.0114	<0.0000019	<0.001	0.0013	
PR_DIC	8/15/2020 10:15	YH0056	M	C058356	2.69	2.65	0.209	<0.0005	0.00035	0.0411	<0.0001	<0.001	<0.05	0.000033	27.6	<0.001	0.0002	0.00134	0.46	0.00022	<0.002	6.09	0.0103	<0.0000019	<0.001	0.0014	
PR_DIC	8/28/2020 15:40	YI9495	M	C062013	3.25	3.19	0.202	<0.0005	0.00035	0.0425	<0.0001	<0.001	<0.05	0.000035	28.5	<0.001	<0.0002	0.00125	0.391	0.00021	<0.002	6.46	0.0092	<0.0000019	<0.001	0.0014	
PR_DIC	8/29/2020 12:50	YJ1741	M	C062465	3.19	3.00	0.184	<0.0005	0.00032	0.0395	<0.0001	<0.001	<0.05	0.000032	26.8	<0.001	<0.0002	0.00123	0.371	<0.0002	<0.002	6.39	0.0083	<0.0000019	<0.001	0.0013	
PR_DIC_DS	9/21/2020 18:15	YM6400	M	C068837	2.73	2.77	0.292	<0.0005	0.00036	0.0466	<0.0001	<0.001	<0.05	0.000046	29.2	<0.001	0.00021	0.0012	0.486	0.00026	<0.002	6.59	0.0112	<0.0000019	<0.001	0.0014	
PR_DIC_DS	9/27/2020 12:05	YN7524	M	C070629	2.48	1.12	0.227	<0.0005	0.00029	0.0436	<0.0001	<0.001	<0.05	0.000033	28.9	<0.001	<0.0002	0.00103	0.382	<0.0002	<0.002	6.68	0.0093	<0.0000019	0.001	0.0012	
PR_DIC_DS	10/2/2020 9:40	YO6598	M	C072223	2.87	2.91	0.151	<0.0005	0.00027	0.0469	<0.0001	<0.001	<0.05	0.000031	30.2	<0.001	<0.0002	0.001	0.274	<0.0002	0.0021	7.67	0.008	<0.0000019	0.0011	0.0012	
PR_DIC_US	9/21/2020 17:45	YM6399	M	C068837	2.72	2.85	1.22	<0.0005	0.00097	0.0759	<0.0001	<0.001	<0.05	0.00011	30.4	0.002	0.00075	0.00365	1.99	0.00097	0.0025	6.82	0.0365	<0.000019	0.0011	0.0032	
PR_DIC_US	9/27/2020 11:10	YN7522	M	C070629	2.46	1.33	0.177	<0.0005	0.00022	0.0402	<0.0001	<0.001	<0.05	0.00003	29.4	<0.001	<0.0002	0.00086	0.249	<0.0002	<0.002	6.65	0.0069	<0.0000019	0.001	0.001	
PR_DIC_US	10/2/2020 9:50	YO6599	M	C072223	2.77	2.83	0.156	<0.0005	0.00029	0.0449	<0.0001	<0.001	<0.05	0.000033	29.6	<0.001	<0.0002	0.00121	0.283	<0.0002	0.0021	7.53	0.0084	<0.0000019	0.0011	0.0012	
PR_DOC	8/14/2020 16:45	YG8152	M	C057967	2.89	2.54	0.605	<0.0005	0.0008	0.0678	<0.0001	<0.001	<0.05	0.0001	29.5	0.0012	0.00059	0.00224	1.38	0.00071	<0.002	6.46	0.0302	<0.0000019	<0.001	0.0025	
PR_DOC	8/15/2020 10:55	YH0057	M	C058356	2.86	2.71	0.515	<0.0005	0.00071	0.0662	<0.0001	<0.001	<0.05	0.000098	29.3	<0.001	0.0006	0.00221	1.37	0.00069	<0.002	6.55	0.0297	<0.0000019	<0.001	0.0025	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
PR_DOC	8/16/2020 12:15	YH0174	M	C058389	3.3	2.33	0.298	<0.0005	0.00048	0.0515	<0.0001	<0.001	<0.05	0.00005	28.8	<0.001	0.0003	0.00146	0.682	0.00036	<0.002	6.39	0.0171	<0.0000019	<0.001	0.0016	
PR_DOC	8/31/2020 16:10	YJ3637	M	C062857	4.03	2.64	0.297	<0.0005	0.00038	0.0451	<0.0001	<0.001	<0.05	0.00004	28.2	<0.001	<0.0002	0.00118	0.417	0.00022	<0.002	6.64	0.0101	<0.0000019	<0.001	0.0013	
PR_DOC	9/1/2020 14:30	YJ6692	M	C063433	2.50	2.72	0.0785	<0.0005	0.00025	0.0401	<0.0001	<0.001	<0.05	0.000024	25.8	<0.001	<0.0002	0.00091	0.15	<0.0002	<0.002	6.32	0.0064	<0.0000019	<0.001	<0.001	
PR_DOC	9/5/2020 9:40	YK1341	M	C064288	2.86	2.69	0.0981	<0.0005	0.00027	0.0464	<0.0001	<0.001	<0.05	0.000035	28.7	<0.001	<0.0002	0.00092	0.19	<0.0002	<0.002	6.69	0.0116	<0.0000019	<0.001	0.0011	
PR_DOC	9/7/2020 9:10	YK2583	M	C064592	2.71	2.65	0.085	<0.0005	0.00022	0.046	<0.0001	<0.001	<0.05	0.000034	29.3	<0.001	<0.0002	0.00088	0.184	<0.0002	<0.002	6.74	0.009	<0.0000019	0.001	0.001	
PR_DOC_DS	9/21/2020 16:05	YM6395	M	C068837	2.62	2.69	0.429	<0.0005	0.00051	0.0518	<0.0001	<0.001	<0.05	0.000053	30.3	<0.001	0.00029	0.00152	0.692	0.00034	0.002	6.71	0.0159	0.0000026	0.0011	0.0016	
PR_DOC_DS	9/27/2020 13:15	YN7527	M	C070629	2.61	1.02	0.51	<0.0005	0.00053	0.0589	<0.0001	<0.001	<0.05	0.000049	29.8	<0.001	0.0004	0.00155	0.857	0.00042	<0.002	6.77	0.0184	0.0000022	0.0011	0.0019	
PR_DOC_DS	10/2/2020 9:20	YO6596	M	C072223	2.96	2.96	0.189	<0.0005	0.00032	0.0465	<0.0001	<0.001	<0.05	0.000039	29.8	<0.001	<0.0002	0.00103	0.357	<0.0002	0.0021	7.47	0.01	<0.0000019	0.0011	0.0013	
PR_DOC_US	9/21/2020 16:50	YM6397	M	C068837	2.24	2.57	0.565	<0.0005	0.00069	0.0665	<0.0001	<0.001	<0.05	0.000078	31.5	0.0011	0.00036	0.0018	1.26	0.00051	<0.002	7.04	0.0309	<0.000019	0.0011	0.002	
PR_DOC_US	9/27/2020 12:30	YN7525	M	C070629	2.40	1.31	0.373	<0.0005	0.00037	0.052	<0.0001	<0.001	<0.05	0.00004	29.9	<0.001	0.00025	0.00123	0.569	0.00027	<0.002	6.90	0.0132	0.0000023	0.001	0.0014	
PR_DOC_US	10/2/2020 9:30	YO6597	M	C072223	2.59	2.89	0.222	<0.0005	0.00036	0.0527	<0.0001	<0.001	<0.05	0.000037	30.9	<0.001	0.00021	0.0012	0.414	0.00024	0.0022	7.86	0.0116	<0.000019	0.0011	0.0014	
QAQC_Curing_Tanks	1/10/2020 11:10	XF5146	M	C002216	5.91	5.72	0.087	0.0315	0.0188	0.0283	<0.0002	<0.002	2.14	<0.00002	3.68	0.0105	<0.0004	0.0827	0.183	<0.0004	0.179	3.84	0.003	<0.000002	0.137	<0.002	
QAQC_Curing_Tanks	2/17/2020 14:00	XK3292	M	C011572	4.76	5.22	0.107	0.0292	0.0164	0.029	<0.0005	<0.005	2.48	<0.00005	5.93	0.0063	<0.001	0.128	0.521	<0.001	0.194	4.98	0.0056	<0.0000019	0.147	<0.005	
QAQC_Curing_Tanks	3/28/2020 12:30	XP3715	M	C022531	2.31	1.98	0.165	0.00644	0.00373	0.0268	<0.0001	<0.001	0.694	<0.00001	6.79	0.0089	0.00024	0.0718	0.664	0.00053	0.0633	5.50	0.0072	<0.0000019	0.0294	<0.001	
QAQC_Curing_Tanks	5/10/2020 15:20	XT4530	M	C031867	3.47	3.46	0.133	0.00989	0.0062	0.0324	<0.0001	<0.001	1.08	0.000012	7.48	0.0038	0.00023	0.108	0.438	0.00087	0.106	6.25	0.0069	<0.0000019	0.0418	<0.001	
QAQC_Sink	1/10/2020 11:00	XF5145	M	C002216	0.88	0.92	0.0068	<0.0005	0.00012	0.0905	<0.0001	<0.001	<0.05	<0.00001	56.2	<0.001	0.00035	1.01	<0.01	0.00027	0.0051	11.4	<0.001	<0.000002	0.0011	<0.001	
QAQC_Sink	2/17/2020 13:40	XK3291	M	C011572	0.57	0.51	0.0051	<0.0005	0.00012	0.0935	<0.0001	<0.001	<0.05	<0.00001	58.9	<0.001	0.00032	0.584	0.016	0.00046	0.0048	12.2	0.0019	<0.0000019	0.0011	<0.001	
QAQC_Sink	3/28/2020 12:20	XP3714	M	C022531	1.65	0.98	0.0035	<0.0005	<0.0001	0.0868	<0.0001	<0.001	<0.05	<0.00001	54.4	<0.001	<0.0002	0.216	0.01	<0.0002	0.0043	11.7	<0.001	<0.0000019	<0.001	<0.001	
QAQC_Sink	5/10/2020 15:10	XT4529	M	C031867	0.93	0.87	0.0087	<0.0005	<0.0001	0.0957	<0.0001	<0.001	<0.05	<0.00001	62.4	0.0011	<0.0002	0.193	0.019	0.00032	0.0032	14.9	<0.001	<0.0000019	<0.001	<0.001	
RBAC-SUMP	5/11/2020 10:30	XT5199	M	C032074	1.25	1.30	2.28	<0.0005	0.00146	0.087	0.00026	<0.001	0.337	0.00186	181	0.0026	0.082	0.00902	3.4	0.00143	0.227	79.4	1.63	0.0000028	0.0046	0.302	
RBAC-SUMP	11/24/2020 14:30	YX7836	M	C087146	3.89	1.35	0.0864	0.00067	0.00078	0.133	<0.0001	<0.001	0.156	0.000023	53.6	<0.001	0.00137	0.0008	0.103	<0.0002	0.189	15.5	0.0357	<0.0000019	0.0045	0.0103	
RB-Core-Trench-Sump	6/13/2020 13:15	XX9597	M	C040986	5.28	4.44	13.7	0.0056	0.0265	0.893	0.00077	<0.002	0.5	0.000505	31.8	0.0426	0.0148	0.0479	21.7	0.0157	0.0946	6.74	0.364	<0.00019	0.049	0.0378	
RB-Core-Trench-Sump	6/20/2020 15:10	XY9031	M	C042884	9.4	<2.5	11.9	0.0058	0.0223	0.929	0.00067	<0.002	0.665	0.000421	34.7	0.0191	0.0113	0.0348	19.6	0.0132	0.11	5.72	0.26	<0.0000019	0.0256	0.0283	
RB-R5B-ACDC	1/8/2020 12:15	XF3039	M	C001783	1.16	0.68	0.0234	<0.0005	0.00018	0.0672	<0.0001	<0.001	<0.05	0.000015	124	<0.001	<0.0002	<0.0005	0.058	<0.0002	0.018	40.4	0.0046	<0.000002	0.0015	<0.001	
RB-R5B-ACDC	2/5/2020 12:00	XI6884	M	C008469	1.36	1.19	0.0345	<0.0005	0.0002	0.0724	<0.0001	<0.001	<0.05	<0.00001	112	<0.001	<0.0002	<0.0005	0.059	<0.0002	0.0156	38.9	0.0043	<0.000002	0.0018	<0.001	
RB-R5B-ACDC	3/9/2020 13:15	XN3893	M	C018020	1.07	0.91	0.271	<0.0005	0.00027	0.0735	<0.0001	<0.001	<0.05	0.000029	104	<0.001	0.0006	0.00066	0.362	0.00022	0.0161	36.0	0.016	<0.0000019	0.0017	0.0025	
RB-R5B-ACDC	4/2/2020 11:40	XP7674	M	C023465	1.28	0.91	0.0274	<0.0005	0.0002	0.0823	<0.0001	<0.001	<0.05	<0.00001	109	<0.001	<0.0002	<0.0005	0.065	<0.0002	0.0133	49.4	0.0027	<0.0000019	0.0015	<0.001	
RB-R5B-ACDC	5/9/2020 12:00	XT4487	M	C031859	1.33	1.21	0.0126	<0.0005	<0.0001	0.0726	<0.0001	<0.001	0.091	0.000042	110	<0.001	<0.0002	<0.0005	0.025	<0.0002	0.0205	40.8	0.005	<0.0000019	0.0014	0.0032	
RB-R5B-ACDC	6/5/2020 14:40	XW9907	M	C039108	1.10	1.24	0.0111	<0.0005	0.00013	0.0627	<0.0001	<0.001	0.056	<0.00001	108	<0.001	<0.0002	<0.0005	0.02	<0.0002	0.0214	38.4	0.0015	<0.0000019	0.0013	0.0014	
RB-R5B-ACDC	7/2/2020 15:40	YA4187	M	C045984	<10	153	8.38	<0.001	0.00958	1.01	0.00048	<0.002	0.101	0.000681	107	0.0128	0.0129	0.022	17.8	0.011	0.0305	28.9	0.323	<0.00019	0.0037	0.0455	
RB-R5B-ACDC	7/10/2020 11:00	YB4120	M	C047917	1.19	1.6	0.0698	<0.0005	0.00022	0.0976	<0.0001	<0.001	0.058	0.000027	106	<0.001	<0.0002	<0.0005	0.109	<0.0002	0.0152	29.2	0.0069	<0.0000019	0.0018	0.0024	
RB-R5B-ACDC	7/15/2020 10:50	YC2135	M	C049614	1.09	1.51	0.103	<0.0005	0.00033	0.111	<0.0001	<0.001	0.062	0.000041	107	<0.001	0.00055	0.00098	0.416	<0.0002	0.0152	29.2	0.011	<0.0000019	0.0018	0.0036	
RB-R5B-ACDC	7/21/2020 14:55	YD0799	M	C051251	<10	2.27	16.8	<0.001	0.016	0.899	0.00096	<0.002	<0.1	0.0014	145	0.0301	0.0171	0.0424	47.8	0.0192	0.0331	34.9	0.983	<0.00019	0.0025	0.0558	
RB-R5B-ACDC	9/2/2020 14:45	YJ7832	M	C063666	2.65	2.23	0.0215	<0.0005	0.00018	0.0793	<0.0001	<0.001	0.089	0.000017	92.3	<0.001	<0.0002	<0.0005	0.033	<0.0002	0.0172	27.1	0.0039	<0.0000019	0.0021	0.0013	
RCC-NE-Sump-BT	1/4/2020 15:15	XE9886	M	C000877	2.02	1.93	0.932	0.00222	0.00317	0.131	<0.0001	<0.001	0.338	0.000029	67.8	0.0014	0.00058	0.00266	0.701	0.00056	0.0478	19.2	0.0318	<0.000002	0.0321	0.0025	
RCC-NE-Sump-BT	1/7/2020 14:15	XF1933	M	C001464	4.93	4.69	1.09	0.00176	0.00245	0.133	<0.0001	<0.001	0.208	0.00003	33.9	0.0099	0.00068	0.00353	0.729	0.0007	0.0329	9.15	0.0318	0.0000021	0.0244	0.002	
RCC-NE-Sump-BT	1/14/2020 12:20	XF8101	M	C002891	1.32	0.57	0.53	0.00132	0.00189	0.148	<0.0001	<0.001	0.245	0.000019	46.1	<0.001	0.00023	0.0012	0.209	0.00023	0.0315	16.8	0.0161	<0.000002	0.0149	0.0011	
RCC-NE-Sump-BT	1/24/2020 10:30	XG9571	M	C005174	2.56	2.71	0.556	0.00192	0.00198	0.114	<0.0001	<0.001	0.235	0.000012	43.1	0.0011	<0.0002	0.00107	0.127	<0.0002	0.0353	15.9	0.0116	0.0000027	0.0174	0.001	
RCC-NE-Sump-BT	1/28/2020 13:30	XH5361	M	C006197	1.14	1.87	0.496	0.00297	0.00234	0.119	<0.0001	<0.001	0.286	0.000015	53.1	0.0012	0.00032	0.00142	0.177	0.00022	0.0377	16.5	0.0156	<0.000002	0.0169	0.0013	
RCC-NE-Sump-BT	2/5/2020 13:35	XI6888	M	C008469	2.90	2.65	0.736	0.00176	0.00251	0.0946	<0.0001	<0.001	0.286	0.000013	46.0	0.0015	0.00032	0.00161	0.317	0.00025	0.0448	17.0	0.0129	<0.000002	0.0205	0.0013	
RCC-NE-Sump-BT	2/11/2020 14:00	XJ6274	M	C010122	3.44	2.32	3.78	0.00177	0.00428	0.288	0.00016	<0.001	0.279	0.000138	48.4	0.0071	0.00235	0.00877	4.63	0.00303	0.0442	16.4	0.0979	<0.0000019	0.0184	0.0064	
RCC-NE-Sump-BT	2/18/2020 13:15	XK4685	M	C011881	6.74	6.47	1.61	0.00201	0.00316	0.166	<0.0001	<0.001	0.268	0.000041	40.3	0.0084	0.00104	0.00736	1.46	0.00103	0.0386	11.7	0.0404	0.0000032	0.0248	0.0024	
RCC-NE-Sump-BT	2/25/2020 12:15	XL5025	M	C014003	2.00	1.79	0.635	0.00146	0.00245	0.127	<0.0001	<0.001	0.284	0.000015	57.7	0.0012	0.00036	0.00163	0.356	0.00026	0.0421	16.2	0.0174	<0.0000019	0.0186	0.0016	
RCC-NE-Sump-BT	3/4/2020 14:30	XM8006	M	C016829	6.41	5.42	1.81	0.00243	0.00372	0.149	<0.0001	<0.001	0.261	0.000041	41.0	0.0092	0.00087	0.0053	1.23	0.00085	0.0369	10.6	0.0294	<0.0000019	0.0309	0.0027	
RCC-NE-Sump-BT	3/10/2020 11:50	XN6092	M	C018396	11.0	8.57	1.59	0.00175	0.00266	0.158	<0.0001	<0.001	0.236	0.000033	53.3	0.006	0.0006	0.00331	0.793	0.00057	0.0349	12.1	0.0233	<0.0000019	0.0207	0.0022	
RCC-NE-Sump-BT	3/17/2020 12:35	XO3909	M	C020169	3.10	2.72	0.941	0.00169	0.003	0.108	<0.0001	<0.001	0.284	0.000016	39.8	0.0029	0.00034	0.00251	0.416	0.00034	0.0385	13.6	0.0163	<0.0000019	0.0295	0.0016	
RCC-NE-Sump-BT	3/27/2020 0:20	XP2505	M	C022160	1.67	0.68	1.17	0.00065	0.00174	0.255	<0.0001	<0.001	0.104	0.000057	62.3	0.0019	0.00088	0.00254	1.67	0.00103	0.0133	13.9	0.0511	<0.0000019	0.002	0.0028	
RCC-NE-Sump-BT	3/31/2020 12:30	XP6326	M	C023153	1.09	1.02	0.0741	<0.0005	0.00039	0.244	<0.0001	<0.001	0.105	0.000019	69.2	<0.001	0.00021	0.0009	0.194	<0.0002	0.0136	16.7	0.0284	<0.0000019	0.0017	0.0015	
RCC-NE-Sump-BT	4/7/2020 12:30	XQ3416	M	C024753	0.95	0.61	0.0611	<0.0005	0.00031	0.23	<0.0001	<0.001	0.116	<0.00001	65.0	<0.001	<0.0002	<0.0005	0.138	<0.0002	0.0136	15.6	0.0218	<0.0000019	0.0017	<0.001	
RCC-NE-Sump-BT	4/15/2020 13:40	XQ9340	M	C026226	2.43	2.15	6.8	0.00167	0.00804	0.498	0.00036	<0.001	0.204	0.000308	61.8	0.0141	0.00665	0.0193	13.2	0.00734	0.0373	15.5	0.254	0.000033	0.0177	0.0172	
RCC-NE-Sump-BT	4/24/2020 11:55	XR7270	M	C028014	1.58	1.94	1.24	0.00139	0.00302	0.136	<0.0001	<0.001	0.239	0.000025	50.4	0.0029	0.00128	0.00379	1.03	0.00083	0.0411	15.0	0.0421	0.0000051	0.0177	0.0045	
RCC-NE-Sump-BT	4/28/2020 13:15	XS2089	M	C029151	1.57	1.64	0.654	0.00147	0.00251	0.0961	<0.0001	<0.001	0.279	0.000011	39.2	0.0026	0.00056	0.00224	0.28	0.0003	0.0426	13.2	0.0203	0.0000049	0.0205	0.0024	
RCC-NE-Sump-BT	5/6/2020 16:50	XT1605	M	C031246	1.63	1.61	1.66	0.00209	0.00369	0.155	<0.0001	<0.001	0.368	0.000028	47.5	0.0043	0.00094	0.00373	0.932	0.00077	0.0608	17.7	0.0239	0.000004	0.0274	0.0042	
RCC-NE-Sump-BT	5/13/2020 12:40	XT8152	M	C032775	2.18	1.72	0.773	0.00158	0.00291	0.101	<0.0001	<0.001	0.296	0.000028	39.4	0.0013	0.00034	0.0017	0.338	0.00029	0.0464	15.1	0.0146	0.0000025	0.0227	0.0019	
RCC-NE-Sump-BT	5/19/2020 13:15	XU3583	M	C033944	2.49	2.36	0.781	0.00262	0.00371	0.101	<0.0001	<0.001	0.347	<0.00001	39.7	0.0034	0.0005	0.00243	0.261	0.00026	0.0479	15.4	0.0193	<0.0000019	0.0339	0.0027	
RCC-NE-Sump-BT	5/30/2020 14:30	XV8355	M	C037043	1.70	1.88	0.201	0.0016	0.00258	0.062	<0.0002	<0.002	0.306	<0.00002	77.2	<0.002	0.0006	0.001	0.237	<0.0004	0.0868	28.4	0.026	<0.0000019	0.0117	0.0035	
RCC-NE-Sump-BT	6/10/2020 13:50	XX4756	M	C040036	3.09	5.02	3.65	0.00731	0.00539	0.165	0.00011	<0.001	0.443	0.000063	28.7	0.0079	0.00155	0.00608	2.41	0.00155	0.057	11.1	0.0475	<0.000019	0.0389	0.0055	
RCC-NE-Sump-BT	6/20/2020 14:45	XY9029	M	C042884	1.23	0.69	0.0866	0.00058	0.00059	0.148	<0.0001	<0.001	0.281	0.000026	79.3	<0.001	0.00055	0.00074	0.157	<0.0002	0.0346	20.4	0.0633	<0.0000019	0.0032	0.0046	
RCC-NE-Sump-BT	6/25/2020 16:00	XZ5985	M	C044346	3.99	3.50	1.01	0.00057	0.00132	0.153	<0.0001	<0.001	0.078	0.00008	42.3	0.0022	0.00077	0.00391	1.59	0.00088	0.0101	10.4	0.0345	<0.000019	0.0027	0.0033	
RCC-NE-Sump-BT	6/30/2020 13:10	YA2737	M	C045692	<2.5	1.38	0.979	0.00094	0.0017	0.198	<0.0001	<0.001	0.226	0.000068	62.2	0.0021	0.00121	0.00395	2.08	0.00112	0.0253	14.3	0.0932	0.000055	0.0038	0.0045	
RCC-NE-Sump-BT	7/9/2020 15:10	YB4141	M	C047920	1.22	0.57	0.0956	<0.0005	0.00052	0.154	<0.0001	<0.001	0.245	0.000043	79.7	<0.001	0.00045	0.00071	0.191	<0.0002	0.0364	22.1	0.0619	<0.0000019	0.0028	0.0067	
RCC-NE-Sump-BT	7/14/2020 13:00	YC1071	M	C049344	3.78	3.24	5.49	0.00276	0.00628	0.33	0.00025	<0.001	0.299	0.000237	60.7	0.0117	0.0044	0.0169	8.29	0.00508	0.0562	13.5	0.174	<0.00019	0.0136	0.0128	
RCC-NE-Sump-BT	7/23/2020 14:50	YD4257	M	C051864	1.06	0.95	0.0675	0.00061	0.00061	0.112	<0.0001	<0.001	0.316	0.000027	72.9	<0.001	0.00037	0.0008	0.385	<0.0002	0.0397	17.7	0.0782	<0.0000019	0.0028	0.0037	
RCC-NE-Sump-BT	8/1/2020 12:00	YE6668	M	C054219	1.06	1.16	0.106	0.00065	0.00063	0.106	<0.0001	<0.001	0.334	0.000015	65.0	<0.001	<0.0002	0.00102	0.315	<0.0002	0.0392	17.6	0.0246	<0.0000019	0.0031	0.0024	
RCC-NE-Sump-BT	8/13/2020 12:25	YG7259	M	C057823	1.04	1.03	0.0709	0.0006	0.00065	0.106	<0.0001	<0.001	0.349	0.000012	62.9	<0.001	<0.0002	0.00095	0.275	<0.0002	0.0386	16.4	0.0244	<0.0000019	0.0037	0.0022	
RCC-NE-Sump-BT	8/22/2020 12:00	YI0131	M	C060262	7.4	5.62	7.86	0.0034	0.00862	0.462	0.00041	<0.002	0.326	0.000443	69.9	0.0232	0.0077	0.0298	16	0.00913	0.0507	11.8	0.314	0.0002	0.0196	0.0205	
RCC-Zula-Ditch	4/7/2020 12:20	XQ3415	M	C024753	2.23	1.88	1.24	0.00158	0.00374	0.101	<0.0001	<0.001	0.258	<0.00001	42.1	0.0033	0.00175	0.00245	1.29	0.00073	0.045	16.1	0.0354	0.0000067	0.0246	0.0044	
RCC-Zula-Ditch	4/23/2020 14:30	XR7183	M	C027994	2.97	2.45	1.91	0.00167	0.00336	0.148	<0.0001	<0.001	0.271	0.000046	49.8	0.0043	0.00217	0.00591	1.88	0.00134	0.0464	14.8	0.0692	<0.000019	0.0221	0.0069	
RCC-Zula-Ditch	4/28/2020 12:55	XS2088	M	C029151	2.20	1.86	1.06	0.00203	0.00351	0.0847	<0.0001	<0.001	0.328	0.00002	42.0	0.0039	0.00069	0.00347	0.678	0.00053	0.0535	14.0	0.0203	0.0000048	0.0271	0.003	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RCC-Zula-Ditch	5/6/2020 16:10	XT1604	M	C031246	2.13	2.00	2.21	0.00255	0.00431	0.171	<0.0001	<0.001	0.442	0.000036	56.4	0.0064	0.00257	0.00985	1.68	0.00154	0.0643	28.5	0.0405	0.0000091	0.0343	0.0073	
RCC-Zula-Ditch	5/13/2020 12:25	XT8151	M	C032775	2.35	1.93	0.942	0.00215	0.00307	0.0654	<0.0001	<0.001	0.345	<0.00001	37.6	0.0015	0.00047	0.00218	0.291	0.00032	0.0579	15.1	0.0074	<0.0000019	0.0303	0.0022	
RCC-Zula-Ditch	5/19/2020 12:55	XU3582	M	C033944	2.88	2.65	1.12	0.0032	0.00445	0.0709	<0.0001	<0.001	0.397	0.000019	41.1	0.0026	0.00054	0.00303	0.351	0.00031	0.0575	17.3	0.0105	<0.0000019	0.036	0.0029	
RSEM-L5E-EOP	4/13/2020 10:30	XQ5693	M	C025217	2.23	2.09	0.625	0.00051	0.00091	0.0602	<0.0001	<0.001	<0.05	0.000075	74.3	0.0019	0.00112	0.00263	1.21	0.00058	0.008	26.2	0.173	0.0000053	0.0065	0.0049	
RSEM-L5E-EOP	4/14/2020 10:45	XQ8324	M	C025913	2.75	2.39	0.491	<0.0005	0.00088	0.056	<0.0001	<0.001	<0.05	0.000069	61.6	0.0017	0.00105	0.00316	0.961	0.00061	0.0067	23.7	0.175	0.000003	0.0055	0.0046	
RSEM-L5E-EOP	4/14/2020 10:55	XQ8325	D	C025913	2.63	2.28	0.456	<0.0005	0.00071	0.0551	<0.0001	<0.001	<0.05	0.00007	61.5	0.0026	0.00101	0.00304	0.891	0.00062	0.0067	24.3	0.183	0.0000038	0.0052	0.0046	
RSEM-L5E-EOP	4/15/2020 18:00	XQ9343	M	C026226	2.32	2.42	0.753	<0.0005	0.00099	0.0774	<0.0001	<0.001	<0.05	0.000123	55.1	0.0016	0.00142	0.00543	1.82	0.00109	0.0064	20.3	0.168	0.0000087	0.0045	0.0057	
RSEM-L5E-EOP	4/16/2020 14:35	XR0410	M	C026516	2.45	2.60	1.82	<0.0005	0.00159	0.0847	<0.0001	<0.001	<0.05	0.0001	48.0	0.0076	0.00197	0.00599	2.99	0.00135	0.0064	20.3	0.19	<0.000019	0.0042	0.009	
RSEM-L5E-EOP	4/17/2020 12:50	XR0399	M	C026514	2.66	3.10	2.23	<0.0005	0.00151	0.103	<0.0001	<0.001	<0.05	0.000122	55.8	0.0185	0.00199	0.00633	3.81	0.00172	0.0075	19.5	0.18	0.000021	0.0047	0.0128	
RSEM-L5E-EOP	4/18/2020 13:10	XR2303	M	C026869	<2.5	2.61	0.928	<0.0005	0.00076	0.0646	<0.0001	<0.001	<0.05	0.000063	45.2	0.0048	0.001	0.00368	1.39	0.00069	0.0054	16.0	0.123	0.00004	0.0039	0.0059	
RSEM-L5E-EOP	4/19/2020 16:30	XR2518	M	C026927	<2.5	2.19	1.16	<0.0005	0.00102	0.0792	<0.0001	<0.001	<0.05	0.000071	50.3	0.0109	0.00112	0.00408	1.81	0.00088	0.0062	17.6	0.138	<0.000019	0.0041	0.0084	
RSEM-L5E-EOP	4/20/2020 14:20	XR3422	M	C027099	2.61	2.21	0.478	<0.0005	0.00045	0.0687	<0.0001	<0.001	<0.05	0.000054	50.1	0.0016	0.00085	0.00333	1.05	0.00048	0.006	17.3	0.126	0.000022	0.0045	0.0042	
RSEM-L5E-EOP	4/20/2020 14:30	XR3423	D	C027099	2.48	2.26	0.388	<0.0005	0.00049	0.068	<0.0001	<0.001	<0.05	0.000063	55.4	0.0012	0.00065	0.003	0.687	0.00049	0.0055	18.0	0.126	0.0000042	0.0047	0.0039	
RSEM-L5E-EOP	4/21/2020 13:10	XR4954	M	C027465	2.37	2.30	0.364	<0.0005	0.00061	0.0847	<0.0001	<0.001	<0.05	0.000072	53.0	0.0022	0.00098	0.00331	0.843	0.00053	0.0047	20.1	0.139	0.0000031	0.0046	0.0046	
RSEM-L5E-EOP	4/22/2020 13:50	XR6357	M	C027799	2.90	2.38	0.423	<0.0005	0.00065	0.0927	<0.0001	<0.001	<0.05	0.000073	63.5	0.003	0.00095	0.00398	0.858	0.00062	0.0061	23.6	0.161	0.0000023	0.0056	0.0067	
RSEM-L5E-EOP	4/23/2020 11:40	XR7179	M	C027994	2.67	2.60	0.26	<0.0005	0.00048	0.068	<0.0001	<0.001	<0.05	0.000059	57.4	<0.001	0.00051	0.00234	0.435	0.00021	0.0061	17.6	0.106	0.0000026	0.0042	0.0034	
RSEM-L5E-EOP	4/23/2020 11:50	XR7180	D	C027994	2.46	2.46	0.28	<0.0005	0.00036	0.072	<0.0001	<0.001	<0.05	0.000042	55.4	<0.001	0.00066	0.0027	0.413	0.00026	0.0066	21.0	0.124	0.0000023	0.0046	0.0039	
RSEM-L5E-EOP	4/24/2020 13:30	XR7271	M	C028014	1.82	2.79	0.132	<0.0005	0.00042	0.0706	<0.0001	<0.001	<0.05	0.000044	50.2	<0.001	0.00061	0.00232	0.244	<0.0002	0.006	19.3	0.125	<0.0000019	0.0048	0.0035	
RSEM-L5E-EOP	4/25/2020 13:30	XR8897	M	C028412	2.84	2.55	0.061	<0.0005	0.00041	0.07	<0.0001	<0.001	<0.05	0.000034	53.7	<0.001	0.00054	0.00215	0.12	<0.0002	0.007	18.7	0.118	<0.0000019	0.0048	0.0033	
RSEM-L5E-EOP	4/26/2020 14:15	XR8995	M	C028429	2.78	2.37	0.0605	0.00054	0.00031	0.0659	<0.0001	<0.001	<0.05	0.000032	51.7	<0.001	0.00043	0.00194	0.08	<0.0002	0.007	17.8	0.105	<0.0000019	0.0047	0.003	
RSEM-L5E-EOP	4/27/2020 9:55	XS0056	M	C028666	2.88	2.35	0.0163	<0.0005	0.00048	0.0737	<0.0001	<0.001	<0.05	<0.00001	61.2	<0.001	<0.0002	<0.0005	0.023	<0.0002	<0.002	23.2	0.0214	<0.0000019	0.0012	<0.001	
RSEM-L5E-EOP	4/27/2020 10:05	XS0057	D	C028666	2.89	2.41	0.0131	<0.0005	0.00064	0.0705	<0.0001	<0.001	<0.05	<0.00001	58.6	<0.001	<0.0002	<0.0005	0.02	<0.0002	<0.002	21.6	0.021	<0.0000019	<0.001	<0.001	
RSEM-L5E-EOP	4/28/2020 15:05	XS2091	M	C029151	2.39	3.26	0.151	<0.0005	0.00029	0.0683	<0.0001	<0.001	<0.05	0.000032	57.5	<0.001	0.00062	0.0024	0.265	<0.0002	0.0076	22.3	0.0976	<0.0000019	0.0048	0.0039	
RSEM-L5E-EOP	4/29/2020 13:50	XS3522	M	C029452	2.77	2.47	0.127	<0.0005	0.00057	0.0649	<0.0001	<0.001	<0.05	0.000057	56.3	<0.001	0.00043	0.00251	0.213	<0.0002	0.0076	22.5	0.0784	<0.0000019	0.0046	0.0033	
RSEM-L5E-EOP	4/30/2020 14:10	XS4885	M	C029734	2.74	2.23	0.0554	0.0006	0.00043	0.0596	<0.0001	<0.001	<0.05	0.00003	60.5	<0.001	0.00028	0.00193	0.09	<0.0002	0.009	24.7	0.0565	<0.0000019	0.0051	0.0031	
RSEM-L5E-EOP	5/1/2020 13:20	XS5999	M	C029956	2.37	2.93	0.0791	0.00055	0.00044	0.0731	<0.0001	<0.001	0.05	0.000052	63.7	0.0045	0.00062	0.00278	0.134	<0.0002	0.0099	25.7	0.0841	<0.0000019	0.0059	0.0061	
RSEM-L5E-EOP	5/3/2020 9:15	XS7393	M	C030307	2.84	2.47	0.126	<0.0005	0.00061	0.063	<0.0001	<0.001	<0.05	0.000024	55.6	<0.001	0.00051	0.00228	0.218	<0.0002	0.0094	25.5	0.0621	<0.0000019	0.0049	0.0031	
RSEM-L5E-EOP	5/4/2020 15:30	XS8357	M	C030506	2.88	2.03	0.283	<0.0005	0.00068	0.0747	<0.0001	<0.001	0.054	0.000034	68.1	0.0012	0.00043	0.00219	0.349	<0.0002	0.01	28.1	0.0545	<0.0000019	0.0056	0.0035	
RSEM-L5E-EOP	5/5/2020 13:15	XT0142	M	C030949	2.56	2.47	0.119	<0.0005	0.00053	0.071	<0.0001	<0.001	0.051	0.000043	70.4	0.0013	0.00041	0.00194	0.163	<0.0002	0.0097	27.8	0.0459	<0.0000019	0.0051	0.0062	
RSEM-L5E-EOP	5/6/2020 17:15	XT1606	M	C031246	1.94	1.89	0.0816	<0.0005	0.00045	0.0846	<0.0001	<0.001	<0.05	0.000045	77.9	0.0018	0.00037	0.0018	0.135	<0.0002	0.0112	30.1	0.0503	<0.0000019	0.0054	0.0037	
RSEM-L5E-EOP	5/7/2020 14:35	XT2580	M	C031444	1.48	1.73	0.105	<0.0005	0.00031	0.0982	<0.0001	<0.001	0.083	0.000047	120	<0.001	0.00028	0.00148	0.198	<0.0002	0.0117	38.0	0.0678	<0.0000019	0.0046	0.0024	
RSEM-L5E-EOP	5/8/2020 12:20	XT2571	M	C031442	1.46	1.78	0.0798	<0.0005	0.00032	0.0884	<0.0001	<0.001	<0.05	0.000047	92.1	<0.001	0.00027	0.00145	0.128	<0.0002	0.0098	31.2	0.0529	<0.0000019	0.0043	0.0026	
RSEM-L5E-EOP	5/9/2020 14:10	XT4491	M	C031859	1.73	1.69	0.138	<0.0005	0.00037	0.0714	<0.0001	<0.001	<0.05	0.000051	90.6	0.0012	0.0003	0.00117	0.253	0.00021	0.0061	28.9	0.0451	<0.0000019	0.003	0.0023	
RSEM-L5E-EOP	5/10/2020 12:00	XT4526	M	C031867	1.65	1.59	0.106	<0.0005	0.00045	0.0795	<0.0001	<0.001	<0.05	0.00005	111	<0.001	0.00024	0.00091	0.189	<0.0002	0.0072	32.9	0.0709	<0.0000019	0.0031	0.0022	
RSEM-L5E-EOP	5/11/2020 11:45	XT5201	M	C032074	1.50	1.12	0.207	<0.0005	0.0002	0.079	<0.0001	<0.001	<0.05	0.000067	125	<0.001	0.00043	0.00096	0.319	<0.0002	0.0084	30.9	0.114	<0.0000019	0.0027	0.0016	
RSEM-L5E-EOP	5/12/2020 14:45	XT7073	M	C032509	1.40	1.60	0.3	<0.0005	0.00051	0.0887	<0.0001	<0.001	<0.05	0.000067	145	<0.001	0.00053	0.00137	0.529	0.00031	0.0088	34.7	0.163	<0.0000019	0.0025	0.0023	
RSEM-L5E-EOP	5/13/2020 14:45	XT8157	M	C032775	1.60	1.54	0.718	<0.0005	0.00079	0.0913	<0.0001	<0.001	<0.05	0.000103	145	0.0014	0.00093	0.00191	1.25	0.00066	0.0069	31.7	0.26	0.0000021	0.0018	0.0034	
RSEM-L5E-EOP	5/14/2020 13:40	XU0101	M	C033161	1.44	1.12	0.438	<0.0005	0.00066	0.0792	<0.0001	<0.001	<0.05	0.000085	141	<0.001	0.00078	0.00105	0.579	0.00029	0.0075	30.5	0.297	<0.0000019	0.0022	0.0024	
RSEM-L5E-EOP	5/15/2020 10:15	XU0133	M	C033173	1.30	1.22	0.204	<0.0005	0.00033	0.0714	<0.0001	<0.001	<0.05	0.00007	143	<0.001	0.00069	0.00069	0.296	<0.0002	0.0073	30.0	0.363	<0.0000019	0.0019	0.002	
RSEM-L5E-EOP	5/16/2020 14:40	XU2653	M	C033733	1.54	1.53	0.162	<0.0005	0.00032	0.0764	<0.0001	<0.001	<0.05	0.000069	159	<0.001	0.00071	0.00076	0.318	<0.0002	0.0039	32.7	0.453	<0.0000019	0.0018	0.0021	
RSEM-L5E-EOP	5/17/2020 13:10	XU2519	M	C033704	1.59	1.53	0.0524	<0.0005	0.00025	0.0706	<0.0001	<0.001	<0.05	0.000063	156	<0.001	0.00065	<0.0005	0.076	<0.0002	0.0039	33.1	0.44	<0.0000019	0.002	0.0019	
RSEM-L5E-EOP	5/18/2020 14:35	XU2640	M	C033728	1.40	1.08	0.0475	<0.0005	0.00014	0.071	<0.0001	<0.001	<0.05	0.000039	158	<0.001	0.00061	0.00054	0.051	<0.0002	0.0038	33.7	0.415	<0.0000019	0.0019	0.0019	
RSEM-L5E-EOP	5/19/2020 15:30	XU3588	M	C033944	1.40	1.31	0.221	<0.0005	0.00033	0.0818	<0.0001	<0.001	<0.05	0.00004	164	0.0017	0.00088	0.00112	0.462	0.0004	0.0038	34.3	0.361	<0.0000019	0.0022	0.0033	
RSEM-L5E-EOP	5/20/2020 14:05	XU5561	M	C034306	1.34	1.18	0.0549	<0.0005	0.00038	0.0573	<0.0001	<0.001	<0.05	0.000043	125	<0.001	0.00055	<0.0005	0.078	<0.0002	0.0055	28.2	0.307	<0.0000019	0.0017	0.0017	
RSEM-L5E-EOP	5/21/2020 16:00	XU7001	M	C034623	1.46	1.50	0.132	<0.0005	0.00047	0.0602	<0.0001	<0.001	<0.05	0.000026	112	<0.001	0.0005	0.00057	0.205	<0.0002	0.0058	27.4	0.264	<0.0000019	0.0017	0.0015	
RSEM-L5E-EOP	5/22/2020 17:05	XU8404	M	C034984	1.76	1.42	0.06	<0.0005	0.00029	0.0561	<0.0001	<0.001	<0.05	0.000019	118	<0.001	0.00049	<0.0005	0.079	<0.0002	0.0052	26.4	0.219	<0.0000019	0.0018	0.0014	
RSEM-L5E-EOP	5/23/2020 15:40	XU8589	M	C034993	1.97	1.44	0.11	<0.0005	0.00034	0.0589	<0.0001	<0.001	<0.05	0.000014	128	<0.001	0.00039	0.00082	0.138	<0.0002	0.0058	27.6	0.201	<0.0000019	0.0019	0.0016	
RSEM-L5E-EOP	5/24/2020 13:45	XU8649	M	C035010	1.47	1.39	0.088	<0.0005	0.00034	0.0583	<0.0001	<0.001	<0.05	0.000011	125	<0.001	0.00036	0.00067	0.116	<0.0002	0.0058	28.0	0.173	<0.0000019	0.0019	0.0016	
RSEM-L5E-EOP	6/9/2020 12:30	XX3622	M	C039793	5.50	5.08	1.96	<0.0005	0.00168	0.0829	<0.0001	<0.001	<0.05	0.000187	122	0.0028	0.0031	0.00428	2.87	0.00152	0.0186	39.9	0.318	<0.000019	0.0042	0.0136	
RSEM-L5E-EOP	6/10/2020 11:55	XX4750	M	C040036	4.95	6.39	0.419	<0.0005	0.00069	0.0569	<0.0001	<0.001	<0.05	0.000125	128	<0.001	0.00238	0.00215	0.487	0.00031	0.0177	41.5	0.299	0.000003	0.0042	0.0113	
RSEM-L5E-EOP	6/10/2020 12:05	XX4751	D	C040036	5.10	6.22	0.485	<0.0005	0.00072	0.0578	<0.0001	<0.001	<0.05	0.000131	133	<0.001	0.00238	0.00218	0.52	0.00033	0.0182	42.2	0.31	<0.0000019	0.0044	0.0116	
RSEM-L5E-EOP	6/11/2020 14:35	XX7043	M	C040416	5.80	5.63	0.158	<0.0005	0.00054	0.0515	<0.0001	<0.001	<0.05	0.000094	121	<0.001	0.00191	0.00179	0.153	<0.0002	0.0171	39.9	0.256	<0.0000019	0.0041	0.0099	
RSEM-L5E-EOP	6/12/2020 14:55	XX9584	M	C040980	5.53	5.66	0.0581	<0.0005	0.0005	0.0485	<0.0001	<0.001	<0.05	0.000083	120	<0.001	0.00162	0.00153	0.056	<0.0002	0.017	38.5	0.232	<0.0000019	0.0041	0.0092	
RSEM-L5E-EOP	6/13/2020 16:15	XX9603	M	C040986	5.27	5.11	0.118	<0.0005	0.00054	0.0476	<0.0001	<0.001	<0.05	0.000066	120	<0.001	0.00145	0.00188	0.213	<0.0002	0.0177	40.7	0.192	<0.0000019	0.0041	0.0091	
RSEM-L5E-EOP	6/14/2020 13:00	XX9643	M	C040993	5.93	5.42	0.621	<0.0005	0.00098	0.0643	<0.0001	<0.001	<0.05	0.000085	121	0.0012	0.00167	0.00282	1.17	0.00057	0.0177	38.9	0.199	0.0000053	0.0043	0.0101	
RSEM-L5E-EOP	6/14/2020 13:10	XX9644	D	C040993	5.61	5.90	0.456	<0.0005	0.00099	0.0638	<0.0001	<0.001	<0.05	0.000089	118	<0.001	0.00167	0.00281	1.12	0.00055	0.0173	39.1	0.197	0.0000049	0.0043	0.0098	
RSEM-L5E-EOP	6/15/2020 19:45	XY1608	M	C041415	3.36	3.18	0.393	<0.0005	0.00066	0.0759	<0.0001	<0.001	0.052	0.00128	176	<0.001	0.0219	0.00254	1.11	0.00034	0.0289	48.5	1.04	<0.0000019	0.0052	0.0742	
RSEM-L5E-EOP	6/16/2020 12:40	XY1512	M	C041388	3.06	2.59	0.183	<0.0005	0.00052	0.0837	<0.0001	<0.001	0.058	0.00151	217	<0.001	0.0312	0.00223	0.385	<0.0002	0.0401	57.9	1.47	<0.0000019	0.0052	0.103	
RSEM-L5E-EOP	6/17/2020 17:30	XY6281	M	C042380	3.38	3.11	0.122	<0.001	0.00047	0.0803	<0.0002	<0.002	<0.1	0.00114	198	<0.002	0.0232	0.0019	0.328	<0.0004	0.0352	55.5	1.15	<0.0000019	0.0054	0.0783	
RSEM-L5E-EOP	6/18/2020 16:50	XY6288	M	C042383	3.26	3.37	0.0778	<0.001	0.00045	0.0755	<0.0002	<0.002	<0.1	0.00103	218	<0.002	0.0214	0.0018	0.185	<0.0004	0.0391	61.8	1.13	<0.0000019	0.0069	0.0738	
RSEM-L5E-EOP	6/19/2020 10:45	XY6267	M	C042375	5.74	5.28	0.619	0.0007	0.0009	0.086	<0.0001	<0.001	0.093	0.000499	182	0.0022	0.0114	0.00272	0.947	0.00051	0.0336	52.2	0.735	0.0000038	0.0083	0.0422	
RSEM-L5E-EOP	6/20/2020 12:45	XY9024	M	C042884	9.36	8.10	1.19	0.0006	0.00124	0.0857	<0.0001	<0.001	0.074	0.000228	124	0.0024	0.00438	0.00413	1.57	0.0009	0.022	35.5	0.346	<0.0000019	0.0066	0.0205	
RSEM-L5E-EOP	6/21/2020 11:00	XY9117	M	C042904	11.2	10.2	1.32	0.00051	0.00155	0.0949	<0.0001	<0.001	0.059	0.000175	98.3	0.0024	0.00254	0.00665	2.19	0.00125	0.0156	27.8	0.219	0.000026	0.0052	0.0136	
RSEM-L5E-EOP	6/22/2020 17:10	XZ0409	M	C043197	10.9	10.4	0.633	0.00053	0.00103	0.0827	<0.0001	<0.001	0.055	0.000124	99.2	0.0012	0.0018	0.00424	1.19	0.00071	0.0152	29.1	0.184	0.0000047	0.0053	0.0117	
RSEM-L5E-EOP	6/23/2020 17:30	XZ2253	M	C043604	9.7	9.76	0.454	<0.0005	0.00086	0.0728	<0.0001	<0.001	0.054	0.000104	97.8	<0.001	0.00151	0.00361	0.839	0.0005	0.0155	29.1	0.161	<0.000019	0.0051	0.0105	
RSEM-L5E-EOP	6/24/2020 11:40	XZ5346	M	C044267	9.34	10.0	0.334	0.00051	0.00085	0.07	<0.0001	<0.001	0.068	0.000091	108	<0.001	0.00155	0.00374	0.717	0.00045	0.0177	31.6	0.157	0.0000048	0.0053	0.0113	
RSEM-L5E-EOP	6/24/2020 11:50	XZ5347	D	C044267	9.57	9.78	0.372	<0.0005	0.00085	0.0679	<0.0001	<0.001	0.066	0.000087	107	<0.001	0.00158	0.00372	0.695	0.00048	0.0171	31.6	0.16	0.0000033	0.0051	0.0116	
RSEM-L5E-EOP	6/25/2020 18:10	XZ5988	M	C044346	8.61	8.18	0.331	0.00058	0.00088	0.0688	<0.0001	<0.001	0.08	0.000118	129	<0.001	0.00256	0.00331	0.711	0.00042	0.0211	37.6	0.251	<0.0000019	0.0064	0.0162	
RSEM-L5E-EOP	7/2/2020 16:30	YA4192	M	C045985	6.18	5.91	0.224	<0.0005	0.00065	0.0641	<0.0001	<0.001	0.072	0.000204	137	<0.001	0.00405	0.0027	0.372	0.00021	0.0245	38.9	0.428	<0.0000019	0.0056	0.0191	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-L5E-EOP	7/3/2020 11:00	YA5151	M	C046179	3.46	3.22	1.61	0.0006	0.00187	0.107	<0.0001	<0.001	0.055	0.000172	124	0.003	0.0025	0.00599	3.64	0.00192	0.0147	34.2	0.238	<0.0000019	0.007	0.0103	
RSEM-L5E-EOP	7/3/2020 11:10	YA5152	D	C046179	3.17	3.24	1.64	0.00056	0.00179	0.105	<0.0001	<0.001	0.055	0.000184	120	0.0032	0.00243	0.00594	3.66	0.00187	0.014	33.1	0.231	<0.0000019	0.0068	0.0101	
RSEM-L5E-EOP	7/4/2020 16:05	YA6737	M	C046470	2.8	4.6	2.03	0.00055	0.00129	0.0997	<0.0001	<0.001	0.055	0.000282	125	0.003	0.00564	0.00369	2.14	0.00119	0.0167	40.7	0.441	<0.000019	0.0064	0.0205	
RSEM-L5E-EOP	7/5/2020 13:10	YA6922	M	C046500	3.57	2.51	1.91	0.00082	0.00115	0.112	<0.0001	<0.001	0.101	0.000657	165	0.0032	0.0135	0.00323	1.9	0.00096	0.0393	54.7	0.827	<0.000019	0.0072	0.0457	
RSEM-L5E-EOP	7/6/2020 13:25	YA8351	M	C046846	4.41	4.61	0.523	0.00069	0.00083	0.0821	<0.0001	<0.001	0.109	0.000361	147	0.0012	0.00822	0.00238	0.784	0.00047	0.0409	47.4	0.648	<0.000019	0.0081	0.0295	
RSEM-L5E-EOP	7/7/2020 16:20	YB0053	M	C047206	3.6	4.17	0.242	0.00079	0.00067	0.0722	<0.0001	<0.001	0.117	0.000391	159	<0.001	0.00905	0.00212	0.453	0.00029	0.0424	51.1	0.659	<0.0000019	0.0088	0.0328	
RSEM-L5E-EOP	7/22/2020 12:30	YD2615	M	C051641	2.19	1.91	0.159	<0.001	0.00045	0.029	<0.0002	<0.002	0.12	<0.00002	231	<0.002	<0.0004	0.0106	0.09	<0.0004	0.0521	27.1	0.0082	<0.0000019	0.0098	<0.002	
RSEM-L5E-EOP	7/22/2020 12:40	YD2616	D	C051641	2.01	1.87	0.182	<0.001	0.00046	0.0309	<0.0002	<0.002	0.126	<0.00002	251	<0.002	<0.0004	<0.001	0.093	<0.0004	0.0559	29.0	0.0089	<0.0000019	0.0105	<0.002	
RSEM-L5E-EOP	7/23/2020 11:05	YD4252	M	C051864	2.39	2.00	0.0698	<0.001	0.00039	0.0283	<0.0002	<0.002	0.121	<0.00002	264	<0.002	<0.0004	<0.001	0.04	<0.0004	0.056	16.6	0.0021	<0.0000019	0.0098	<0.002	
RSEM-L5E-EOP	7/23/2020 11:15	YD4253	D	C051864	1.88	1.91	0.0712	<0.001	0.00033	0.0264	<0.0002	<0.002	0.117	<0.00002	249	<0.002	<0.0004	<0.001	0.038	<0.0004	0.0532	15.7	<0.002	<0.0000019	0.009	<0.002	
RSEM-L5E-EOP	7/24/2020 11:35	YD5907	M	C052038	1.79	1.36	0.0838	0.00068	0.00045	0.023	<0.0001	<0.001	0.129	<0.00001	270	<0.001	<0.0002	<0.0005	0.102	<0.0002	0.0588	16.1	0.0041	<0.0000019	0.0102	<0.001	
RSEM-L5E-EOP	7/25/2020 10:30	YD7672	M	C052402	2.29	1.91	0.0503	<0.001	0.00029	0.0174	<0.0002	<0.002	0.13	<0.00002	277	<0.002	<0.0004	<0.001	0.045	<0.0004	0.0581	17.2	0.0031	<0.0000019	0.0089	<0.002	
RSEM-L5E-EOP	7/25/2020 10:40	YD7673	D	C052402	2.22	1.93	0.058	<0.001	0.00028	0.017	<0.0002	<0.002	0.131	<0.00002	267	<0.002	<0.0004	<0.001	0.04	<0.0004	0.0569	17.3	0.0031	<0.0000019	0.0088	<0.002	
RSEM-L5E-EOP	7/26/2020 11:05	YD7710	M	C052420	2.11	2.11	0.0773	<0.001	0.00053	0.013	<0.0002	<0.002	0.155	<0.00002	331	<0.002	<0.0004	<0.001	0.121	<0.0004	0.0697	21.2	0.0033	<0.0000019	0.0118	<0.002	
RSEM-L5E-EOP	7/27/2020 11:00	YD7770	M	C052432	2.41	2.32	0.0559	<0.001	0.0004	0.0082	<0.0002	<0.002	0.141	<0.00002	284	<0.002	<0.0004	<0.001	0.066	<0.0004	0.0607	18.8	0.0024	<0.0000019	0.0099	<0.002	
RSEM-L5E-EOP	7/29/2020 13:00	YE4005	M	C053695	3.43	2.48	0.0731	<0.001	0.00053	0.0107	<0.0002	<0.002	0.12	<0.00002	259	<0.002	<0.0004	<0.001	0.128	<0.0004	0.0585	18.8	0.0096	<0.0000019	0.0094	<0.002	
RSEM-L5E-EOP	7/30/2020 17:00	YE5559	M	C054021	3.41	3.08	0.604	<0.001	0.00069	0.0275	<0.0002	<0.002	0.127	0.000046	261	<0.002	0.00051	0.0011	0.218	<0.0004	0.0561	35.8	0.0097	<0.0000019	0.0092	<0.002	
RSEM-L5E-EOP	8/29/2020 13:25	YJ1742	M	C062465	3.83	3.12	0.201	<0.001	0.00067	0.0594	<0.0002	<0.002	<0.1	0.000055	213	<0.002	0.0005	0.0029	0.471	<0.0004	0.0145	63.3	0.0275	<0.0000019	0.0091	0.003	
RSEM-L5E-EOP	8/30/2020 10:45	YJ1568	M	C062426	3.99	3.07	0.0864	0.00054	0.00056	0.0532	<0.0001	<0.001	0.084	0.000036	210	<0.001	0.00035	0.00242	0.184	<0.0002	0.0139	60.3	0.02	<0.0000019	0.01	0.0024	
RSEM-L5E-EOP	8/31/2020 11:45	YJ3636	M	C062857	3.63	3.83	0.307	0.00051	0.00063	0.0562	<0.0001	<0.001	0.1	0.000031	218	<0.001	0.00036	0.0024	0.281	<0.0002	0.0188	67.5	0.0187	<0.0000019	0.0097	0.0027	
RSEM-L5E-EOP	9/1/2020 10:25	YJ6688	M	C063433	4.15	3.88	0.331	0.0005	0.00088	0.0652	<0.0001	<0.001	0.106	0.000047	206	<0.001	0.00061	0.00289	0.605	0.00049	0.0214	66.0	0.0365	<0.0000019	0.0093	0.0035	
RSEM-L5E-EOP	9/2/2020 12:10	YJ7828	M	C063666	4.39	4.88	0.139	<0.001	0.00071	0.0563	<0.0002	<0.002	0.114	0.00003	203	<0.002	<0.0004	0.0024	0.222	<0.0004	0.023	67.1	0.0286	<0.0000019	0.0092	0.0029	
RSEM-L5E-EOP	9/2/2020 12:20	YJ7829	D	C063666	5.25	3.97	0.121	<0.001	0.00069	0.0547	<0.0002	<0.002	0.108	0.000025	205	<0.002	<0.0004	0.0023	0.218	<0.0004	0.023	67.2	0.0287	<0.0000019	0.0095	0.003	
RSEM-L5E-EOP	9/3/2020 13:35	YK0029	M	C064047	4.81	4.08	0.109	<0.0005	0.00068	0.049	<0.0001	<0.001	0.102	0.000023	209	<0.001	0.00033	0.002	0.195	<0.0002	0.0213	68.4	0.0212	0.0000025	0.0095	0.0026	
RSEM-L5E-SP	2/29/2020 14:30	XM2365	M	C015500	2.61	2.11	0.316	<0.0005	0.00075	0.0512	<0.0001	<0.001	<0.05	0.000042	82.5	<0.001	0.00072	0.00203	0.317	0.00021	0.0058	28.8	0.0976	<0.0000019	0.0073	0.0031	
RSEM-L5E-SP	5/2/2020 10:45	XS7459	M	C030328	2.73	2.25	0.0677	0.00057	0.0006	0.0666	<0.0001	<0.001	<0.05	0.000022	58.5	<0.001	0.00045	0.00209	0.108	<0.0002	0.009	24.3	0.0735	<0.0000019	0.0054	0.0033	
RSEM-L5E-SP	5/25/2020 10:30	XU8667	M	C035018	1.18	1.44	0.0568	<0.0005	0.00029	0.0508	<0.0001	<0.001	<0.05	<0.00001	94.4	<0.001	0.00031	0.00054	0.07	<0.0002	0.0055	24.5	0.145	<0.0000019	0.0018	0.0014	
RSEM-L5E-SP	5/26/2020 16:30	XV2884	M	C035941	1.50	1.31	0.0875	<0.0005	0.00035	0.0579	<0.0001	<0.001	<0.05	<0.00001	118	<0.001	0.00033	0.00056	0.107	<0.0002	0.0062	29.3	0.129	<0.0000019	0.002	0.0016	
RSEM-L5E-SP	5/27/2020 14:30	XV4566	M	C036323	1.58	1.46	0.0479	<0.0005	0.00032	0.0568	<0.0001	<0.001	<0.05	<0.00001	119	<0.001	0.00029	0.00057	0.067	<0.0002	0.0059	29.3	0.109	<0.0000019	0.0021	0.0017	
RSEM-L5E-SP	5/30/2020 17:45	XV8357	M	C037043	1.46	1.91	0.047	<0.0005	0.00032	0.0553	<0.0001	<0.001	<0.05	<0.00001	115	<0.001	0.00022	0.00062	0.068	<0.0002	0.0067	30.4	0.0598	<0.0000019	0.0022	0.0015	
RSEM-L5E-SP	7/21/2020 11:47	YC8397	M	C050753	2.5	2.62	0.195	0.00083	0.00073	0.0363	<0.0001	<0.001	0.13	0.000017	219	<0.001	0.00034	0.00113	0.278	0.0002	0.0461	32.3	0.0198	<0.0000019	0.0115	0.0022	
RSEM-L5E-SP	8/28/2020 16:20	YI9496	M	C062013	3.32	3.67	0.137	0.00054	0.00059	0.0644	<0.0001	<0.001	0.089	0.000047	225	<0.001	0.00046	0.00282	0.336	0.00022	0.016	60.6	0.0297	<0.0000019	0.0103	0.0027	
RSEM-L5W-EOP	4/19/2020 16:45	XR2519	M	C026927	<2.5	1.59	0.545	0.00168	0.00176	0.0702	<0.0001	<0.001	0.081	0.00003	41.3	0.0045	0.00067	0.00228	0.954	0.00049	0.027	16.7	0.0215	0.0000029	0.0119	0.0038	
RSEM-L5W-EOP	4/19/2020 19:30	XR3421	M	C027098	<2.5	1.49	0.602	0.00172	0.00149	0.078	<0.0001	<0.001	0.091	0.000034	42.1	0.0043	0.00071	0.002	1.09	0.00062	0.0278	16.3	0.0232	0.0000041	0.0127	0.0038	
RSEM-L5W-EOP	7/4/2020 16:15	YA6738	M	C046470	1.69	1.03	0.572	<0.0005	0.00054	0.0961	<0.0001	<0.001	0.059	0.000059	102	0.001	0.00033	0.00178	0.578	0.00036	0.0108	30.7	0.0271	<0.0000019	0.0061	0.0021	
RSEM-L5W-EOP	7/5/2020 13:20	YA6923	M	C046500	1.70	1.83	0.131	<0.0005	0.00034	0.081	<0.0001	<0.001	0.061	0.000048	105	<0.001	0.00021	0.00133	0.134	<0.0002	0.0112	33.0	0.0206	<0.0000019	0.006	0.0016	
RSEM-L5W-EOP	7/7/2020 16:30	YB0054	M	C047206	2.37	2.13	0.371	<0.0005	0.00073	0.0869	<0.0001	<0.001	0.066	0.000072	112	<0.001	0.00053	0.00221	0.83	0.00053	0.0141	32.4	0.0305	<0.0000019	0.0066	0.0027	
RSEM-L5W-EOP	7/8/2020 16:00	YB2463	M	C047619	2.67	2.85	0.56	<0.0005	0.00071	0.0888	<0.0001	<0.001	0.07	0.000057	113	0.0011	0.00045	0.00213	0.846	0.00049	0.0157	33.7	0.0242	0.0000028	0.0066	0.0025	
RSEM-L5W-SP	7/3/2020 11:20	YA5153	M	C046179	2.47	2.40	0.54	<0.0005	0.00097	0.146	<0.0001	<0.001	0.076	0.000063	114	0.001	0.00059	0.00245	1.33	0.00074	0.0154	31.9	0.0242	<0.0000019	0.0068	0.0027	
RSEM-L6-EOP	6/17/2020 17:45	XY6278	M	C042380	<2.5	2.41	0.105	<0.0005	0.00049	0.0844	<0.0001	<0.001	0.06	0.000054	85.4	<0.001	0.00036	0.00134	0.148	<0.0002	0.011	22.9	0.0203	<0.0000019	0.008	0.0018	
RSEM-L6-EOP	6/18/2020 13:00	XY6287	M	C042383	2.90	2.37	0.076	0.0005	0.00049	0.0808	<0.0001	<0.001	0.061	0.000049	84.5	<0.001	0.00048	0.00128	0.078	<0.0002	0.0119	22.4	0.0197	<0.0000019	0.0079	0.0025	
RSEM-L6-EOP	6/19/2020 11:00	XY6268	M	C042375	2.80	2.40	0.0549	0.00054	0.00048	0.0861	<0.0001	<0.001	0.067	0.00006	89.0	<0.001	0.00053	0.00143	0.05	<0.0002	0.0135	23.8	0.0186	<0.0000019	0.0081	0.0025	
RSEM-L6-EOP	6/20/2020 13:40	XY9026	M	C042884	2.36	1.96	0.0443	0.00058	0.00043	0.0826	<0.0001	<0.001	0.071	0.000057	92.1	<0.001	0.00057	0.00146	0.039	<0.0002	0.0136	24.1	0.0162	<0.0000019	0.0082	0.003	
RSEM-L6-EOP	6/21/2020 11:45	XY9121	M	C042904	2.28	2.10	0.0772	0.00062	0.00053	0.0881	<0.0001	<0.001	0.073	0.000067	92.3	<0.001	0.00071	0.00129	0.12	<0.0002	0.0162	24.4	0.0194	<0.0000019	0.0082	0.0038	
RSEM-L6-EOP	6/22/2020 16:30	XZ0406	M	C043197	2.34	1.94	0.0525	0.0008	0.00054	0.0902	<0.0001	<0.001	0.079	0.000069	94.0	<0.001	0.00076	0.00113	0.06	<0.0002	0.0213	27.5	0.0261	<0.0000019	0.0086	0.0046	
RSEM-L6-EOP	6/23/2020 14:00	XZ2252	M	C043604	2.41	2.08	0.0515	0.00078	0.0005	0.0871	<0.0001	<0.001	0.08	0.00007	94.1	<0.001	0.00062	0.00111	0.045	<0.0002	0.0218	28.9	0.0319	<0.0000019	0.0085	0.0045	
RSEM-L6-EOP	6/27/2020 19:15	XZ9070	M	C044897	2.16	2.15	0.0742	0.00081	0.00057	0.0861	<0.0001	<0.001	0.094	0.000052	93.2	<0.001	0.0006	0.00117	0.109	<0.0002	0.0227	26.2	0.0171	<0.0000019	0.0085	0.0044	
RSEM-L6-EOP	6/27/2020 19:25	XZ9071	D	C044897	2.08	<2.5	0.0835	0.00081	0.00059	0.0885	<0.0001	<0.001	0.094	0.000052	94.4	<0.001	0.00061	0.00224	0.131	<0.0002	0.0227	27.0	0.0176	<0.0000019	0.0088	0.0044	
RSEM-L6-SP	5/29/2020 12:15	XV5617	M	C036525	2.32	2.59	0.0749	<0.0005	0.00044	0.0668	<0.0001	<0.001	<0.05	0.000046	80.3	<0.001	<0.0002	0.00134	0.072	<0.0002	0.0079	25.2	0.0047	<0.0000019	0.0081	0.0011	
RSEM-L6-SP	6/16/2020 10:25	XY1503	M	C041388	2.29	2.16	0.178	<0.0005	0.00055	0.0852	<0.0001	<0.001	0.052	0.000051	86.7	<0.001	0.00028	0.00144	0.223	<0.0002	0.0097	22.8	0.0199	<0.0000019	0.0081	0.0015	
RSEM-L6-SP	6/25/2020 17:30	XZ5987	M	C044346	2.41	2.26	0.0719	0.00074	0.0005	0.0834	<0.0001	<0.001	0.089	0.000057	87.9	<0.001	0.00055	0.00121	0.103	<0.0002	0.021	25.4	0.0118	<0.0000019	0.0081	0.0038	
RSEM-L6-SP	7/5/2020 9:25	YA6828	M	C046487	<5.0	1.78	0.0999	0.00135	0.00051	0.105	<0.0001	<0.001	0.127	0.000054	89.4	0.0013	0.00119	0.00115	0.114	<0.0002	0.0305	28.7	0.118	<0.0000019	0.0079	0.0051	
RSEM-R5a-A-EOP	6/30/2020 11:55	YA2735	M	C045692	2.56	3.32	0.612	0.00056	0.00104	0.108	<0.0001	<0.001	0.168	0.000029	51.4	0.0012	0.00049	0.00275	0.821	0.00052	0.0354	10.8	0.0159	0.0000051	0.0068	0.0029	
RSEM-R5a-A-EOP	7/4/2020 13:35	YA6734	M	C046470	<2.0	1.60	3.41	0.00053	0.00206	0.194	0.00013	<0.001	0.124	0.00009	49.7	0.005	0.00153	0.00471	3.34	0.00189	0.03	11.1	0.0573	<0.000019	0.0063	0.0056	
RSEM-R5a-A-EOP	7/5/2020 11:45	YA6921	M	C046500	1.8	<0.50	2.6	0.00061	0.00143	0.171	0.0001	<0.001	0.203	0.00007	58.0	0.0038	0.00164	0.00344	1.94	0.00118	0.0478	12.6	0.0582	<0.000019	0.0072	0.0066	
RSEM-R5A-A-SP	3/29/2020 13:50	XP3927	M	C022584	<2.0	3.09	2.21	<0.0005	0.00229	0.208	0.00014	<0.001	<0.05	0.00011	29.6	0.0041	0.002	0.00684	4.19	0.00229	0.0062	4.59	0.0801	<0.0000019	0.0042	0.0071	
RSEM-R5A-A-SP	4/12/2020 11:25	XQ6089	M	C025305	1.39	1.17	2.62	<0.0005	0.00298	0.184	0.00014	<0.001	<0.05	0.000138	33.1	0.0051	0.00232	0.00683	5.33	0.00296	0.0046	5.69	0.0914	0.0000199	0.0023	0.0073	
RSEM-R5A-A-SP	6/16/2020 11:35	XY1508	M	C041388	2.19	1.75	5.6	<0.001	0.00163	0.164	<0.0002	<0.002	<0.1	0.000065	43.5	0.0077	0.00116	0.0044	2.91	0.00145	0.0174	8.10	0.0469	<0.000019	0.0057	0.0053	
RSEM-R5A-B-SP	3/29/2020 14:00	XP3928	M	C022584	2.64	2.61	1.98	0.00056	0.00223	0.176	0.00015	<0.001	<0.05	0.000102	22.8	0.0036	0.00201	0.00712	3.61	0.00225	0.0057	3.68	0.0675	<0.0000019	0.0052	0.0069	
RSEM-R5A-B-SP	4/12/2020 11:35	XQ6090	M	C025305	3.1	1.37	11.5	0.00063	0.00995	0.615	0.00072	<0.001	0.064	0.000415	30.0	0.0204	0.0101	0.0296	20.4	0.0122	0.0176	7.13	0.323	0.00007	0.0062	0.0313	
RSEM-R5A-B-SP	6/16/2020 11:45	XY1509	M	C041388	1.84	1.62	3.7	0.0005	0.00118	0.128	0.0001	<0.001	0.086	0.000044	44.2	0.0049	0.00083	0.00312	1.71	0.00094	0.0135	7.84	0.0326	<0.000019	0.006	0.0038	
RSEM-R5A-B-SP	7/3/2020 14:20	YA5154	M	C046179	<2.5	1.91	2.48	<0.0005	0.00319	0.196	0.00017	<0.001	0.086	0.000135	33.3	0.0039	0.00224	0.00766	5.31	0.00326	0.015	5.92	0.0716	<0.0000019	0.0048	0.0077	
RSEM-R5A-C-SP	3/29/2020 14:30	XP3929	M	C022584	2.38	2.51	0.519	<0.0005	0.00074	0.104	<0.0001	<0.001	<0.05	0.000041	29.7	0.0011	0.00061	0.00236	0.954	0.00059	0.0042	4.79	0.0337	<0.0000019	0.0059	0.0027	
RSEM-R5A-C-SP	4/12/2020 12:15	XQ6091	M	C025305	1.81	1.50	7.7	0.00067	0.00784	0.454	0.00051	<0.001	0.066	0.000306	29.3	0.0136	0.0076	0.0221	14.3	0.00891	0.0143	6.63	0.221	0.0000456	0.0076	0.0222	
RSEM-R5A-C-SP	6/16/2020 12:00	XY1510	M	C041388	2.44	2.41	3.7	<0.0025	0.00162	0.169	<0.0005	<0.005	0.37	0.000094	83.2	0.0051	0.0041	0.0047	2.66	0.0014	0.118	19.8	0.163	<0.000019	0.0067	0.016	
RSEM-R5A-D-SP	3/29/2020 14:40	XP3930	M	C022584	4.8	2.49	1.27	<0.0005	0.0015	0.116	<0.0001	<0.001	<0.05	0.000075	23.5	0.0024	0.00123	0.0044	2.3	0.00143	0.0039	3.60	0.0564	<0.0000019	0.0043	0.0044	
RSEM-R5A-D-SP	4/12/2020 12:25	XQ6092	M	C025305	2.02	1.84	8.17	0.00056	0.00776	0.466	0.00058	<0.001	0.068	0.000377	30.0	0.0146	0.00751	0.0236	15.2	0.0091	0.0149	6.92	0.232	0.000053	0.0077	0.0229	
RSEM-R5A-D-SP	6/16/2020 12:10	XY1511	M	C041388	2.56	2.31	1.2	<0.0025	0.0008	0.138	<0.0005	<0.005	<0.25	0.000065	70.6	<0.005	0.0014	0.0031	0.865	<0.001	0.074	16.7	0.06	0.0000046	0.0061	0.0064	
RSEM-R5B-EOP	1/1/2020 13:10	XE7142	M	C000229	2.79	2.42	0.0426	0.00081	0.00079	0.0406	<0.0001	<0.001	0.148	0.000018	68.3	0.0012	0.0004	0.00092	0.031	<0.0002	0.0845	38.9	0.0081	0.0000023	0.0063	0.0081	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R5B-EOP	1/1/2020 13:20	XE7143	D	C000229	2.60	2.23	0.0345	0.0008	0.00081	0.0411	<0.0001	<0.001	0.15	0.000018	68.4	0.0012	0.00039	0.00092	0.031	<0.0002	0.085	39.2	0.0083	0.0000028	0.0063	0.008	
RSEM-R5B-EOP	1/2/2020 11:20	XE7177	M	C000238	1.70	2.11	0.036	0.00076	0.00076	0.0414	<0.0001	<0.001	0.145	0.000019	69.7	0.0012	0.00039	0.0009	0.029	<0.0002	0.0807	38.8	0.0079	<0.000002	0.0061	0.0077	
RSEM-R5B-EOP	1/2/2020 11:30	XE7178	D	C000238	1.88	2.30	0.0325	0.00076	0.00078	0.0416	<0.0001	<0.001	0.147	0.000021	70.1	0.0012	0.00037	0.00089	0.03	<0.0002	0.0806	39.2	0.0079	<0.000002	0.0062	0.0078	
RSEM-R5B-EOP	1/3/2020 12:40	XE8695	M	C000625	1.94	2.03	0.0343	0.00074	0.00068	0.0409	<0.0001	<0.001	0.131	0.000022	76.7	0.0012	0.00035	0.00099	0.031	<0.0002	0.0738	38.2	0.0081	0.0000023	0.0061	0.0077	
RSEM-R5B-EOP	1/3/2020 12:50	XE8696	D	C000625	1.64	2.08	0.0321	0.00074	0.00069	0.0408	<0.0001	<0.001	0.131	0.000017	76.4	0.0012	0.00035	0.00098	0.034	<0.0002	0.0699	37.6	0.0078	0.0000029	0.0059	0.0076	
RSEM-R5B-EOP	1/4/2020 14:20	XE9883	M	C000877	1.73	1.87	0.0189	0.0007	0.00059	0.0448	<0.0001	<0.001	0.12	0.000025	87.8	0.0011	0.00028	0.00081	0.03	<0.0002	0.0616	40.5	0.0072	<0.000002	0.0055	0.0064	
RSEM-R5B-EOP	1/4/2020 14:30	XE9884	D	C000877	1.77	1.87	0.022	0.00075	0.00064	0.0466	<0.0001	<0.001	0.125	0.000025	91.1	0.0011	0.0003	0.0009	0.027	<0.0002	0.0622	43.0	0.0076	<0.000002	0.0059	0.0068	
RSEM-R5B-EOP	1/5/2020 13:10	XE9854	M	C000870	1.80	1.84	0.0162	0.0007	0.00054	0.0437	<0.0001	<0.001	0.118	0.000019	85.8	0.001	0.00024	0.0008	0.023	<0.0002	0.0626	40.2	0.0069	<0.000002	0.0056	0.0057	
RSEM-R5B-EOP	1/5/2020 13:20	XE9855	D	C000870	1.80	1.75	0.0187	0.00067	0.00056	0.0426	<0.0001	<0.001	0.114	0.000028	82.7	0.001	0.00024	0.0008	0.023	<0.0002	0.0584	37.9	0.0064	<0.000002	0.0056	0.0054	
RSEM-R5B-EOP	1/6/2020 12:50	XF0705	M	C001127	1.30	1.32	0.0287	0.00069	0.00061	0.0403	<0.0001	<0.001	0.108	0.000016	73.6	<0.001	<0.0002	0.00069	0.022	<0.0002	0.065	31.2	0.0056	0.000002	0.0057	0.0048	
RSEM-R5B-EOP	1/6/2020 13:00	XF0706	D	C001127	1.32	1.18	0.0219	0.00069	0.00061	0.0409	<0.0001	<0.001	0.109	0.000017	74.3	<0.001	<0.0002	0.00068	0.022	<0.0002	0.0646	31.4	0.0057	<0.000002	0.0057	0.0049	
RSEM-R5B-EOP	1/7/2020 13:40	XF1930	M	C001464	1.52	2.10	0.0287	0.00079	0.00059	0.0394	<0.0001	<0.001	0.127	0.000016	71.2	<0.001	0.00021	0.00072	0.024	<0.0002	0.0762	30.9	0.0057	<0.000002	0.0058	0.0051	
RSEM-R5B-EOP	1/7/2020 13:50	XF1931	D	C001464	1.70	1.81	0.0285	0.00077	0.0006	0.0388	<0.0001	<0.001	0.126	0.000014	70.5	<0.001	<0.0002	0.00107	0.022	<0.0002	0.0788	30.1	0.0056	0.0000023	0.0058	0.005	
RSEM-R5B-EOP	1/8/2020 13:30	XF3040	M	C001783	1.81	1.75	0.0244	0.00084	0.00066	0.0381	<0.0001	<0.001	0.13	0.000018	65.4	0.001	0.00023	0.00085	0.03	<0.0002	0.0745	31.9	0.006	<0.000002	0.0058	0.0057	
RSEM-R5B-EOP	1/8/2020 13:40	XF3041	D	C001783	1.92	1.41	0.0311	0.00085	0.0007	0.0399	<0.0001	<0.001	0.137	0.000018	74.9	0.0011	0.00025	0.00088	0.029	<0.0002	0.0826	33.8	0.0065	<0.000002	0.0063	0.0062	
RSEM-R5B-EOP	1/9/2020 11:50	XF4215	M	C002074	2.15	2.16	0.0238	0.00086	0.00073	0.0352	<0.0001	<0.001	0.139	0.000015	60.5	<0.001	0.00023	0.00077	0.025	<0.0002	0.0785	29.2	0.0057	<0.000002	0.0064	0.0056	
RSEM-R5B-EOP	1/9/2020 12:00	XF4216	D	C002074	2.76	2.12	0.0252	0.00089	0.00076	0.0367	<0.0001	<0.001	0.145	0.000013	62.3	<0.001	0.00023	0.00081	0.024	<0.0002	0.0819	30.0	0.0057	0.0000039	0.0067	0.0057	
RSEM-R5B-EOP	1/10/2020 14:00	XF5143	M	C002216	1.91	1.89	0.0311	0.0009	0.00079	0.0339	<0.0001	<0.001	0.147	0.000014	56.6	<0.001	0.00024	0.00084	0.021	<0.0002	0.0839	29.5	0.0055	0.0000044	0.0067	0.0061	
RSEM-R5B-EOP	1/10/2020 14:10	XF5144	D	C002216	1.86	1.92	0.0351	0.00093	0.00078	0.0338	<0.0001	<0.001	0.146	0.000015	56.7	<0.001	0.00022	0.0008	0.025	<0.0002	0.0838	29.7	0.0054	<0.000002	0.0068	0.0061	
RSEM-R5B-EOP	1/11/2020 11:40	XF5746	M	C002384	1.91	1.71	0.0365	0.00097	0.00083	0.0326	<0.0001	<0.001	0.149	0.000014	54.3	<0.001	0.00023	0.0008	0.026	<0.0002	0.0817	29.8	0.0051	<0.000002	0.007	0.006	
RSEM-R5B-EOP	1/11/2020 11:50	XF5747	D	C002384	2.19	1.84	0.0369	0.00096	0.00082	0.0336	<0.0001	<0.001	0.153	0.00001	53.9	<0.001	0.00023	0.00078	0.024	<0.0002	0.0814	29.1	0.005	<0.000002	0.007	0.006	
RSEM-R5B-EOP	1/12/2020 12:40	XF5773	M	C002394	2.08	1.87	0.0368	0.001	0.00086	0.0327	<0.0001	<0.001	0.16	0.000011	53.5	<0.001	0.00024	0.00084	0.026	<0.0002	0.0821	29.0	0.0049	0.0000029	0.0069	0.0061	
RSEM-R5B-EOP	1/12/2020 12:50	XF5774	D	C002394	2.07	1.78	0.0395	0.00096	0.00086	0.0323	<0.0001	<0.001	0.151	<0.00001	52.4	<0.001	0.00023	0.00079	0.024	<0.0002	0.081	28.8	0.0048	0.000004	0.0071	0.006	
RSEM-R5B-EOP	1/13/2020 11:25	XF7158	M	C002657	2.21	2.20	0.0391	0.00103	0.00094	0.0339	<0.0001	<0.001	0.157	0.000013	52.8	<0.001	0.00024	0.00085	0.024	<0.0002	0.0819	30.0	0.0049	<0.000002	0.0074	0.0063	
RSEM-R5B-EOP	1/13/2020 11:35	XF7159	D	C002657	2.47	1.38	0.0402	0.00101	0.00093	0.0335	<0.0001	<0.001	0.155	<0.00001	54.1	<0.001	0.00024	0.00084	0.025	<0.0002	0.0792	29.9	0.0049	<0.000002	0.0073	0.0061	
RSEM-R5B-EOP	1/14/2020 11:40	XF8098	M	C002891	2.07	1.24	0.0452	0.00107	0.00093	0.0349	<0.0001	<0.001	0.146	0.000016	51.7	0.001	0.00025	0.00086	0.027	<0.0002	0.0724	31.9	0.0052	0.0000023	0.0073	0.0063	
RSEM-R5B-EOP	1/14/2020 11:50	XF8099	D	C002891	2.08	2.06	0.0401	0.00102	0.00092	0.0342	<0.0001	<0.001	0.14	0.000014	50.6	<0.001	0.00025	0.00082	0.025	<0.0002	0.0691	30.9	0.0049	<0.000002	0.007	0.0061	
RSEM-R5B-EOP	1/15/2020 12:35	XF9569	M	C003144	2.31	2.28	0.048	0.00109	0.00107	0.036	<0.0001	<0.001	0.157	0.000012	53.5	0.0012	0.00026	0.00087	0.025	<0.0002	0.0813	31.3	0.0054	<0.000002	0.0072	0.0062	
RSEM-R5B-EOP	1/15/2020 12:45	XF9570	D	C003144	2.28	2.14	0.0506	0.00111	0.00108	0.0369	<0.0001	<0.001	0.157	0.000011	55.0	0.0012	0.00026	0.00083	0.026	<0.0002	0.0813	31.8	0.0055	0.0000023	0.0073	0.0063	
RSEM-R5B-EOP	1/16/2020 13:00	XG0615	M	C003413	2.13	2.23	0.0432	0.00102	0.00104	0.033	<0.0001	<0.001	0.148	0.000011	49.5	0.0013	0.00025	0.0008	0.023	<0.0002	0.0698	27.8	0.005	<0.000002	0.0083	0.0058	
RSEM-R5B-EOP	1/16/2020 13:10	XG0616	D	C003413	2.27	2.06	0.0445	0.00103	0.0011	0.0332	<0.0001	<0.001	0.148	0.000012	50.9	0.0013	0.00025	0.00082	0.024	<0.0002	0.0694	27.9	0.0051	<0.000002	0.0082	0.0057	
RSEM-R5B-EOP	1/17/2020 12:25	XG0614	M	C003412	2.34	2.08	0.0567	0.00107	0.00117	0.0342	<0.0001	<0.001	0.152	0.000012	50.4	0.0018	0.00028	0.00087	0.026	<0.0002	0.0679	28.0	0.0057	<0.000002	0.0099	0.006	
RSEM-R5B-EOP	1/18/2020 11:40	XG2772	M	C003851	2.32	2.20	0.0484	0.00122	0.00148	0.0365	<0.0001	<0.001	0.168	0.000014	52.4	0.0023	0.0003	0.00098	0.029	<0.0002	0.0713	28.4	0.0061	<0.000002	0.0121	0.006	
RSEM-R5B-EOP	1/19/2020 14:45	XG2756	M	C003847	2.26	2.15	0.0583	0.00124	0.00155	0.0381	<0.0001	<0.001	0.172	0.000014	52.0	0.0029	0.00035	0.00107	0.039	<0.0002	0.0742	28.8	0.0068	<0.000002	0.0139	0.0062	
RSEM-R5B-EOP	1/20/2020 11:50	XG2705	M	C003843	2.47	2.17	0.0588	0.00141	0.00185	0.0386	<0.0001	<0.001	0.187	0.000016	54.0	0.0034	0.00038	0.0011	0.035	<0.0002	0.0753	29.2	0.0071	0.0000045	0.0161	0.0063	
RSEM-R5B-EOP	1/21/2020 14:10	XG5825	M	C004470	2.30	1.87	0.0706	0.00151	0.00205	0.0397	<0.0001	<0.001	0.179	0.000012	54.5	0.0037	0.00041	0.00117	0.039	<0.0002	0.0622	29.5	0.0078	<0.000002	0.0183	0.0065	
RSEM-R5B-EOP	1/21/2020 14:20	XG5826	D	C004470	2.23	2.02	0.0745	0.00153	0.00206	0.0401	<0.0001	<0.001	0.178	0.000012	56.8	0.0039	0.00042	0.00115	0.045	<0.0002	0.0589	29.5	0.008	<0.000002	0.0184	0.0064	
RSEM-R5B-EOP	1/22/2020 15:50	XG7452	M	C004860	2.39	2.25	0.0687	0.00146	0.00206	0.04	<0.0001	<0.001	0.183	0.000014	55.4	0.0036	0.00039	0.00114	0.034	<0.0002	0.0676	28.4	0.0076	<0.000002	0.0178	0.006	
RSEM-R5B-EOP	1/22/2020 16:00	XG7453	D	C004860	2.22	2.41	0.0687	0.00148	0.00201	0.04	<0.0001	<0.001	0.186	0.000013	53.2	0.0036	0.00038	0.00105	0.036	<0.0002	0.0646	28.5	0.0076	<0.000002	0.0176	0.006	
RSEM-R5B-EOP	1/23/2020 15:20	XG9563	M	C005172	2.18	2.48	0.0624	0.00153	0.00202	0.0414	<0.0001	<0.001	0.175	<0.00001	54.3	0.0039	0.00041	0.00122	0.033	<0.0002	0.0673	28.3	0.0078	0.0000026	0.0183	0.0063	
RSEM-R5B-EOP	1/23/2020 15:30	XG9564	D	C005172	2.06	2.51	0.0639	0.00147	0.00198	0.0404	<0.0001	<0.001	0.174	0.000014	53.0	0.004	0.00041	0.00125	0.035	<0.0002	0.0661	28.9	0.0079	<0.000002	0.0175	0.0065	
RSEM-R5B-EOP	1/24/2020 11:10	XG9569	M	C005174	2.03	2.43	0.0666	0.00149	0.00195	0.0404	<0.0001	<0.001	0.176	0.000013	53.4	0.0038	0.0004	0.00116	0.033	<0.0002	0.0676	28.2	0.0076	0.0000029	0.0183	0.0063	
RSEM-R5B-EOP	1/24/2020 11:20	XG9570	D	C005174	2.07	2.36	0.068	0.00149	0.00198	0.04	<0.0001	<0.001	0.174	0.000014	52.6	0.0038	0.00041	0.00121	0.036	<0.0002	0.0668	28.3	0.0077	0.0000025	0.0177	0.0064	
RSEM-R5B-EOP	1/25/2020 12:00	XH2064	M	C005631	2.09	2.12	0.0644	0.00142	0.00198	0.0408	<0.0001	<0.001	0.182	0.000015	51.9	0.0036	0.00038	0.0011	0.036	<0.0002	0.0763	27.4	0.0078	0.0000029	0.017	0.0059	
RSEM-R5B-EOP	1/25/2020 12:10	XH2062	D	C005631	2.09	2.11	0.0719	0.00143	0.00196	0.041	<0.0001	<0.001	0.183	0.000012	53.0	0.0037	0.00039	0.00111	0.037	<0.0002	0.0766	28.3	0.008	<0.000002	0.0175	0.0058	
RSEM-R5B-EOP	1/26/2020 13:40	XH2025	M	C005623	<0.50	2.13	0.0727	0.00138	0.00193	0.0426	<0.0001	<0.001	0.179	0.000015	53.5	0.0036	0.00039	0.00113	0.041	<0.0002	0.0754	27.1	0.0088	0.0000023	0.0175	0.0057	
RSEM-R5B-EOP	1/26/2020 13:50	XH2026	D	C005623	2.17	1.96	0.0696	0.00141	0.00192	0.0429	<0.0001	<0.001	0.173	0.000013	52.4	0.0036	0.00039	0.00109	0.039	<0.0002	0.0742	27.1	0.0096	<0.000002	0.0174	0.0058	
RSEM-R5B-EOP	1/27/2020 14:10	XH3887	M	C005941	1.96	2.27	0.0644	0.00142	0.00188	0.0434	<0.0001	<0.001	0.183	0.000014	56.8	0.0035	0.00038	0.00108	0.037	<0.0002	0.0716	29.6	0.0086	<0.000002	0.017	0.0058	
RSEM-R5B-EOP	1/27/2020 14:20	XH3888	D	C005941	2.87	2.19	0.0601	0.00129	0.00173	0.0422	<0.0001	<0.001	0.181	0.000013	56.9	0.0035	0.00037	0.00107	0.038	<0.0002	0.0711	29.1	0.0084	<0.000002	0.0164	0.0057	
RSEM-R5B-EOP	1/28/2020 12:45	XH5358	M	C006197	1.21	1.78	0.0591	0.00122	0.0016	0.0472	<0.0001	<0.001	0.144	0.000015	66.4	0.0032	0.00036	0.00108	0.036	<0.0002	0.0571	31.3	0.0087	<0.000002	0.0143	0.0057	
RSEM-R5B-EOP	1/28/2020 12:55	XH5359	D	C006197	1.32	1.91	0.0504	0.00121	0.00162	0.0463	<0.0001	<0.001	0.144	0.000016	66.3	0.003	0.00035	0.00105	0.036	<0.0002	0.058	29.9	0.0085	<0.000002	0.0144	0.0055	
RSEM-R5B-EOP	1/29/2020 11:40	XH6910	M	C006592	2.13	1.94	0.0413	0.00101	0.0014	0.0512	<0.0001	<0.001	0.137	0.000013	75.0	0.0028	0.00033	0.00231	0.041	<0.0002	0.0554	33.7	0.0095	<0.000002	0.0114	0.0046	
RSEM-R5B-EOP	1/29/2020 11:50	XH6911	D	C006592	2.03	2.50	0.0424	0.00097	0.00138	0.0507	<0.0001	<0.001	0.13	0.000011	79.7	0.0026	0.00032	0.00102	0.043	<0.0002	0.0558	32.5	0.0093	<0.000002	0.0115	0.0045	
RSEM-R5B-EOP	1/30/2020 13:15	XH8746	M	C006955	1.83	1.66	0.048	0.0009	0.00133	0.0568	<0.0001	<0.001	0.125	0.000017	75.4	0.0022	0.00034	0.00096	0.045	<0.0002	0.048	30.5	0.012	<0.000002	0.0119	0.0043	
RSEM-R5B-EOP	1/30/2020 13:25	XH8747	D	C006955	1.84	1.71	0.0565	0.00089	0.00129	0.0571	<0.0001	<0.001	0.128	0.000018	76.2	0.0022	0.00034	0.00093	0.045	<0.0002	0.0493	30.4	0.012	<0.000002	0.0118	0.0044	
RSEM-R5B-EOP	1/31/2020 13:05	XH9849	M	C007079	1.88	1.84	0.0672	0.00111	0.00132	0.0587	<0.0001	<0.001	0.143	0.000019	73.4	0.0021	0.00035	0.00124	0.05	<0.0002	0.0515	30.5	0.0133	<0.000002	0.012	0.0045	
RSEM-R5B-EOP	1/31/2020 13:15	XH9850	D	C007079	1.73	1.81	0.0741	0.00111	0.0014	0.0604	<0.0001	<0.001	0.145	0.000017	74.8	0.0022	0.00035	0.00129	0.053	<0.0002	0.0514	30.7	0.0135	<0.000002	0.0128	0.0044	
RSEM-R5B-EOP	2/1/2020 11:30	XI1802	M	C007448	1.72	1.85	0.0657	0.00114	0.00134	0.0575	<0.0001	<0.001	0.151	0.000014	68.4	0.0021	0.00035	0.00101	0.048	<0.0002	0.0535	27.7	0.0132	<0.000002	0.0134	0.0044	
RSEM-R5B-EOP	2/1/2020 11:45	XI1803	D	C007448	1.94	1.81	0.0666	0.00114	0.00145	0.0586	<0.0001	<0.001	0.15	0.000016	69.4	0.0022	0.00037	0.00102	0.049	<0.0002	0.0536	28.2	0.0135	<0.000002	0.0136	0.0045	
RSEM-R5B-EOP	2/2/2020 13:50	XI1832	M	C007454	2.56	1.98	0.0669	0.00124	0.00133	0.0536	<0.0001	<0.001	0.169	0.000012	64.1	0.002	0.00038	0.00103	0.047	<0.0002	0.061	27.3	0.0126	<0.000002	0.0137	0.0048	
RSEM-R5B-EOP	2/2/2020 14:00	XI1833	D	C007454	1.82	1.99	0.072	0.00124	0.00133	0.0534	<0.0001	<0.001	0.165	0.000017	65.4	0.002	0.00039	0.00104	0.05	<0.0002	0.0573	27.0	0.0126	<0.000002	0.0136	0.0047	
RSEM-R5B-EOP	2/3/2020 12:20	XI3479	M	C007820	1.83	1.59	0.0821	0.00131	0.00133	0.0516	<0.0001	<0.001	0.173	0.000016	58.7	0.0019	0.0005	0.00104	0.054	<0.0002	0.0613	27.1	0.0137	<0.000002	0.0137	0.0053	
RSEM-R5B-EOP	2/3/2020 12:30	XI3480	D	C007820	2.21	1.99	0.0767	0.00126	0.00129	0.0508	<0.0001	<0.001	0.17	0.000019	60.4	0.0019	0.00048	0.00103	0.069	<0.0002	0.0622	26.7	0.013	<0.000002	0.0135	0.0051	
RSEM-R5B-EOP	2/4/2020 11:50	XI3460	M	C007815	2.05	1.78	0.0786	0.00125	0.00125	0.0479	<0.0001	<0.001	0.166	0.000015	55.7	0.0017	0.00048	0.00101	0.057	<0.0002	0.0615	25.3	0.0123	<0.000002	0.013	0.0049	
RSEM-R5B-EOP	2/4/2020 12:00	XI3461	D	C007815	1.98	1.60	0.0863	0.0013	0.00137	0.0497	<0.0001	<0.001	0.173	0.000015	57.4	0.0017	0.00051	0.00104	0.058	<0.0002	0.0638	26.6	0.013	<0.000002	0.0137	0.0054	
RSEM-R5B-EOP	2/5/2020 12:55	XI6885	M	C008469	2.17	1.88	0.0682	0.00147	0.00127	0.0472	<0.0001	<0.001	0.166	0.000015	51.8	0.0016	0.00044	0.00153	0.054	<0.0002	0.0666	28.4	0.0114	<0.000002	0.0127	0.0061	
RSEM-R5B-EOP	2/5/2020 13:05	XI6886	D	C008469	2.15	1.97	0.0701	0.00146	0.00131	0.0463	<0.0001	<0.001	0.171	0.000014	55.3	0.0016	0.00045	0.00109	0.053	<0.0002	0.0673	28.6	0.0115	<0.000002	0.0134	0.0055	
RSEM-R5B-EOP	2/6/2020 12:00	XI8757	M	C008772	2.29	1.92	0.0644	0.00145	0.00116	0.0436	<0.0001	<0.001	0.191	0.000016	52.5	0.0016	0.00044	0.00117	0.045	<0.0002	0.0711	27.6	0.0103	<0.000002	0.0132	0.0058	
RSEM-R5B-EOP	2/6/2020 12:10	XI8758	D	C008772	1.93	1.74	0.0653	0.00142	0.00118	0.0429	<0.0001	<0.001	0.193	0.000015	52.9	0.0016	0.00044	0.00112	0.047	<0.0002	0.0703	27.3	0.01	<0.000002	0.0132	0.0055	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R5B-EOP	2/7/2020 12:10	XI8782	M	C008775	2.31	1.75	0.0771	0.00148	0.00124	0.0465	<0.0001	<0.001	0.197	0.000016	53.5	0.0015	0.00043	0.00123	0.05	<0.0002	0.0735	28.2	0.0109	<0.000002	0.0134	0.006	
RSEM-R5B-EOP	2/8/2020 11:50	XJ1670	M	C009232	2.02	1.93	0.0637	0.00141	0.00116	0.0504	<0.0001	<0.001	0.181	0.000012	52.2	0.0014	0.00043	0.00121	0.059	<0.0002	0.0718	28.8	0.0128	<0.000002	0.0125	0.0058	
RSEM-R5B-EOP	2/8/2020 12:00	XJ1671	D	C009232	1.99	1.91	0.0639	0.00144	0.00123	0.0519	<0.0001	<0.001	0.184	0.000012	53.3	0.0014	0.00044	0.00115	0.061	<0.0002	0.0735	29.2	0.0131	<0.000002	0.0126	0.0059	
RSEM-R5B-EOP	2/9/2020 13:10	XJ1690	M	C009242	2.10	1.97	0.0726	0.00132	0.00114	0.0595	<0.0001	<0.001	0.175	0.000014	54.1	0.0013	0.00057	0.00127	0.093	<0.0002	0.0714	28.9	0.0178	<0.000002	0.0118	0.0062	
RSEM-R5B-EOP	2/9/2020 13:20	XJ1691	D	C009242	1.99	1.82	0.0681	0.00127	0.00112	0.0573	<0.0001	<0.001	0.17	0.000017	52.0	0.0012	0.00054	0.00109	0.083	<0.0002	0.0685	27.6	0.017	<0.000002	0.0112	0.0059	
RSEM-R5B-EOP	2/10/2020 11:10	XJ1714	M	C009249	2.29	1.96	0.0751	0.00134	0.00115	0.0645	<0.0001	<0.001	0.181	0.000016	56.1	0.0012	0.0006	0.00119	0.098	<0.0002	0.0742	29.7	0.0189	<0.000002	0.0116	0.0063	
RSEM-R5B-EOP	2/10/2020 11:20	XJ1715	D	C009249	1.73	1.99	0.0728	0.00127	0.00104	0.0618	<0.0001	<0.001	0.17	0.000017	53.4	0.0012	0.00058	0.00114	0.095	<0.0002	0.0695	28.5	0.0182	<0.000002	0.0108	0.0062	
RSEM-R5B-EOP	2/11/2020 15:30	XJ6272	M	C010122	2.17	2.07	0.0898	0.00127	0.00109	0.0663	<0.0001	<0.001	0.184	0.000019	53.9	0.001	0.0006	0.00109	0.094	<0.0002	0.0709	29.6	0.0177	<0.0000019	0.0107	0.0061	
RSEM-R5B-EOP	2/11/2020 15:40	XJ6273	D	C010122	2.56	2.10	0.0847	0.00125	0.00103	0.0661	<0.0001	<0.001	0.176	0.000027	53.5	<0.001	0.00059	0.0011	0.086	<0.0002	0.0695	29.6	0.0175	<0.0000019	0.0108	0.0061	
RSEM-R5B-EOP	2/12/2020 15:20	XJ8072	M	C010503	2.04	1.75	0.0762	0.00122	0.00108	0.0626	<0.0001	<0.001	0.191	0.000016	53.7	0.0017	0.00057	0.001	0.076	<0.0002	0.0695	28.5	0.0167	<0.0000019	0.0108	0.0061	
RSEM-R5B-EOP	2/12/2020 15:30	XJ8073	D	C010503	2.03	1.84	0.0845	0.00125	0.00104	0.0638	<0.0001	<0.001	0.189	0.000016	53.7	<0.001	0.00059	0.00124	0.101	<0.0002	0.0689	29.2	0.0174	<0.0000019	0.011	0.0064	
RSEM-R5B-EOP	2/13/2020 14:20	XJ9468	M	C010790	2.10	1.50	0.0909	0.00123	0.00107	0.0631	<0.0001	<0.001	0.182	0.000022	51.4	<0.001	0.00062	0.00113	0.09	<0.0002	0.0717	29.1	0.0176	<0.0000019	0.0106	0.0062	
RSEM-R5B-EOP	2/13/2020 14:30	XJ9469	D	C010790	2.28	2.08	0.0884	0.00126	0.00109	0.0648	<0.0001	<0.001	0.184	0.000017	52.6	<0.001	0.00061	0.00112	0.097	<0.0002	0.074	29.6	0.0178	<0.0000019	0.011	0.0063	
RSEM-R5B-EOP	2/14/2020 11:30	XJ9493	M	C010796	2.30	1.93	0.116	0.0013	0.00107	0.0644	<0.0001	<0.001	0.186	0.000016	52.2	<0.001	0.00061	0.00119	0.089	<0.0002	0.0737	29.6	0.0176	<0.0000019	0.0109	0.0062	
RSEM-R5B-EOP	2/14/2020 11:40	XJ9494	D	C010796	2.24	2.24	0.101	0.00126	0.00102	0.063	<0.0001	<0.001	0.178	0.000017	50.5	<0.001	0.0006	0.00115	0.103	<0.0002	0.0728	29.0	0.0177	<0.0000019	0.0106	0.0063	
RSEM-R5B-EOP	2/15/2020 12:10	XK0372	M	C011012	2.03	1.9	0.129	0.00125	0.00103	0.0593	<0.0001	<0.001	0.192	0.000019	51.5	0.0011	0.00059	0.00121	0.108	<0.0002	0.0699	26.7	0.0171	<0.0000019	0.0108	0.0062	
RSEM-R5B-EOP	2/15/2020 12:20	XK0373	D	C011012	2.07	1.8	0.118	0.00123	0.00099	0.0572	<0.0001	<0.001	0.186	0.000022	51.0	0.0011	0.0006	0.00121	0.11	<0.0002	0.0674	26.5	0.0169	<0.0000019	0.0108	0.0062	
RSEM-R5B-EOP	2/16/2020 14:00	XK3308	M	C011578	2.21	2.45	0.118	0.00126	0.00113	0.0642	<0.0001	<0.001	0.196	0.000019	53.3	0.0016	0.00056	0.00156	0.104	<0.0002	0.0663	28.2	0.0173	<0.0000019	0.0115	0.0057	
RSEM-R5B-EOP	2/16/2020 14:10	XK3307	D	C011578	2.17	2.17	0.123	0.00121	0.00113	0.0635	<0.0001	<0.001	0.193	0.000017	52.0	0.0015	0.00056	0.00153	0.102	<0.0002	0.0657	27.9	0.0174	<0.0000019	0.0115	0.0057	
RSEM-R5B-EOP	2/17/2020 16:20	XK3289	M	C011572	2.90	2.88	0.124	0.0013	0.00117	0.0631	<0.0001	<0.001	0.181	0.000016	50.0	0.0021	0.00049	0.00171	0.119	<0.0002	0.065	26.7	0.017	<0.0000019	0.0123	0.0052	
RSEM-R5B-EOP	2/17/2020 16:30	XK3290	D	C011572	2.98	2.37	0.124	0.0013	0.00116	0.0645	<0.0001	<0.001	0.191	0.000017	50.9	0.0022	0.00051	0.0017	0.112	<0.0002	0.0653	27.3	0.0172	<0.0000019	0.0124	0.0053	
RSEM-R5B-EOP	2/18/2020 12:40	XK4682	M	C011881	3.20	2.87	0.141	0.00135	0.00121	0.0607	<0.0001	<0.001	0.192	0.000017	48.1	0.0027	0.00045	0.0017	0.114	<0.0002	0.0674	26.2	0.0151	<0.0000019	0.0131	0.005	
RSEM-R5B-EOP	2/18/2020 12:50	XK4683	D	C011881	3.73	2.88	0.13	0.0014	0.00123	0.0614	<0.0001	<0.001	0.196	0.000019	49.5	0.0027	0.00044	0.00174	0.116	<0.0002	0.0683	26.3	0.0154	<0.0000019	0.0133	0.0049	
RSEM-R5B-EOP	2/19/2020 11:35	XK5999	M	C012192	3.24	3.15	0.114	0.00139	0.00117	0.0514	<0.0001	<0.001	0.184	0.000013	43.9	0.0028	0.00042	0.00164	0.104	<0.0002	0.0617	25.0	0.0132	<0.0000019	0.0128	0.0052	
RSEM-R5B-EOP	2/19/2020 11:45	XK6000	D	C012192	3.31	3.20	0.113	0.00138	0.00118	0.0533	<0.0001	<0.001	0.187	0.000018	45.9	0.0028	0.00042	0.00166	0.113	<0.0002	0.0634	25.7	0.0135	<0.0000019	0.0135	0.0054	
RSEM-R5B-EOP	2/20/2020 12:30	XK7909	M	C012680	3.34	3.22	0.0979	0.0015	0.0013	0.0517	<0.0001	<0.001	0.189	0.000017	47.2	0.003	0.00046	0.00166	0.083	<0.0002	0.0705	27.3	0.0125	<0.0000019	0.0145	0.006	
RSEM-R5B-EOP	2/20/2020 12:40	XK7910	D	C012680	3.91	3.49	0.0992	0.00148	0.0013	0.0518	<0.0001	<0.001	0.19	0.000017	47.3	0.0031	0.00045	0.00172	0.089	<0.0002	0.0694	27.6	0.0126	<0.0000019	0.0142	0.0061	
RSEM-R5B-EOP	2/21/2020 11:40	XK7931	M	C012683	3.47	3.39	0.0839	0.00144	0.0013	0.0444	<0.0001	<0.001	0.177	0.00002	48.9	0.0029	0.00044	0.00144	0.064	<0.0002	0.0667	28.3	0.0104	<0.0000019	0.0137	0.0071	
RSEM-R5B-EOP	2/21/2020 11:50	XK7932	D	C012683	3.59	3.52	0.0785	0.00145	0.00127	0.045	<0.0001	<0.001	0.184	0.00002	46.9	0.003	0.00046	0.00145	0.062	<0.0002	0.0669	28.5	0.0106	<0.0000019	0.014	0.0072	
RSEM-R5B-EOP	2/23/2020 11:40	XL1342	M	C013192	2.73	2.53	0.0561	0.00123	0.00122	0.0357	<0.0001	<0.001	0.18	0.000018	47.6	0.0024	0.00049	0.00108	0.048	<0.0002	0.063	28.5	0.0093	<0.0000019	0.0122	0.0083	
RSEM-R5B-EOP	2/23/2020 11:50	XL1343	D	C013192	2.75	2.55	0.052	0.00129	0.00121	0.036	<0.0001	<0.001	0.185	0.000021	48.7	0.0025	0.00051	0.00115	0.049	<0.0002	0.0627	29.0	0.0095	<0.0000019	0.0126	0.0085	
RSEM-R5B-EOP	2/24/2020 11:35	XL1317	M	C013183	2.90	2.60	0.052	0.00118	0.00113	0.0335	<0.0001	<0.001	0.166	0.000018	43.6	0.0024	0.00045	0.00131	0.05	<0.0002	0.0646	27.9	0.0082	<0.0000019	0.0115	0.0082	
RSEM-R5B-EOP	2/25/2020 11:00	XL5022	M	C014003	2.98	2.61	0.0624	0.00122	0.00125	0.0325	<0.0001	<0.001	0.187	0.000018	46.3	0.0028	0.00044	0.00125	0.05	<0.0002	0.0658	29.5	0.0074	<0.0000019	0.0116	0.0089	
RSEM-R5B-EOP	2/25/2020 11:10	XL5023	D	C014003	2.94	2.63	0.0537	0.00128	0.00125	0.032	<0.0001	<0.001	0.184	0.000015	46.4	0.0028	0.00043	0.00122	0.051	<0.0002	0.0644	29.2	0.0073	<0.0000019	0.0117	0.0087	
RSEM-R5B-EOP	2/26/2020 10:50	XL6611	M	C014425	3.02	2.60	0.0719	0.00126	0.00132	0.0384	<0.0001	<0.001	0.19	0.000018	45.7	0.0028	0.00045	0.0013	0.062	<0.0002	0.0658	29.2	0.0095	<0.0000019	0.0121	0.0089	
RSEM-R5B-EOP	2/26/2020 11:00	XL6612	D	C014425	2.89	2.67	0.0685	0.00124	0.00132	0.0388	<0.0001	<0.001	0.189	0.000024	46.6	0.0028	0.00045	0.00139	0.062	<0.0002	0.065	29.5	0.0097	<0.0000019	0.012	0.0092	
RSEM-R5B-EOP	2/27/2020 11:35	XL6657	M	C014448	3.17	2.46	0.0873	0.00115	0.00123	0.0453	<0.0001	<0.001	0.174	0.00002	49.2	0.0025	0.00052	0.00112	0.083	<0.0002	0.0616	27.9	0.0163	<0.0000019	0.0112	0.0087	
RSEM-R5B-EOP	2/28/2020 12:00	XL8820	M	C014870	2.85	2.32	0.109	0.00117	0.00121	0.043	<0.0001	<0.001	0.185	0.000021	50.7	0.0026	0.00063	0.00137	0.099	0.00045	0.0613	28.9	0.0171	<0.0000019	0.0111	0.0091	
RSEM-R5B-EOP	2/29/2020 12:25	XM2598	M	C015563	2.91	2.34	0.111	0.00126	0.00123	0.0513	<0.0001	<0.001	0.164	0.000037	50.2	0.0026	0.00097	0.00146	0.121	<0.0002	0.0581	26.9	0.0257	<0.0000019	0.0115	0.0094	
RSEM-R5B-EOP	3/1/2020 10:55	XM2630	M	C015569	3.30	2.75	0.136	0.00136	0.00126	0.0499	<0.0001	<0.001	0.169	0.000041	51.8	0.0028	0.00101	0.00166	0.119	<0.0002	0.0571	28.4	0.024	<0.0000019	0.0127	0.0094	
RSEM-R5B-EOP	3/2/2020 19:30	XM6322	M	C016408	3.86	3.43	0.13	0.00137	0.00117	0.0448	<0.0001	<0.001	0.171	0.000034	47.9	0.0026	0.00065	0.00182	0.096	<0.0002	0.0596	25.8	0.0164	<0.0000019	0.0125	0.0075	
RSEM-R5B-EOP	3/3/2020 11:50	XM6548	M	C016468	3.80	3.38	0.153	0.00139	0.00124	0.0473	<0.0001	<0.001	0.164	0.000036	48.3	0.0021	0.0008	0.00187	0.129	<0.0002	0.0505	26.3	0.0188	<0.0000019	0.0129	0.007	
RSEM-R5B-EOP	3/3/2020 12:00	XM6549	D	C016468	4.06	3.88	0.145	0.00145	0.00132	0.0492	<0.0001	<0.001	0.168	0.000043	49.7	0.0024	0.00084	0.00193	0.119	<0.0002	0.051	27.7	0.0201	<0.0000019	0.0135	0.0073	
RSEM-R5B-EOP	3/4/2020 16:20	XM8004	M	C016829	4.35	3.65	0.153	0.00145	0.0014	0.0498	<0.0001	<0.001	0.168	0.000039	51.9	0.0028	0.00078	0.00186	0.135	<0.0002	0.0497	26.3	0.0202	<0.0000019	0.0143	0.0065	
RSEM-R5B-EOP	3/4/2020 16:30	XM8005	D	C016829	4.01	3.49	0.15	0.00142	0.0014	0.0497	<0.0001	<0.001	0.167	0.000037	53.1	0.0028	0.00078	0.0019	0.135	<0.0002	0.0482	26.0	0.0197	<0.0000019	0.0144	0.0065	
RSEM-R5B-EOP	3/5/2020 15:20	XN0420	M	C017276	3.18	3.41	0.14	0.00143	0.00137	0.0484	<0.0001	<0.001	0.162	0.000037	48.6	0.0026	0.00065	0.00178	0.115	<0.0002	0.0468	24.1	0.0173	<0.0000019	0.0138	0.0056	
RSEM-R5B-EOP	3/5/2020 15:30	XN0421	D	C017276	4.09	2.78	0.142	0.00141	0.00138	0.0486	<0.0001	<0.001	0.162	0.000034	48.7	0.0027	0.00068	0.00179	0.119	<0.0002	0.0476	24.6	0.0175	<0.0000019	0.0139	0.0058	
RSEM-R5B-EOP	3/6/2020 11:20	XN0417	M	C017275	3.86	3.74	0.15	0.00147	0.00141	0.0497	<0.0001	<0.001	0.161	0.000031	48.8	0.003	0.00072	0.00163	0.114	<0.0002	0.0474	23.8	0.0168	<0.0000019	0.0147	0.0056	
RSEM-R5B-EOP	3/6/2020 11:30	XN0416	D	C017275	4.00	3.54	0.144	0.00149	0.00142	0.0498	<0.0001	<0.001	0.162	0.000038	48.0	0.003	0.00072	0.00164	0.108	<0.0002	0.0479	23.9	0.0169	<0.0000019	0.0145	0.0057	
RSEM-R5B-EOP	3/7/2020 11:20	XN3072	M	C017820	4.65	4.65	0.122	0.00138	0.00144	0.0476	<0.0001	<0.001	0.161	0.000028	44.7	0.0034	0.00055	0.00166	0.099	<0.0002	0.0466	23.0	0.0149	<0.0000019	0.0141	0.0047	
RSEM-R5B-EOP	3/7/2020 11:30	XN3073	D	C017820	4.52	4.51	0.129	0.00147	0.00145	0.0487	<0.0001	<0.001	0.169	0.000027	46.0	0.0035	0.00057	0.00166	0.099	<0.0002	0.0473	23.5	0.0152	<0.0000019	0.0145	0.0049	
RSEM-R5B-EOP	3/8/2020 11:30	XN2025	M	C017627	4.62	5.87	0.167	0.00155	0.00143	0.0515	<0.0001	<0.001	0.175	0.000025	44.4	0.0041	0.00044	0.00197	0.107	<0.0002	0.0494	23.0	0.0128	<0.0000019	0.0149	0.0042	
RSEM-R5B-EOP	3/8/2020 11:40	XN2026	D	C017627	6.12	5.81	0.183	0.00154	0.00146	0.0511	<0.0001	<0.001	0.17	0.000023	44.7	0.004	0.00043	0.00192	0.108	<0.0002	0.049	22.4	0.0126	<0.0000019	0.0147	0.0041	
RSEM-R5B-EOP	3/9/2020 14:40	XN3894	M	C018020	5.05	4.15	0.203	0.0015	0.00143	0.051	<0.0001	<0.001	0.169	0.000019	46.9	0.0046	0.00038	0.0022	0.115	<0.0002	0.0455	23.6	0.0123	<0.0000019	0.0145	0.0039	
RSEM-R5B-EOP	3/9/2020 14:50	XN3895	D	C018020	5.74	4.84	0.222	0.0015	0.0014	0.0507	<0.0001	<0.001	0.171	0.000019	47.2	0.0045	0.00039	0.00234	0.126	0.00033	0.046	23.2	0.0121	<0.0000019	0.0148	0.0039	
RSEM-R5B-EOP	3/10/2020 11:05	XN6088	M	C018396	4.31	4.67	0.178	0.00143	0.00144	0.0545	<0.0001	<0.001	0.167	0.000023	50.1	0.004	0.00041	0.00204	0.128	<0.0002	0.0426	23.2	0.0175	<0.0000019	0.0145	0.0039	
RSEM-R5B-EOP	3/11/2020 13:10	XN7890	M	C018851	4.86	4.59	0.22	0.00113	0.00129	0.0636	<0.0001	<0.001	0.137	0.000032	49.7	0.003	0.00054	0.00176	0.236	0.00023	0.0381	22.0	0.0269	<0.0000019	0.0113	0.0038	
RSEM-R5B-EOP	3/12/2020 10:55	XN8893	M	C019027	4.23	3.55	0.139	0.00104	0.00112	0.0626	<0.0001	<0.001	0.122	0.000049	47.8	0.0025	0.0012	0.00181	0.151	<0.0002	0.0342	21.3	0.037	<0.0000019	0.0098	0.0062	
RSEM-R5B-EOP	3/13/2020 12:30	XN9532	M	C019176	4.49	3.50	0.148	0.00099	0.00108	0.0559	<0.0001	<0.001	0.123	0.000047	46.5	0.0022	0.00103	0.00147	0.127	<0.0002	0.0377	20.4	0.03	<0.0000019	0.0097	0.0055	
RSEM-R5B-EOP	3/14/2020 12:25	XO0536	M	C019410	3.91	3.09	0.0953	0.00123	0.00129	0.0565	<0.0001	<0.001	0.133	0.000047	50.6	0.0026	0.00101	0.00165	0.084	<0.0002	0.0401	24.4	0.0273	<0.0000019	0.0117	0.0063	
RSEM-R5B-EOP	3/14/2020 12:35	XO0537	D	C019410	3.85	3.22	0.083	0.00108	0.00109	0.0488	<0.0001	<0.001	0.118	0.000042	43.7	0.0023	0.00088	0.00161	0.07	<0.0002	0.0345	21.2	0.0241	<0.0000019	0.0101	0.0055	
RSEM-R5B-EOP	3/15/2020 13:00	XO0653	M	C019435	4.60	3.44	0.0749	0.00118	0.00121	0.0404	<0.0001	<0.001	0.124	0.000033	42.2	0.0026	0.00061	0.00139	0.055	<0.0002	0.0363	21.0	0.0152	<0.0000019	0.011	0.0051	
RSEM-R5B-EOP	3/15/2020 13:10	XO0654	D	C019435	3.79	3.75	0.0777	0.00123	0.00128	0.0422	<0.0001	<0.001	0.13	0.000035	45.4	0.0027	0.00062	0.00153	0.057	<0.0002	0.0387	22.1	0.016	<0.0000019	0.0118	0.005	
RSEM-R5B-EOP	3/16/2020 12:50	XO2542	M	C019847	3.29	3.47	0.0698	0.00132	0.00155	0.0343	<0.0001	<0.001	0.153	0.000023	43.0	0.0031	0.00039	0.00143	0.047	<0.0002	0.0459	21.1	0.0089	<0.0000019	0.0136	0.0042	
RSEM-R5B-EOP	3/16/2020 13:00	XO2543	D	C019847	3.49	3.55	0.0725	0.00126	0.00157	0.0341	<0.0001	<0.001	0.155	0.000021	42.1	0.0031	0.00039	0.00136	0.046	<0.0002	0.0456	20.8	0.0088	<0.0000019	0.0134	0.0042	
RSEM-R5B-EOP	3/17/2020 12:05	XO3906	M	C020169	4.04	3.56	0.0703	0.00133	0.00165	0.031	<0.0001	<0.001	0.155	0.00002	40.1	0.0034	0.00031	0.00141	0.04	<0.0002	0.0469	20.6	0.0067	<0.0000019	0.0142	0.0039	
RSEM-R5B-EOP	3/17/2020 12:15	XO3907	D	C020169	4.11	3.19	0.0697	0.00137	0.00168	0.0308	<0.0001	<0.001	0.159	0.000018	39.7	0.0033	0.0003	0.00139	0.037	<0.0002	0.0463	19.9	0.0064	<0.0000019	0.0144	0.0039	
RSEM-R5B-EOP	3/18/2020 11:40	XO5557	M	C020445	3.89	2.98	0.0596	0.00127	0.00159	0.0299	<0.0001	<0.001	0.131	0.000019	39.6	0.0031	0.00026	0.00136	0.041	<0.0002	0.0484	20.6	0.0057	<0.0000019	0.0129	0.0036	
RSEM-R5B-EOP	3/18/2020 11:50	XO5558	D	C020445	3.89	3.03	0.0606	0.00132	0.00158	0.0301	<0.0001	<0.001	0.135	0.000019	38.5	0.003	0.00026	0.00135	0.039	<0.0002	0.0483	20.2	0.0059	<0.0000019	0.0131	0.0035	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R5B-EOP	3/19/2020 11:30	XO6999	M	C020738	2.98	2.30	0.125	0.00124	0.00155	0.0412	<0.0001	<0.001	0.143	0.000019	41.7	0.0029	0.00032	0.00175	0.101	<0.0002	0.0401	19.8	0.0101	<0.0000019	0.013	0.0036	
RSEM-R5B-EOP	3/19/2020 11:40	XO7000	D	C020738	2.52	2.56	0.135	0.00127	0.00159	0.0428	<0.0001	<0.001	0.147	0.000023	43.4	0.003	0.00032	0.0018	0.133	<0.0002	0.0401	20.3	0.0103	<0.0000019	0.0133	0.0036	
RSEM-R5B-EOP	3/20/2020 12:15	XO7002	M	C020739	2.13	2.54	0.145	0.00123	0.00142	0.0522	<0.0001	<0.001	0.14	0.000023	43.9	0.0024	0.00035	0.00173	0.142	<0.0002	0.0394	19.5	0.0132	<0.0000019	0.0122	0.0035	
RSEM-R5B-EOP	3/20/2020 12:25	XO7003	D	C020739	2.20	2.34	0.121	0.00114	0.00142	0.0504	<0.0001	<0.001	0.139	0.000022	43.3	0.0025	0.00034	0.00175	0.106	<0.0002	0.0382	19.1	0.0129	<0.0000019	0.0118	0.0035	
RSEM-R5B-EOP	3/21/2020 11:30	XO8297	M	C021037	2.25	2.47	0.144	0.00123	0.00142	0.0519	<0.0001	<0.001	0.146	0.000027	45.5	0.0026	0.00043	0.00186	0.135	<0.0002	0.0456	21.7	0.0146	<0.0000019	0.0121	0.0041	
RSEM-R5B-EOP	3/21/2020 11:40	XO8298	D	C021037	2.31	2.34	0.107	0.00125	0.00137	0.0529	<0.0001	<0.001	0.147	0.000023	45.3	0.0025	0.00042	0.00179	0.114	<0.0002	0.0455	21.1	0.0142	<0.0000019	0.0119	0.0039	
RSEM-R5B-EOP	3/22/2020 11:20	XO8419	M	C021064	2.41	2.15	0.202	0.00115	0.00133	0.0586	<0.0001	<0.001	0.134	0.000042	44.3	0.0023	0.00085	0.00183	0.339	0.00023	0.0472	20.8	0.0246	<0.0000019	0.0109	0.0057	
RSEM-R5B-EOP	3/22/2020 11:30	XO8420	D	C021064	2.45	2.17	0.235	0.00118	0.00128	0.0578	<0.0001	<0.001	0.138	0.000041	44.2	0.0023	0.0008	0.00178	0.332	0.00022	0.0456	19.9	0.0232	<0.0000019	0.0109	0.0055	
RSEM-R5B-EOP	3/23/2020 12:00	XO8465	M	C021073	2.59	2.69	0.081	0.00107	0.00097	0.0563	<0.0001	<0.001	0.122	0.000036	44.6	0.0015	0.00081	0.00144	0.136	<0.0002	0.049	20.2	0.0238	<0.0000019	0.0099	0.0065	
RSEM-R5B-EOP	3/24/2020 13:10	XP0444	M	C021618	2.43	2.12	0.085	0.00108	0.00097	0.0546	<0.0001	<0.001	0.125	0.000042	46.5	0.0013	0.00089	0.00132	0.126	<0.0002	0.0519	21.6	0.0247	<0.0000019	0.0096	0.0075	
RSEM-R5B-EOP	3/24/2020 13:20	XP0441	D	C021618	2.33	2.19	0.0923	0.00102	0.00098	0.0528	<0.0001	<0.001	0.125	0.000042	46.1	0.0013	0.00086	0.00127	0.128	<0.0002	0.0513	21.0	0.0237	0.000002	0.0095	0.0072	
RSEM-R5B-EOP	3/25/2020 12:50	XP1314	M	C021872	2.50	2.09	0.0634	0.00108	0.00091	0.0494	<0.0001	<0.001	0.124	0.000042	46.9	0.0012	0.00089	0.00121	0.081	<0.0002	0.0616	22.6	0.0223	0.0000029	0.0095	0.0089	
RSEM-R5B-EOP	3/25/2020 13:00	XP1315	D	C021872	2.91	2.06	0.0782	0.00109	0.0009	0.0503	<0.0001	<0.001	0.125	0.00004	48.5	0.0011	0.0009	0.00123	0.096	<0.0002	0.0598	22.4	0.0225	<0.0000019	0.0098	0.0089	
RSEM-R5B-EOP	3/26/2020 14:10	XP2433	M	C022151	2.44	1.85	0.126	0.00134	0.00104	0.0512	<0.0001	<0.001	0.126	0.000043	46.7	0.0014	0.00082	0.00166	0.198	<0.0002	0.0553	21.8	0.0212	<0.0000019	0.0101	0.009	
RSEM-R5B-EOP	3/26/2020 14:20	XP2434	D	C022151	1.99	2.47	0.501	0.00117	0.00111	0.0596	<0.0001	<0.001	0.1	0.000048	36.5	0.0019	0.00085	0.00339	0.688	0.00044	0.0395	16.1	0.0296	0.0000034	0.0079	0.007	
RSEM-R5B-EOP	3/27/2020 10:50	XP2503	M	C022160	2.89	2.03	0.278	0.00165	0.00141	0.0599	<0.0001	<0.001	0.124	0.000049	40.1	0.002	0.00116	0.00168	0.447	0.0003	0.0424	17.2	0.0329	<0.0000019	0.011	0.008	
RSEM-R5B-EOP	3/27/2020 11:00	XP2504	D	C022160	3.08	2.76	0.31	0.00167	0.00135	0.0607	<0.0001	<0.001	0.127	0.00005	40.2	0.0021	0.00118	0.00184	0.453	0.00031	0.0426	17.2	0.0341	<0.0000019	0.011	0.008	
RSEM-R5B-EOP	3/28/2020 14:10	XP3712	M	C022531	2.39	2.52	0.204	0.0016	0.00148	0.0582	<0.0001	<0.001	0.135	0.000032	35.9	0.0026	0.00093	0.00155	0.302	0.0002	0.0473	16.3	0.0281	<0.0000019	0.0118	0.0065	
RSEM-R5B-EOP	3/28/2020 14:20	XP3713	D	C022531	3.25	2.26	0.196	0.0016	0.00151	0.0587	<0.0001	<0.001	0.14	0.000032	36.5	0.0027	0.00094	0.00162	0.334	0.0002	0.0471	16.7	0.0288	<0.0000019	0.012	0.0066	
RSEM-R5B-EOP	3/29/2020 15:30	XP3675	M	C022512	2.62	2.48	0.122	0.00174	0.00167	0.0544	<0.0001	<0.001	0.153	0.000027	38.3	0.0031	0.00072	0.00145	0.144	<0.0002	0.0535	18.8	0.0206	<0.0000019	0.0132	0.0058	
RSEM-R5B-EOP	3/30/2020 15:00	XP5011	M	C022895	2.34	2.76	0.1	0.00197	0.00172	0.0546	<0.0001	<0.001	0.162	0.000025	42.2	0.0045	0.00073	0.00176	0.088	<0.0002	0.055	23.2	0.019	<0.0000019	0.0155	0.0065	
RSEM-R5B-EOP	3/31/2020 12:00	XP6323	M	C023153	3.18	3.18	0.11	0.00205	0.00185	0.0561	<0.0001	<0.001	0.175	0.00002	45.6	0.0051	0.00063	0.00192	0.061	<0.0002	0.0589	25.4	0.0159	<0.0000019	0.0158	0.0076	
RSEM-R5B-EOP	3/31/2020 12:10	XP6324	D	C023153	3.37	2.85	0.112	0.00201	0.00194	0.0539	<0.0001	<0.001	0.171	0.000024	42.8	0.0049	0.00062	0.00168	0.063	<0.0002	0.057	24.2	0.0148	<0.0000019	0.0159	0.0071	
RSEM-R5B-EOP	4/1/2020 12:10	XP6344	M	C023159	3.28	2.78	0.115	0.00199	0.00189	0.0528	<0.0001	<0.001	0.177	0.000019	44.0	0.0048	0.00048	0.00144	0.074	<0.0002	0.058	25.1	0.0139	<0.0000019	0.0153	0.0067	
RSEM-R5B-EOP	4/1/2020 12:20	XP6345	D	C023159	3.25	2.97	0.116	0.00178	0.00155	0.0536	<0.0001	<0.001	0.174	0.000017	43.3	0.0047	0.00049	0.00147	0.081	<0.0002	0.0554	23.8	0.014	<0.0000019	0.0152	0.0066	
RSEM-R5B-EOP	4/2/2020 11:00	XP7671	M	C023465	3.10	2.24	0.0926	0.00178	0.00187	0.0507	<0.0001	<0.001	0.169	0.000022	43.7	0.005	0.00051	0.00149	0.05	<0.0002	0.0569	26.1	0.0154	<0.0000019	0.014	0.0077	
RSEM-R5B-EOP	4/2/2020 11:10	XP7672	D	C023465	2.94	2.28	0.0852	0.00168	0.00163	0.0502	<0.0001	<0.001	0.171	0.00003	42.6	0.0047	0.00047	0.0013	0.047	<0.0002	0.0577	24.5	0.0135	<0.0000019	0.0137	0.0067	
RSEM-R5B-EOP	4/3/2020 11:10	XP9111	M	C023756	2.35	2.09	0.0965	0.00158	0.00141	0.046	<0.0001	<0.001	0.156	<0.00001	41.5	0.0049	0.00043	0.00147	0.063	<0.0002	0.0547	24.8	0.0115	<0.0000019	0.0133	0.0062	
RSEM-R5B-EOP	4/3/2020 11:20	XP9112	D	C023756	2.34	2.36	0.0982	0.00146	0.00127	0.046	<0.0001	<0.001	0.162	0.000013	43.1	0.0049	0.00047	0.00162	0.059	<0.0002	0.0566	26.2	0.0129	<0.0000019	0.0131	0.0068	
RSEM-R5B-EOP	4/4/2020 11:30	XQ0607	M	C024053	2.31	2.18	0.103	0.00163	0.00161	0.0453	<0.0001	<0.001	0.164	0.000023	42.9	0.0044	0.0004	0.00313	0.054	<0.0002	0.0566	25.8	0.0102	<0.0000019	0.0136	0.0062	
RSEM-R5B-EOP	4/4/2020 11:40	XQ0608	D	C024053	2.49	2.16	0.114	0.00166	0.00167	0.0472	<0.0001	<0.001	0.173	0.000024	43.5	0.0048	0.00046	0.00147	0.06	<0.0002	0.0588	26.1	0.0111	<0.0000019	0.0141	0.0063	
RSEM-R5B-EOP	4/5/2020 12:20	XQ0577	M	C024048	2.33	2.08	0.103	0.00155	0.00128	0.0463	<0.0001	<0.001	0.163	0.000015	45.7	0.0046	0.00049	0.00151	0.071	<0.0002	0.0558	28.6	0.013	<0.0000019	0.0127	0.0066	
RSEM-R5B-EOP	4/5/2020 12:30	XQ0578	D	C024048	2.38	2.07	0.107	0.00161	0.0012	0.0453	<0.0001	<0.001	0.166	0.000016	43.7	0.0048	0.00051	0.00154	0.08	<0.0002	0.0559	26.3	0.0121	<0.0000019	0.0127	0.0059	
RSEM-R5B-EOP	4/6/2020 12:25	XQ1945	M	C024407	2.34	2.05	0.109	0.00168	0.00161	0.051	<0.0001	<0.001	0.173	<0.00001	49.0	0.0045	0.00048	0.00109	0.061	<0.0002	0.0574	31.8	0.0146	<0.0000019	0.0133	0.0068	
RSEM-R5B-EOP	4/6/2020 12:35	XQ1946	D	C024407	2.48	2.23	0.114	0.00161	0.0018	0.0527	<0.0001	<0.001	0.179	0.000015	52.2	0.0049	0.00054	0.00103	0.062	<0.0002	0.0599	31.3	0.0152	<0.0000019	0.0141	0.0068	
RSEM-R5B-EOP	4/7/2020 11:50	XQ3412	M	C024753	2.05	1.82	0.112	0.00154	0.00151	0.0569	<0.0001	<0.001	0.171	0.000021	52.5	0.0042	0.00058	0.00094	0.094	<0.0002	0.0553	30.9	0.019	0.0000046	0.0136	0.0061	
RSEM-R5B-EOP	4/7/2020 12:00	XQ3413	D	C024753	2.26	1.89	0.104	0.00159	0.0014	0.0563	<0.0001	<0.001	0.167	0.00002	51.6	0.0043	0.00052	0.00082	0.082	<0.0002	0.0544	30.9	0.0179	<0.0000019	0.0132	0.0064	
RSEM-R5B-EOP	4/8/2020 11:30	XQ4587	M	C024938	3.26	2.47	0.379	0.00111	0.00108	0.0839	<0.0001	<0.001	0.112	0.00005	49.0	0.0059	0.00116	0.00361	0.523	0.00035	0.0325	25.5	0.047	0.0000042	0.0096	0.0111	
RSEM-R5B-EOP	4/8/2020 11:40	XQ4588	D	C024938	3.23	2.54	0.469	0.00109	0.00088	0.0891	<0.0001	<0.001	0.118	0.000056	53.2	0.0033	0.0012	0.00204	0.742	0.00039	0.034	25.7	0.0498	0.0000034	0.0097	0.0065	
RSEM-R5B-EOP	4/9/2020 12:20	XQ4586	M	C024937	3.67	2.88	1.02	0.00087	0.00153	0.0787	<0.0001	<0.001	0.085	0.000058	38.5	0.0042	0.00089	0.00233	1.34	0.00064	0.0284	20.3	0.0464	0.0000066	0.0081	0.0063	
RSEM-R5B-EOP	4/10/2020 11:30	XQ5867	M	C025257	3.94	2.83	1.09	0.00079	0.00137	0.0951	<0.0001	<0.001	0.079	0.000067	52.4	0.0039	0.00164	0.00332	2.01	0.00109	0.0272	21.8	0.0815	0.0000064	0.0078	0.0089	
RSEM-R5B-EOP	4/10/2020 11:40	XQ5868	D	C025257	3.91	2.61	0.994	0.00074	0.00155	0.0955	<0.0001	<0.001	0.076	0.000063	43.9	0.0047	0.00158	0.00359	1.84	0.00111	0.0247	18.2	0.0713	0.000007	0.0073	0.0078	
RSEM-R5B-EOP	4/11/2020 18:50	XQ5966	M	C025274	3.83	3.63	0.121	0.00096	0.00095	0.0587	<0.0001	<0.001	0.1	0.00006	45.7	0.0034	0.00165	0.00198	0.16	<0.0002	0.0348	24.5	0.0591	0.0000038	0.0101	0.0094	
RSEM-R5B-EOP	4/12/2020 13:35	XQ6093	M	C025305	3.78	3.37	0.104	0.00095	0.00126	0.0578	<0.0001	<0.001	0.108	0.000037	49.3	0.0035	0.00155	0.00179	0.154	<0.0002	0.037	23.2	0.048	0.0000028	0.0105	0.0092	
RSEM-R5B-EOP	4/12/2020 13:45	XQ6094	D	C025305	3.90	3.36	0.107	0.00107	0.00118	0.0581	<0.0001	<0.001	0.107	0.000053	47.9	0.0035	0.00151	0.00168	0.165	<0.0002	0.0368	22.8	0.0504	0.0000022	0.0104	0.0098	
RSEM-R5B-EOP	4/13/2020 10:30	XQ5692	M	C025217	3.63	3.31	0.175	0.00109	0.00126	0.0582	<0.0001	<0.001	0.096	0.000038	50.5	0.0037	0.0012	0.00094	0.184	<0.0002	0.0352	21.3	0.0385	0.0000026	0.0109	0.0086	
RSEM-R5B-EOP	4/14/2020 18:05	XQ8327	M	C025913	3.56	2.99	0.0816	0.001	0.00145	0.0533	<0.0001	<0.001	0.083	0.000058	43.5	0.0035	0.00116	0.00229	0.134	<0.0002	0.0362	18.9	0.0376	<0.0000019	0.0105	0.0091	
RSEM-R5B-EOP	4/15/2020 13:05	XQ9337	M	C026226	4.23	3.14	0.0819	0.0012	0.00189	0.0587	<0.0001	<0.001	0.087	0.000056	44.3	0.0034	0.00131	0.00171	0.264	<0.0002	0.0397	18.2	0.0456	0.000024	0.0113	0.0094	
RSEM-R5B-EOP	4/15/2020 13:15	XQ9338	D	C026226	4.63	3.48	0.0977	0.00118	0.00186	0.0589	<0.0001	<0.001	0.085	0.000053	43.2	0.0036	0.00156	0.0017	0.292	0.00021	0.0396	17.6	0.0437	0.000003	0.0122	0.0092	
RSEM-R5B-EOP	4/16/2020 12:30	XR0406	M	C026516	3.94	2.82	0.12	0.00127	0.00171	0.0536	<0.0001	<0.001	0.084	0.000051	41.5	0.0042	0.00152	0.00159	0.515	0.00026	0.0374	15.7	0.0451	0.0000058	0.0116	0.0092	
RSEM-R5B-EOP	4/16/2020 12:40	XR0407	D	C026516	3.70	3.18	0.0679	0.00115	0.00163	0.0547	<0.0001	<0.001	0.099	0.00006	44.3	0.005	0.00166	0.00176	0.172	<0.0002	0.0426	17.7	0.0527	0.0000054	0.0121	0.0107	
RSEM-R5B-EOP	4/17/2020 11:25	XR0398	M	C026514	3.61	3.15	0.0693	0.00127	0.00163	0.0519	<0.0001	<0.001	0.095	0.00005	40.4	0.0048	0.00194	0.00183	0.196	<0.0002	0.044	17.5	0.0513	0.0000036	0.0119	0.0113	
RSEM-R5B-EOP	4/18/2020 10:30	XR2299	M	C026869	3.08	3.15	0.0727	0.00122	0.00138	0.0451	<0.0001	<0.001	0.092	0.000073	37.9	0.0053	0.00215	0.00152	0.172	<0.0002	0.0447	15.9	0.0555	0.0000035	0.011	0.0127	
RSEM-R5B-EOP	4/18/2020 10:40	XR2300	D	C026869	<2.5	3.19	0.0662	0.00117	0.00138	0.0435	<0.0001	<0.001	0.087	0.000073	35.6	0.0068	0.00185	0.00142	0.163	<0.0002	0.0426	15.5	0.0535	0.0000038	0.0105	0.013	
RSEM-R5B-EOP	4/19/2020 14:45	XR2517	M	C026927	2.67	2.49	0.0969	0.00142	0.00182	0.0478	<0.0001	<0.001	0.104	0.00009	40.3	0.0043	0.00214	0.00159	0.193	<0.0002	0.0558	18.3	0.0572	0.0000026	0.0122	0.0135	
RSEM-R5B-EOP	4/20/2020 16:40	XR3425	M	C027099	2.63	1.98	0.0542	0.00143	0.00172	0.0429	<0.0001	<0.001	0.106	0.000064	39.0	0.004	0.00137	0.00116	0.092	<0.0002	0.0601	17.4	0.0327	0.0000035	0.0123	0.0114	
RSEM-R5B-EOP	4/21/2020 11:20	XR4950	M	C027465	2.60	2.22	0.0873	0.00158	0.00188	0.0456	<0.0001	<0.001	0.127	0.000055	37.3	0.0044	0.00131	0.00229	0.154	0.00038	0.0615	18.2	0.0356	0.000003	0.0129	0.0116	
RSEM-R5B-EOP	4/21/2020 11:30	XR4951	D	C027465	2.62	2.14	0.0841	0.00143	0.00186	0.0494	<0.0001	<0.001	0.143	0.000059	40.3	0.0043	0.00158	0.00294	0.14	<0.0002	0.0713	20.3	0.0381	0.0000027	0.014	0.0122	
RSEM-R5B-EOP	4/22/2020 11:30	XR6353	M	C027799	2.07	2.41	0.121	0.00182	0.00258	0.0604	<0.0001	<0.001	0.153	0.000033	48.9	0.0065	0.00179	0.00231	0.198	0.00025	0.0828	25.1	0.044	0.0000025	0.0168	0.0152	
RSEM-R5B-EOP	4/22/2020 11:40	XR6354	D	C027799	2.69	2.31	0.141	0.00214	0.00241	0.0661	<0.0001	<0.001	0.165	0.000027	53.6	0.0025	0.00171	0.00238	0.208	<0.0002	0.0895	26.0	0.0444	0.0000026	0.0185	0.0158	
RSEM-R5B-EOP	4/23/2020 14:05	XR7182	M	C027994	2.44	2.36	0.0495	0.0013	0.00165	0.0406	<0.0001	<0.001	0.113	0.000026	36.2	0.0034	0.00114	0.0012	0.057	0.00022	0.0629	18.0	0.0239	0.0000026	0.0116	0.0102	
RSEM-R5B-EOP	4/24/2020 11:05	XR7266	M	C028014	2.38	2.67	0.0499	0.00154	0.00139	0.0402	<0.0001	<0.001	0.127	0.000043	45.4	0.0035	0.00124	0.00123	0.047	<0.0002	0.0744	22.7	0.0256	<0.0000019	0.0128	0.0114	
RSEM-R5B-EOP	4/24/2020 11:15	XR7267	D	C028014	2.10	2.47	0.0487	0.00149	0.00138	0.0419	<0.0001	<0.001	0.132	0.000036	45.0	0.0031	0.00117	0.00132	0.054	<0.0002	0.0744	21.8	0.0242	<0.0000019	0.0127	0.0106	
RSEM-R5B-EOP	4/25/2020 11:05	XR8893	M	C028412	3.30	2.80	0.0543	0.00233	0.00152	0.0436	<0.0001	<0.001	0.136	<0.00001	51.8	0.0031	0.00122	0.00123	0.044	<0.0002	0.0951	25.0	0.0226	<0.0000019	0.0158	0.0117	
RSEM-R5B-EOP	4/25/2020 11:15	XR8894	D	C028412	3.42	2.53	0.0558	0.00207	0.00135	0.0417	<0.0001	<0.001	0.13	0.000011	49.5	0.0032	0.0011	0.00109	0.035	<0.0002	0.0914	24.6	0.0216	<0.0000019	0.0157	0.0113	
RSEM-R5B-EOP	4/26/2020 11:50	XR8990	M	C028429	3.17	2.53	0.0671	0.00238	0.00136	0.0421	<0.0001	<0.001	0.143	0.000042	51.8	0.0036	0.00091	0.00164	0.042	<0.0002	0.101	26.4	0.0179	<0.0000019	0.0177	0.0123	
RSEM-R5B-EOP	4/26/2020 12:00	XR8991	D	C028429	3.05	3.01	0.0487	0.00236	0.00164	0.042	<0.0001	<0.001	0.151	0.000022	51.5	0.003	0.00079	0.00124	0.041	<0.0002	0.104	26.7	0.0171	<0.0000019	0.0186	0.0113	
RSEM-R5B-EOP	4/27/2020 13:05	XS0059	M	C028666	2.90	3.38	0.0446	0.00229	0.00101	0.0343	<0.0001	<0.001	0.127	0.000012	41.7	0.0024	0.00059	0.00085	0.028	<0.0002	0.0877	23.1	0.01	<0.0000019	0.0164	0.0072	
RSEM-R5B-EOP	4/28/2020 14:10	XS2090	M	C029151	2.56	2.88	0.0567	0.00212	0.001	0.0335	<0.0001	<0.001	0.181	0.000034	42.8	0.0022	0.00042	0.00071	0.057	<0.0002	0.0913	20.8	0.0053	<0.0000019	0.0167	0.0052	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R5B-EOP	4/29/2020 11:45	XS3520	M	C029452	3.15	2.65	0.0511	0.00233	0.00139	0.0347	<0.0001	<0.001	0.183	<0.00001	39.2	0.0028	0.00029	0.00108	0.056	<0.0002	0.0955	23.4	0.0058	<0.0000019	0.0188	0.0059	
RSEM-R5B-EOP	4/30/2020 11:45	XS4884	M	C029734	2.64	2.18	0.0504	0.00265	0.00154	0.0327	<0.0001	<0.001	0.154	0.000016	41.6	0.0032	0.00036	0.00108	0.046	<0.0002	0.0922	25.7	0.0068	<0.0000019	0.0179	0.0057	
RSEM-R5B-EOP	5/1/2020 12:00	XS5998	M	C029956	2.26	2.19	0.0634	0.00293	0.00177	0.0358	<0.0001	<0.001	0.176	0.000037	40.1	0.0027	0.0003	0.0012	0.051	<0.0002	0.0987	25.0	0.0068	<0.0000019	0.019	0.0056	
RSEM-R5B-EOP	5/2/2020 12:35	XS7463	M	C030328	2.85	2.24	0.0633	0.00279	0.002	0.0369	<0.0001	<0.001	0.147	0.000025	40.7	0.003	0.00035	0.00268	0.064	<0.0002	0.097	24.8	0.0064	<0.0000019	0.0193	0.0055	
RSEM-R5B-EOP	5/4/2020 14:30	XS8356	M	C030506	2.37	2.04	0.0983	0.00248	0.00095	0.0364	<0.0001	<0.001	0.172	0.00007	39.1	0.0036	0.00096	0.00154	0.127	<0.0002	0.0912	24.0	0.0588	<0.0000019	0.0151	0.0099	
RSEM-R5B-EOP	5/7/2020 12:00	XT2577	M	C031444	2.29	2.05	0.0698	0.00294	0.0016	0.0469	<0.0001	<0.001	0.219	0.000028	46.1	0.0033	0.00034	0.00188	0.075	<0.0002	0.131	30.8	0.007	<0.0000019	0.0226	0.006	
RSEM-R5B-EOP	5/8/2020 13:00	XT2572	M	C031442	2.14	2.25	0.0515	0.00244	0.00153	0.0418	<0.0001	<0.001	0.182	0.000025	42.1	0.003	0.0003	0.00165	0.068	<0.0002	0.104	27.0	0.0064	<0.0000019	0.0191	0.005	
RSEM-R5B-EOP	5/9/2020 12:40	XT4488	M	C031859	2.46	2.16	0.0506	0.00212	0.00137	0.038	<0.0001	<0.001	0.182	0.000014	42.6	0.0038	<0.0002	0.00151	0.069	<0.0002	0.081	28.4	0.0052	<0.0000019	0.017	0.0049	
RSEM-R5B-EOP	5/9/2020 12:50	XT4490	D	C031859	2.36	2.39	0.0597	0.00269	0.00174	0.046	<0.0001	<0.001	0.189	0.000018	49.7	0.0039	0.00026	0.00186	0.082	<0.0002	0.0973	34.4	0.0062	<0.0000019	0.0204	0.0056	
RSEM-R5B-EOP	5/10/2020 13:30	XT4528	M	C031867	2.40	2.32	0.046	0.00205	0.0011	0.0378	<0.0001	<0.001	0.156	0.000034	42.5	0.0024	<0.0002	0.00135	0.055	<0.0002	0.0762	28.2	0.005	<0.0000019	0.0154	0.0039	
RSEM-R5B-EOP	5/11/2020 9:45	XT5198	M	C032074	2.30	2.21	0.0524	0.00227	0.001	0.0436	<0.0001	<0.001	0.193	0.000019	43.5	0.0026	0.00023	0.00147	0.051	<0.0002	0.0949	28.3	0.0045	<0.0000019	0.0172	0.0037	
RSEM-R5B-EOP	5/12/2020 11:40	XT7069	M	C032509	2.78	2.61	0.0611	0.00251	0.00138	0.0493	<0.0001	<0.001	0.211	<0.00001	50.6	0.0026	<0.0002	0.00222	0.064	<0.0002	0.105	31.5	0.0051	<0.0000019	0.0191	0.0042	
RSEM-R5B-EOP	5/16/2020 12:00	XU2649	M	C033733	2.49	2.58	0.059	0.00231	0.00092	0.0508	<0.0001	<0.001	0.172	<0.00001	50.7	0.0046	0.00024	0.00196	0.077	<0.0002	0.0835	31.7	0.0045	<0.0000019	0.0189	0.0047	
RSEM-R5B-EOP	5/17/2020 10:40	XU2515	M	C033704	2.54	2.36	0.0415	0.00233	0.00094	0.0484	<0.0001	<0.001	0.158	<0.00001	51.3	0.0029	<0.0002	0.00292	0.037	<0.0002	0.0859	32.7	0.0039	<0.0000019	0.0176	0.0035	
RSEM-R5B-EOP	5/18/2020 0:10	XU2636	M	C033728	2.52	2.19	0.0341	0.00224	0.00084	0.0475	<0.0001	<0.001	0.158	<0.00001	46.7	0.002	0.00021	0.00224	0.037	<0.0002	0.0788	29.8	0.0035	<0.0000019	0.0173	0.0031	
RSEM-R5B-EOP	5/21/2020 14:30	XU7000	M	C034623	2.14	2.48	0.0513	0.00166	0.00095	0.0427	<0.0001	<0.001	0.132	<0.00001	41.6	0.0025	<0.0002	0.00448	0.067	<0.0002	0.0753	27.5	0.0047	<0.0000019	0.0135	0.0053	
RSEM-R5B-EOP	5/22/2020 15:40	XU8403	M	C034984	2.26	2.30	0.0377	0.00174	0.00084	0.0433	<0.0001	<0.001	0.132	0.000016	40.0	0.0037	<0.0002	0.00257	0.053	<0.0002	0.0676	25.5	0.004	<0.0000019	0.0131	0.0033	
RSEM-R5B-EOP	6/9/2020 17:10	XX3628	M	C039793	1.90	2.74	0.338	0.00111	0.00113	0.0777	<0.0001	<0.001	0.126	0.00003	56.3	0.0011	0.00044	0.00316	0.569	0.00032	0.0562	29.5	0.0233	0.0000034	0.0109	0.0037	
RSEM-R5B-EOP	6/14/2020 15:25	XX9648	M	C040993	3.03	2.31	0.535	0.0009	0.00151	0.108	<0.0001	<0.001	0.096	0.00005	62.8	0.0014	0.00085	0.00367	1.4	0.00075	0.0442	27.2	0.0437	0.0000061	0.0086	0.005	
RSEM-R5B-EOP	6/15/2020 16:30	XY1607	M	C041415	2.62	2.31	0.396	0.00085	0.00087	0.107	<0.0001	<0.001	0.078	0.000103	67.3	0.0017	0.00339	0.00208	0.407	0.00026	0.0223	16.1	0.123	0.0000022	0.006	0.0137	
RSEM-R5B-EOP	6/16/2020 11:25	XY1507	M	C041388	2.44	2.16	0.219	0.0009	0.00064	0.115	<0.0001	<0.001	0.087	0.000404	81.0	0.0013	0.0113	0.00171	0.181	<0.0002	0.0307	21.5	0.304	<0.0000019	0.0059	0.0414	
RSEM-R5B-EOP	6/17/2020 13:20	XY6279	M	C042380	2.38	2.55	0.0783	0.00092	0.00054	0.116	<0.0001	<0.001	0.1	0.000384	88.6	0.001	0.0128	0.00145	0.082	<0.0002	0.0369	24.1	0.388	<0.0000019	0.0061	0.0463	
RSEM-R5B-EOP	6/18/2020 14:30	XY6286	M	C042383	2.40	2.37	0.0697	0.00097	0.00058	0.116	<0.0001	<0.001	0.111	0.000528	95.9	<0.001	0.0159	0.00146	0.072	<0.0002	0.0458	28.0	0.459	<0.0000019	0.0063	0.0581	
RSEM-R5B-EOP	6/19/2020 12:00	XY6265	M	C042375	2.50	1.92	0.058	0.00097	0.00054	0.116	<0.0001	<0.001	0.115	0.000533	97.2	0.001	0.0158	0.00127	0.04	<0.0002	0.0475	28.1	0.451	<0.0000019	0.0065	0.0595	
RSEM-R5B-EOP	6/19/2020 12:10	XY6266	D	C042375	2.44	2.35	0.0531	0.00097	0.00056	0.117	<0.0001	<0.001	0.118	0.000519	98.1	0.001	0.0162	0.00134	0.04	<0.0002	0.047	29.3	0.463	<0.0000019	0.0065	0.061	
RSEM-R5B-EOP	6/20/2020 15:30	XY9032	M	C042884	2.53	1.86	0.0494	0.00101	0.00057	0.11	<0.0001	<0.001	0.118	0.000495	95.8	<0.001	0.0143	0.00132	0.03	<0.0002	0.0465	28.8	0.402	<0.0000019	0.0066	0.0572	
RSEM-R5B-EOP	6/21/2020 14:45	XY9119	M	C042904	2.74	1.86	0.0681	0.00107	0.00063	0.11	<0.0001	<0.001	0.125	0.000459	97.5	<0.001	0.0132	0.00132	0.058	<0.0002	0.049	29.5	0.363	<0.0000019	0.0071	0.0561	
RSEM-R5B-EOP	6/22/2020 12:30	XZ0405	M	C043197	2.46	1.97	0.0637	0.00119	0.00068	0.113	<0.0001	<0.001	0.12	0.000408	92.3	0.0013	0.0116	0.00163	0.101	<0.0002	0.0523	30.3	0.33	<0.0000019	0.0076	0.0524	
RSEM-R5B-EOP	6/23/2020 16:40	XZ2251	M	C043604	2.27	1.95	0.0573	0.00131	0.00076	0.112	<0.0001	<0.001	0.128	0.000307	92.3	0.0011	0.00878	0.00128	0.069	<0.0002	0.0543	30.8	0.251	<0.0000019	0.0081	0.0453	
RSEM-R5B-EOP	6/24/2020 13:50	XZ5350	M	C044267	2.09	2.01	0.141	0.00136	0.00092	0.114	<0.0001	<0.001	0.147	0.000313	95.4	0.0013	0.0107	0.00177	0.25	<0.0002	0.0577	31.8	0.281	<0.0000019	0.0083	0.049	
RSEM-R5B-EOP	6/25/2020 16:30	XZ5986	M	C044346	2.49	2.08	0.118	0.00144	0.0009	0.112	<0.0001	<0.001	0.154	0.000235	95.3	0.0014	0.00692	0.00166	0.212	<0.0002	0.0592	31.9	0.177	<0.0000019	0.0086	0.0406	
RSEM-R5B-EOP	6/26/2020 15:20	XZ7318	M	C044624	2.33	<2.5	0.0559	0.00148	0.00089	0.109	<0.0001	<0.001	0.165	0.000166	95.4	0.0013	0.00488	0.00135	0.065	<0.0002	0.0591	32.1	0.126	<0.0000019	0.0089	0.036	
RSEM-R5B-EOP	6/27/2020 18:20	XZ9067	M	C044897	3.0	1.96	0.086	0.00154	0.00095	0.107	<0.0001	<0.001	0.163	0.000154	94.5	0.0013	0.00396	0.00143	0.1	<0.0002	0.0568	31.1	0.0996	<0.0000019	0.0093	0.0325	
RSEM-R5B-EOP	6/28/2020 11:15	XZ9157	M	C044916	<2.5	2.03	0.0919	0.00154	0.00101	0.104	<0.0001	<0.001	0.165	0.000113	89.4	0.0014	0.00312	0.00149	0.115	<0.0002	0.0571	30.5	0.0757	<0.0000019	0.0096	0.0287	
RSEM-R5B-EOP	6/29/2020 15:00	YA0780	M	C045275	2.51	2.54	0.0756	0.00176	0.00112	0.104	<0.0001	<0.001	0.171	0.00009	87.2	0.0015	0.00229	0.00169	0.107	<0.0002	0.0541	30.7	0.0545	<0.0000019	0.0105	0.0252	
RSEM-R5B-EOP	6/29/2020 15:10	YA0781	D	C045275	2.37	2.29	0.0808	0.00178	0.00113	0.102	<0.0001	<0.001	0.173	0.000091	87.6	0.0016	0.00221	0.00155	0.107	<0.0002	0.055	30.1	0.0523	<0.0000019	0.0104	0.0247	
RSEM-R5B-EOP	6/30/2020 12:35	YA2736	M	C045692	<2.5	1.71	0.088	0.00183	0.00125	0.0993	<0.0001	<0.001	0.177	0.000063	80.8	0.0017	0.0016	0.00137	0.138	<0.0002	0.057	29.5	0.0388	<0.0000019	0.0106	0.0212	
RSEM-R5B-EOP	7/1/2020 12:30	YA2710	M	C045689	2.25	2.19	0.494	0.00136	0.00162	0.113	<0.0001	<0.001	0.159	0.000048	80.6	0.0018	0.00117	0.00218	0.974	0.0005	0.0376	28.3	0.0385	0.0000031	0.0083	0.0089	
RSEM-R5B-EOP	7/2/2020 14:25	YA4191	M	C045985	2.12	2.33	0.356	0.0008	0.00157	0.101	<0.0001	<0.001	0.108	0.000274	69.3	0.0011	0.0008	0.00412	0.927	0.0007	0.0236	17.6	0.0264	<0.000019	0.0056	0.0045	
RSEM-R5B-EOP	7/3/2020 16:35	YA5157	M	C046179	3.0	2.57	0.882	<0.0005	0.00184	0.12	<0.0001	<0.001	0.058	0.0001	59.7	0.0018	0.00119	0.00374	2.39	0.00121	0.0117	13.2	0.0649	<0.0000019	0.0041	0.0053	
RSEM-R5B-EOP	7/4/2020 12:45	YA6731	M	C046470	2.79	2.50	1.98	<0.0005	0.00103	0.123	<0.0001	<0.001	<0.05	0.000122	57.6	0.0029	0.00234	0.00284	1.55	0.00085	0.0122	13.2	0.099	<0.000019	0.0038	0.0099	
RSEM-R5B-EOP	7/4/2020 12:55	YA6732	D	C046470	2.71	2.57	1.66	<0.0005	0.00103	0.126	<0.0001	<0.001	<0.05	0.000127	56.2	0.0025	0.00251	0.00281	1.54	0.00089	0.0124	13.4	0.101	<0.000019	0.004	0.0106	
RSEM-R5B-EOP	7/5/2020 10:50	YA6920	M	C046500	<2.0	0.97	0.545	<0.0005	0.00048	0.118	<0.0001	<0.001	0.05	0.000517	69.5	<0.001	0.0121	0.00278	0.532	0.0003	0.0214	19.0	0.269	<0.0000019	0.0034	0.0437	
RSEM-R5B-EOP	7/6/2020 11:45	YA8350	M	C046846	2.25	2.31	0.147	<0.0005	0.00037	0.116	<0.0001	<0.001	0.068	0.000638	84.7	<0.001	0.0153	0.00186	0.198	<0.0002	0.0359	24.4	0.34	<0.0000019	0.0033	0.0567	
RSEM-R5B-EOP	7/7/2020 13:00	YB0052	M	C047206	2.31	2.3	0.0803	<0.0005	0.00032	0.12	<0.0001	<0.001	0.077	0.000787	101	<0.001	0.0195	0.00165	0.105	<0.0002	0.0436	29.7	0.403	<0.0000019	0.0035	0.0727	
RSEM-R5B-EOP	7/8/2020 15:30	YB2462	M	C047619	2.32	2.23	0.0948	<0.0005	0.00032	0.122	<0.0001	<0.001	0.085	0.000664	101	<0.001	0.0171	0.00155	0.101	<0.0002	0.0475	31.6	0.382	<0.0000019	0.0034	0.0667	
RSEM-R5B-EOP	7/9/2020 15:30	YB4138	M	C047920	2.20	2.03	0.0982	<0.0005	0.00032	0.112	<0.0001	<0.001	0.081	0.000419	98.9	<0.001	0.0117	0.00131	0.091	<0.0002	0.0415	30.4	0.279	<0.0000019	0.0033	0.0481	
RSEM-R5B-EOP	7/10/2020 10:45	YB4118	M	C047917	1.54	2.8	0.0948	<0.0005	0.00036	0.114	<0.0001	<0.001	0.081	0.000238	98.7	<0.001	0.00751	0.00122	0.082	<0.0002	0.037	31.0	0.186	<0.0000019	0.0034	0.0348	
RSEM-R5B-EOP	7/11/2020 16:00	YB7195	M	C048486	2.07	2.27	0.0763	<0.0005	0.00036	0.101	<0.0001	<0.001	0.07	0.000067	91.8	<0.001	0.00343	0.00101	0.063	<0.0002	0.0272	30.2	0.0783	<0.0000019	0.0031	0.02	
RSEM-R5B-EOP	7/12/2020 15:40	YB7110	M	C048462	2.15	1.86	0.1	<0.0005	0.00034	0.0991	<0.0001	<0.001	0.068	0.000022	90.1	<0.001	0.00186	0.00105	0.082	<0.0002	0.0245	30.6	0.038	<0.0000019	0.0029	0.0143	
RSEM-R5B-EOP	7/13/2020 15:30	YB9221	M	C048875	2.10	2.08	0.0897	<0.0005	0.00037	0.0969	<0.0001	<0.001	0.07	<0.00001	86.5	<0.001	0.00107	0.00096	0.099	<0.0002	0.023	31.1	0.0186	<0.0000019	0.0027	0.01	
RSEM-R5B-EOP	7/14/2020 12:45	YC1070	M	C049344	2.18	1.92	0.0782	<0.0005	0.00033	0.0898	<0.0001	<0.001	0.065	<0.00001	82.0	<0.001	0.00079	0.00081	0.085	<0.0002	0.0219	30.3	0.0121	<0.0000019	0.0025	0.0085	
RSEM-R5B-EOP	7/15/2020 11:35	YC2136	M	C049614	1.79	1.50	0.0518	<0.0005	0.0003	0.0893	<0.0001	<0.001	0.067	<0.00001	81.6	<0.001	0.00088	0.00073	0.055	<0.0002	0.0214	30.6	0.0128	<0.0000019	0.0024	0.0086	
RSEM-R5B-EOP	7/16/2020 14:20	YC4663	M	C049952	1.88	1.33	0.0523	<0.0005	0.00036	0.0852	<0.0001	<0.001	0.064	<0.00001	77.5	<0.001	0.00082	0.0007	0.051	<0.0002	0.02	29.0	0.0113	0.0000027	0.0022	0.0079	
RSEM-R5B-EOP	7/16/2020 14:30	YC4664	D	C049952	1.82	1.52	0.0468	<0.0005	0.00033	0.0873	<0.0001	<0.001	0.065	<0.00001	79.3	<0.001	0.00084	0.00074	0.05	<0.0002	0.0205	30.3	0.0118	<0.0000019	0.0022	0.0084	
RSEM-R5B-EOP	7/17/2020 12:45	YC5479	M	C050110	1.56	1.56	0.063	<0.0005	0.0003	0.0852	<0.0001	<0.001	0.06	<0.00001	79.0	<0.001	0.00062	0.00072	0.07	<0.0002	0.0199	29.0	0.0093	<0.0000019	0.0021	0.0074	
RSEM-R5B-EOP	7/17/2020 12:55	YC5480	D	C050110	1.50	1.69	0.0731	<0.0005	0.0003	0.0875	<0.0001	<0.001	0.063	<0.00001	80.3	<0.001	0.00063	0.00073	0.071	<0.0002	0.0203	30.0	0.0097	<0.0000019	0.0021	0.0076	
RSEM-R5B-EOP	7/18/2020 12:05	YC7456	M	C050583	1.86	1.38	0.0513	<0.0005	0.00029	0.0866	<0.0001	<0.001	0.072	<0.00001	76.8	<0.001	0.00045	0.00074	0.049	<0.0002	0.0197	30.3	0.0075	<0.0000019	0.0021	0.0064	
RSEM-R5B-EOP	7/18/2020 12:15	YC7457	D	C050583	1.90	1.78	0.0457	<0.0005	0.0003	0.0864	<0.0001	<0.001	0.069	<0.00001	77.1	<0.001	0.00045	0.00067	0.046	<0.0002	0.0197	30.0	0.0074	<0.0000019	0.0022	0.0065	
RSEM-R5B-EOP	7/19/2020 12:40	YC7534	D	C050603	1.78	1.53	0.0535	<0.0005	0.00028	0.0863	<0.0001	<0.001	0.064	<0.00001	76.1	<0.001	0.00032	0.00068	0.048	<0.0002	0.0183	29.8	0.0063	<0.0000019	0.002	0.0053	
RSEM-R5B-EOP	7/19/2020 13:30	YC7533	M	C050603	1.49	1.20	0.0488	<0.0005	0.00027	0.0848	<0.0001	<0.001	0.062	<0.00001	73.6	<0.001	0.00032	0.00067	0.048	<0.0002	0.0179	29.0	0.0063	<0.0000019	0.002	0.0052	
RSEM-R5B-EOP	7/20/2020 12:30	YC8545	M	C050811	1.49	1.43	0.0816	<0.0005	0.00036	0.0965	<0.0001	<0.001	0.061	<0.00001	77.6	<0.001	0.0003	0.00085	0.132	<0.0002	0.0171	29.0	0.0106	<0.0000019	0.0019	0.0044	
RSEM-R5B-EOP	7/21/2020 15:20	YD0798	M	C051251	1.76	1.76	0.0744	<0.0005	0.00035	0.0944	<0.0001	<0.001	0.059	<0.00001	76.1	<0.001	0.00024	0.00075	0.107	<0.0002	0.0155	27.4	0.0099	<0.0000019	0.002	0.0036	
RSEM-R5B-EOP	7/22/2020 14:20	YD2619	M	C051641	1.69	1.59	0.047	<0.0005	0.00033	0.0953	<0.0001	<0.001	0.056	<0.00001	74.4	<0.001	<0.0002	0.00067	0.051	<0.0002	0.0152	27.5	0.0078	<0.0000019	0.002	0.0031	
RSEM-R5B-EOP	7/23/2020 14:20	YD4256	M	C051864	1.95	1.67	0.0441	<0.0005	0.00031	0.095	<0.0001	<0.001	0.059	<0.00001	71.2	<0.001	<0.0002	0.00065	0.042	<0.0002	0.016	27.8	0.0062	<0.0000019	0.002	0.003	
RSEM-R5B-EOP	7/24/2020 14:05	YD5908	M	C052038	2.15	1.43	0.0446	<0.0005	0.00028	0.0909	<0.0001	<0.001	0.063	<0.00001	71.6	<0.001	<0.0002	0.00066	0.044	<0.0002	0.0165	28.5	0.0067	<0.0000019	0.0019	0.0028	
RSEM-R5B-EOP	7/25/2020 12:00	YD7676	M	C052402	2.21	1.69	0.0563	<0.0005	0.00029	0.0901	<0.0001	<0.001	0.066	<0.00001	70.1	<0.001	<0.0002	0.00075	0.076	<0.0002	0.0163	28.3	0.0064	<0.0000019	0.0019	0.0028	
RSEM-R5B-EOP	7/26/2020 13:15	YD7711	M	C052420	1.68	1.87	0.0488	<0.0005	0.00024	0.0876	<0.0001	<0.001	0.066	<0.00001	67.7	<0.001	<0.0002	0.00075	0.046	<0.0002	0.0162	28.5	0.0056	<0.0000019	0.0019	0.0025	
RSEM-R5B-EOP	7/26/2020 13:25	YD7712	D	C052420	2.06	1.73	0.0417	<0.0005	0.00026	0.0882	<0.0001	<0.001	0.064	<0.00001	67.5	<0.001	<0.0002	0.00071	0.043	<0.0002	0.016	28.4	0.0056	<0.0000019	0.002	0.0026	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R5B-EOP	7/27/2020 11:50	YD7771	M	C052432	2.05	1.90	0.046	<0.0005	0.00024	0.0873	<0.0001	<0.001	0.065	<0.00001	67.2	<0.001	<0.0002	0.00078	0.045	<0.0002	0.016	28.6	0.0071	<0.0000019	0.0018	0.0025	
RSEM-R5B-EOP	7/28/2020 13:45	YE2031	M	C053295	1.71	1.40	0.0367	<0.0005	0.00029	0.0905	<0.0001	<0.001	0.064	0.000015	67.7	<0.001	<0.0002	0.0008	0.034	<0.0002	0.0165	29.0	0.0087	<0.0000019	0.0018	0.0026	
RSEM-R5B-EOP	7/30/2020 14:30	YE4007	M	C053695	2.16	1.82	0.0403	<0.0005	0.00033	0.0845	<0.0001	<0.001	0.063	<0.00001	62.7	<0.001	<0.0002	0.0009	0.037	<0.0002	0.017	28.4	0.0095	<0.0000019	0.0019	0.0024	
RSEM-R5B-EOP	7/31/2020 12:10	YE5652	M	C054023	2.27	1.88	0.0459	<0.0005	0.00031	0.0871	<0.0001	<0.001	0.064	<0.00001	60.7	<0.001	<0.0002	0.00082	0.051	<0.0002	0.0156	28.8	0.0134	<0.0000019	0.0019	0.0023	
RSEM-R5B-EOP	7/31/2020 12:20	YE5654	D	C054023	2.23	1.91	0.0428	<0.0005	0.00034	0.088	<0.0001	<0.001	0.064	<0.00001	65.6	<0.001	<0.0002	0.00076	0.047	<0.0002	0.0155	29.4	0.0138	<0.0000019	0.0019	0.0022	
RSEM-R5B-EOP	8/1/2020 11:30	YE6667	M	C054219	2.17	2.07	0.0418	<0.0005	0.00035	0.0877	<0.0001	<0.001	0.067	<0.00001	66.2	<0.001	<0.0002	0.0008	0.048	<0.0002	0.0159	29.4	0.0143	<0.0000019	0.0019	0.0022	
RSEM-R5B-EOP	8/2/2020 13:45	YE8518	M	C054579	2.21	2.06	0.0327	<0.0005	0.00036	0.0857	<0.0001	<0.001	0.068	<0.00001	62.0	<0.001	<0.0002	0.00086	0.043	<0.0002	0.0154	28.0	0.0196	<0.0000019	0.002	0.0023	
RSEM-R5B-EOP	8/3/2020 11:40	YE8526	M	C054582	2.19	2.13	0.0459	<0.0005	0.00041	0.0874	<0.0001	<0.001	0.075	<0.00001	63.6	<0.001	<0.0002	0.00095	0.078	<0.0002	0.0155	28.3	0.0233	<0.0000019	0.002	0.0022	
RSEM-R5B-EOP	8/4/2020 11:20	YF1642	M	C055153	2.52	3.16	0.0678	<0.0005	0.00047	0.0852	<0.0001	<0.001	0.067	0.000026	59.4	<0.001	0.0003	0.00132	0.152	<0.0002	0.0151	27.4	0.0217	<0.0000019	0.0021	0.0026	
RSEM-R5B-EOP	8/5/2020 11:05	YF2975	M	C055442	2.48	2.26	0.0301	<0.0005	0.00044	0.0779	<0.0001	<0.001	0.07	<0.00001	56.8	<0.001	<0.0002	0.00099	0.037	<0.0002	0.0155	26.5	0.0144	<0.0000019	0.0021	0.0021	
RSEM-R5B-EOP	8/6/2020 12:40	YF2970	M	C055440	2.77	2.49	0.0448	<0.0005	0.0004	0.0943	<0.0001	<0.001	0.074	<0.00001	58.8	<0.001	<0.0002	0.00092	0.046	<0.0002	0.0161	27.5	0.0158	<0.0000019	0.0022	0.0023	
RSEM-R5B-EOP	8/7/2020 10:45	YF4855	M	C055741	2.81	2.56	0.0496	<0.0005	0.00043	0.083	<0.0001	<0.001	0.065	<0.00001	57.3	<0.001	<0.0002	0.00093	0.067	<0.0002	0.0155	26.4	0.0154	<0.0000019	0.0024	0.0021	
RSEM-R5B-EOP	8/8/2020 11:15	YF8356	M	C056281	2.37	2.52	0.0405	<0.0005	0.00037	0.0757	<0.0001	<0.001	0.071	<0.00001	51.6	<0.001	<0.0002	0.00112	0.053	<0.0002	0.0167	26.5	0.0124	<0.0000019	0.0023	0.002	
RSEM-R5B-EOP	8/9/2020 13:20	YF8359	M	C056282	2.69	2.57	0.043	<0.0005	0.00036	0.0768	<0.0001	<0.001	0.076	<0.00001	52.0	<0.001	<0.0002	0.00107	0.064	<0.0002	0.0177	27.8	0.0112	<0.0000019	0.0024	0.0022	
RSEM-R5B-EOP	8/9/2020 13:30	YF8360	D	C056282	2.85	2.40	0.0445	<0.0005	0.00038	0.073	<0.0001	<0.001	0.072	<0.00001	49.4	<0.001	<0.0002	0.00087	0.065	<0.0002	0.0168	26.4	0.0106	<0.0000019	0.0023	0.002	
RSEM-R5B-EOP	8/10/2020 11:00	YG0104	M	C056587	2.67	2.84	0.0455	<0.0005	0.00037	0.0753	<0.0001	<0.001	0.072	<0.00001	53.8	<0.001	<0.0002	0.00092	0.128	<0.0002	0.0176	28.8	0.0126	<0.0000019	0.0024	0.0021	
RSEM-R5B-EOP	8/11/2020 11:35	YG2364	M	C056973	2.54	2.15	0.0424	<0.0005	0.00042	0.0753	<0.0001	<0.001	0.08	<0.00001	54.9	<0.001	<0.0002	0.00094	0.064	<0.0002	0.0173	29.6	0.0091	<0.0000019	0.0027	0.0022	
RSEM-R5B-EOP	8/11/2020 11:45	YG2365	D	C056973	2.40	2.36	0.0455	<0.0005	0.00043	0.0763	<0.0001	<0.001	0.083	<0.00001	55.1	<0.001	<0.0002	0.00092	0.059	<0.0002	0.0178	30.0	0.0091	<0.0000019	0.0026	0.0021	
RSEM-R5B-EOP	8/12/2020 16:10	YG4634	M	C057417	2.93	2.34	0.0421	<0.0005	0.00044	0.0749	<0.0001	<0.001	0.079	<0.00001	54.4	<0.001	<0.0002	0.001	0.079	<0.0002	0.0175	28.2	0.0087	<0.0000019	0.0026	0.0021	
RSEM-R5B-EOP	8/13/2020 11:50	YG7258	M	C057823	2.38	2.68	0.0337	<0.0005	0.00037	0.0743	<0.0001	<0.001	0.086	<0.00001	55.5	<0.001	<0.0002	0.00094	0.05	<0.0002	0.0182	28.4	0.0083	<0.0000019	0.0027	0.0021	
RSEM-R5B-EOP	8/14/2020 12:00	YG7188	M	C057817	2.90	2.57	0.0449	<0.0005	0.00036	0.0732	<0.0001	<0.001	0.083	<0.00001	52.3	<0.001	<0.0002	0.001	0.065	<0.0002	0.0171	27.4	0.0077	<0.0000019	0.0026	0.0021	
RSEM-R5B-EOP	8/15/2020 13:20	YH0058	M	C058356	2.53	2.61	0.038	<0.0005	0.00039	0.0705	<0.0001	<0.001	0.072	<0.00001	52.2	<0.001	<0.0002	0.00099	0.069	<0.0002	0.0149	27.8	0.0084	<0.0000019	0.0027	0.002	
RSEM-R5B-EOP	8/15/2020 13:30	YH0059	D	C058356	2.51	2.62	0.0443	<0.0005	0.00044	0.0724	<0.0001	<0.001	0.074	<0.00001	52.1	<0.001	<0.0002	0.001	0.071	<0.0002	0.0148	28.3	0.0086	<0.0000019	0.0029	0.0022	
RSEM-R5B-EOP	8/16/2020 11:00	YH0171	M	C058389	3.11	2.59	0.0442	<0.0005	0.00046	0.0733	<0.0001	<0.001	0.077	<0.00001	55.0	<0.001	<0.0002	0.00101	0.065	<0.0002	0.0151	27.8	0.0088	<0.0000019	0.0029	0.0021	
RSEM-R5B-EOP	8/17/2020 10:10	YG9871	M	C058326	3.48	2.28	0.0548	<0.0005	0.00053	0.0724	<0.0001	<0.001	0.088	0.000084	53.6	<0.001	0.00021	0.00155	0.059	<0.0002	0.017	27.5	0.0088	<0.0000019	0.0029	0.0021	
RSEM-R5B-EOP	8/18/2020 15:45	YH3310	M	C059056	2.75	2.56	0.0723	<0.0005	0.0004	0.0727	<0.0001	<0.001	0.079	<0.00001	51.1	<0.001	<0.0002	0.00118	0.103	<0.0002	0.0179	27.6	0.0103	<0.0000019	0.0029	0.0021	
RSEM-R5B-EOP	8/19/2020 16:00	YH5389	M	C059422	2.95	2.32	0.0774	<0.0005	0.00037	0.0689	<0.0001	<0.001	0.082	<0.00001	50.9	<0.001	<0.0002	0.00101	0.092	<0.0002	0.0173	27.9	0.0108	<0.0000019	0.0028	0.0021	
RSEM-R5B-EOP	8/23/2020 15:30	YI0111	M	C060255	2.58	2.39	0.336	<0.0005	0.00088	0.102	<0.0001	<0.001	0.081	0.000035	56.9	<0.001	0.00055	0.00247	0.865	0.00054	0.0187	22.1	0.0239	0.0000033	0.0054	0.0033	
RSEM-R5B-EOP	8/24/2020 14:40	YI2200	M	C060702	2.80	2.28	0.315	<0.0005	0.00077	0.101	<0.0001	<0.001	0.078	0.000029	56.8	<0.001	0.00045	0.00224	0.59	0.00037	0.0186	22.7	0.0249	<0.000019	0.0057	0.003	
RSEM-R5B-EOP	8/25/2020 11:30	YI3993	M	C061087	2.35	1.90	0.207	<0.0005	0.00067	0.104	<0.0001	<0.001	0.082	0.000022	61.1	<0.001	0.00037	0.00191	0.364	0.00023	0.0196	20.4	0.0355	<0.0000019	0.0067	0.0031	
RSEM-R5B-EOP	8/25/2020 11:40	YI3994	D	C061087	2.37	2.40	0.213	<0.0005	0.00068	0.104	<0.0001	<0.001	0.083	0.000014	61.0	<0.001	0.00037	0.00184	0.356	0.00025	0.0195	20.2	0.0348	0.0000022	0.0066	0.0031	
RSEM-R5B-EOP	8/26/2020 12:35	YI6262	M	C061565	2.49	1.85	0.0931	<0.0005	0.00058	0.101	<0.0001	<0.001	0.081	0.000017	60.6	<0.001	0.00031	0.00166	0.186	<0.0002	0.021	19.9	0.0285	<0.0000019	0.007	0.0031	
RSEM-R5B-EOP	8/27/2020 11:30	YI7771	M	C061827	2.61	2.05	0.12	<0.0005	0.00056	0.1	<0.0001	<0.001	0.087	0.000018	61.5	<0.001	0.00028	0.00157	0.174	<0.0002	0.0218	20.3	0.0222	<0.0000019	0.0075	0.0032	
RSEM-R5B-EOP	8/27/2020 11:40	YI7772	D	C061827	2.54	2.04	0.117	<0.0005	0.00055	0.101	<0.0001	<0.001	0.09	0.000017	62.7	<0.001	0.00028	0.0019	0.168	<0.0002	0.022	20.4	0.0218	<0.0000019	0.0076	0.0031	
RSEM-R5B-EOP	8/28/2020 12:40	YI9492	M	C062013	2.55	2.44	0.0735	<0.0005	0.00056	0.096	<0.0001	<0.001	0.086	<0.00001	58.4	<0.001	0.00021	0.00144	0.136	<0.0002	0.0215	19.1	0.0167	<0.0000019	0.0076	0.0029	
RSEM-R5B-EOP	8/29/2020 11:15	YJ1740	M	C062465	2.65	2.31	0.0778	<0.0005	0.00052	0.0952	<0.0001	<0.001	0.085	0.000013	59.8	<0.001	0.00022	0.0014	0.113	<0.0002	0.0193	19.8	0.0144	<0.0000019	0.0078	0.003	
RSEM-R5B-EOP	8/30/2020 13:35	YJ1571	M	C062426	2.50	2.07	0.0824	<0.0005	0.00052	0.0907	<0.0001	<0.001	0.082	0.000024	58.0	<0.001	0.00021	0.00144	0.116	<0.0002	0.0199	19.6	0.0105	<0.0000019	0.0077	0.0028	
RSEM-R5B-EOP	8/31/2020 17:25	YJ3641	M	C062857	2.13	2.35	0.234	<0.0005	0.00057	0.102	<0.0001	<0.001	0.099	0.000019	61.9	<0.001	0.00034	0.0018	0.304	<0.0002	0.0242	20.9	0.0131	<0.0000019	0.0083	0.0032	
RSEM-R5B-EOP	9/1/2020 12:55	YJ6689	M	C063433	2.60	2.42	0.104	<0.0005	0.00049	0.0979	<0.0001	<0.001	0.091	<0.00001	57.6	<0.001	<0.0002	0.00135	0.117	<0.0002	0.0231	19.5	0.0092	<0.0000019	0.0079	0.0028	
RSEM-R5B-EOP	9/2/2020 15:35	YJ7833	M	C063666	3.87	3.29	0.1	<0.0005	0.00049	0.096	<0.0001	<0.001	0.092	<0.00001	56.9	<0.001	<0.0002	0.00129	0.094	<0.0002	0.0234	19.6	0.0078	<0.0000019	0.0079	0.0027	
RSEM-R5B-EOP	9/3/2020 15:15	YK0032	M	C064047	2.60	2.32	0.124	<0.0005	0.00051	0.094	<0.0001	<0.001	0.091	0.000012	59.5	<0.001	0.00021	0.00135	0.144	<0.0002	0.0224	20.5	0.008	<0.0000019	0.008	0.0027	
RSEM-R5B-EOP	9/3/2020 15:25	YK0033	D	C064047	2.40	2.33	0.108	<0.0005	0.00049	0.0923	<0.0001	<0.001	0.089	0.000016	56.8	<0.001	0.00023	0.00144	0.14	<0.0002	0.0218	20.2	0.0086	<0.0000019	0.008	0.0029	
RSEM-R5B-EOP	9/4/2020 13:30	YK0087	M	C064051	2.47	2.17	0.096	<0.0005	0.00044	0.0873	<0.0001	<0.001	0.088	<0.00001	55.9	<0.001	<0.0002	0.00121	0.09	<0.0002	0.0221	20.6	0.0069	<0.0000019	0.0077	0.0025	
RSEM-R5B-SP	2/22/2020 13:20	XL1355	M	C013195	3.24	2.83	0.0671	0.00131	0.00126	0.0383	<0.0001	<0.001	0.177	0.000021	47.1	0.0027	0.00047	0.00127	0.057	<0.0002	0.0678	28.8	0.0097	<0.0000019	0.0132	0.0081	
RSEM-R5B-SP	2/22/2020 13:30	XL1356	D	C013195	3.75	2.98	0.068	0.00128	0.00121	0.0389	<0.0001	<0.001	0.179	0.00002	46.2	0.0027	0.0005	0.00136	0.074	<0.0002	0.0664	28.5	0.01	<0.0000019	0.0128	0.0079	
RSEM-R5B-SP	5/3/2020 8:20	XS7392	M	C030307	2.61	2.08	0.0633	0.00298	0.00177	0.0361	<0.0001	<0.001	0.177	0.00001	42.2	0.0038	0.00036	0.00143	0.084	<0.0002	0.101	28.3	0.0082	<0.0000019	0.0198	0.006	
RSEM-R5B-SP	5/5/2020 14:20	XT0143	M	C030949	2.35	2.15	0.0723	0.00247	0.00126	0.0345	<0.0001	<0.001	0.166	0.000023	42.5	0.0031	0.00033	0.00182	0.089	<0.0002	0.0902	26.4	0.0071	<0.0000019	0.0183	0.0051	
RSEM-R5B-SP	5/6/2020 14:40	XT1603	D	C031246	2.82	2.35	0.0774	0.00229	0.0013	0.0373	<0.0001	<0.001	0.166	0.000019	40.7	0.0032	0.00028	0.00219	0.087	<0.0002	0.0874	29.3	0.0064	<0.0000019	0.0191	0.0053	
RSEM-R5B-SP	5/6/2020 14:50	XT1601	M	C031246	2.28	2.11	0.0687	0.00265	0.0015	0.041	<0.0001	<0.001	0.191	0.000027	40.6	0.0032	0.00031	0.00206	0.074	<0.0002	0.116	28.5	0.0073	<0.0000019	0.0204	0.0058	
RSEM-R5B-SP	5/13/2020 11:35	XT8150	M	C032775	2.38	2.43	0.0593	0.00205	0.00116	0.0458	<0.0001	<0.001	0.167	<0.00001	46.9	0.0021	0.00022	0.00169	0.062	<0.0002	0.101	28.5	0.0038	<0.0000019	0.0175	0.0035	
RSEM-R5B-SP	5/15/2020 9:35	XU0134	M	C033173	2.22	1.93	0.0485	0.00206	0.00109	0.0469	<0.0001	<0.001	0.164	0.000019	48.5	0.0023	0.0002	0.00181	0.05	<0.0002	0.101	29.7	0.0042	<0.0000019	0.0184	0.0032	
RSEM-R5B-SP	5/23/2020 14:20	XU8588	M	C034993	2.51	2.28	0.0398	0.00173	0.001	0.0477	<0.0001	<0.001	0.14	0.000022	43.7	0.0016	<0.0002	0.00356	0.044	<0.0002	0.0663	27.9	0.0034	<0.0000019	0.0139	0.0027	
RSEM-R5B-SP	5/30/2020 14:45	XV8356	M	C037043	1.77	2.64	0.0491	0.00159	0.00092	0.0507	<0.0001	<0.001	0.135	0.000011	44.5	0.0012	<0.0002	0.00248	0.056	<0.0002	0.0655	28.9	0.0057	0.0000021	0.0134	0.0027	
RSEM-R5B-SP	6/10/2020 14:30	XX4755	M	C040036	2.20	4.11	0.291	0.0011	0.00103	0.0778	<0.0001	<0.001	0.116	0.000025	58.0	<0.001	0.00041	0.00321	0.451	0.00028	0.0573	29.7	0.0208	0.0000021	0.0107	0.0037	
RSEM-R5B-SP	8/22/2020 12:20	YI0130	M	C060262	2.52	2.10	0.734	<0.0005	0.0015	0.118	<0.0001	<0.001	0.08	0.000069	55.0	0.0015	0.001	0.00382	2.1	0.00116	0.0187	22.7	0.04	<0.000019	0.0048	0.0045	
RSEM-R5B-W	4/8/2020 14:20	XQ4591	M	C024938	6.43	4.49	25.7	0.0011	0.03	1.31	0.00165	<0.001	0.066	0.00171	101	0.0483	0.0258	0.0695	75.1	0.0328	0.0363	23.7	1.2	0.00026	0.0082	0.0796	
RSEM-R5B-W	7/2/2020 14:45	YA4186	M	C045984	4.0	5.00	17.3	0.0012	0.0162	0.904	0.00102	<0.002	0.135	0.00104	133	0.0281	0.015	0.0404	38.9	0.0196	0.0399	29.0	0.747	<0.00019	0.0078	0.0499	
RSEM-R6E-EOP	1/1/2020 13:45	XE7145	M	C000229	1.99	2.39	0.147	0.00114	0.00132	0.132	<0.0001	<0.001	0.192	0.000021	70.5	<0.001	0.00115	0.00123	0.096	<0.0002	0.0392	20.3	0.0742	0.0000035	0.0158	0.0056	
RSEM-R6E-EOP	1/2/2020 10:55	XE7180	M	C000238	1.71	2.05	0.154	0.00113	0.00129	0.131	<0.0001	<0.001	0.186	0.00002	70.6	0.0011	0.00115	0.00121	0.096	<0.0002	0.0394	20.7	0.0751	0.0000024	0.0162	0.0055	
RSEM-R6E-EOP	1/3/2020 14:05	XE8698	M	C000625	1.90	2.08	0.115	0.00111	0.00119	0.125	<0.0001	<0.001	0.171	0.000018	74.4	0.0038	0.001	0.00142	0.074	<0.0002	0.0338	19.9	0.0634	0.0000026	0.0195	0.0053	
RSEM-R6E-EOP	1/4/2020 15:30	XE9881	M	C000877	1.93	1.83	0.117	0.00121	0.00129	0.136	<0.0001	<0.001	0.186	0.00002	80.9	0.0045	0.00101	0.00147	0.065	<0.0002	0.0351	22.3	0.0664	<0.000002	0.0217	0.0053	
RSEM-R6E-EOP	1/5/2020 15:00	XE9852	M	C000870	2.13	1.74	0.13	0.00124	0.00131	0.138	<0.0001	<0.001	0.194	0.000026	84.9	0.0053	0.00099	0.00161	0.063	<0.0002	0.0351	23.5	0.061	<0.000002	0.0243	0.0054	
RSEM-R6E-EOP	1/6/2020 13:40	XF0704	M	C001127	1.44	1.48	0.131	0.00109	0.00127	0.13	<0.0001	<0.001	0.162	0.000033	75.2	0.0053	0.00086	0.00146	0.07	<0.0002	0.0353	19.5	0.0605	<0.000002	0.0241	0.0048	
RSEM-R6E-EOP	1/7/2020 15:00	XF1934	M	C001464	2.26	2.43	0.168	0.00111	0.00125	0.131	<0.0001	<0.001	0.188	0.000023	79.0	0.0059	0.00083	0.00162	0.127	<0.0002	0.0379	19.7	0.0655	<0.000002	0.0242	0.0049	
RSEM-R6E-EOP	1/8/2020 14:45	XF3043	M	C001783	2.20	1.75	0.218	0.0011	0.00136	0.131	<0.0001	<0.001	0.181	0.000034	82.8	0.0059	0.00091	0.0017	0.156	<0.0002	0.0396	21.4	0.0712	<0.000002	0.0236	0.0051	
RSEM-R6E-EOP	1/9/2020 13:50	XF4213	M	C002074	2.82	2.32	0.135	0.00105	0.00124	0.126	<0.0001	<0.001	0.189	0.000018	75.6	0.005	0.00083	0.00154	0.082	<0.0002	0.0362	20.4	0.0624	<0.000002	0.0231	0.0047	
RSEM-R6E-EOP	1/10/2020 11:50	XF5141	M	C002216	2.16	1.79	0.163	0.00108	0.00121	0.132	<0.0001	<0.001	0.184	0.000024	78.1	0.0046	0.00084	0.00152	0.09	<0.0002	0.0366	20.9	0.0587	<0.000002	0.0227	0.0049	
RSEM-R6E-EOP	1/11/2020 13:15	XF5749	M	C002384	1.95	1.88	0.14	0.00105	0.00125	0.134	<0.0001	<0.001	0.191	0.000021	78.8	0.0042	0.00077	0.00143	0.066	<0.0002	0.0341	21.0	0.0515	<0.000002	0.0221	0.0045	
RSEM-R6E-EOP	1/12/2020 14:30	XF5771	M	C002394	1.98	1.78	0.133	0.00106	0.00121	0.13	<0.0001	<0.001	0.188	0.000023	78.1	0.004	0.00072	0.00147	0.062	<0.0002	0.0334	20.5	0.0466	0.0000038	0.0215	0.0044	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6E-EOP	1/13/2020 13:00	XF7161	M	C002657	2.21	1.86	0.147	0.00109	0.00121	0.13	<0.0001	<0.001	0.192	0.00002	79.3	0.0039	0.0007	0.00172	0.077	<0.0002	0.0341	20.4	0.0462	<0.000002	0.0215	0.0043	
RSEM-R6E-EOP	1/14/2020 13:05	XF8102	M	C002891	2.26	1.96	0.115	0.00113	0.00122	0.135	<0.0001	<0.001	0.182	0.000027	76.9	0.0039	0.00075	0.00158	0.054	<0.0002	0.0326	22.0	0.0508	<0.000002	0.0219	0.0045	
RSEM-R6E-EOP	1/15/2020 14:00	XF9572	M	C003144	2.23	1.70	0.125	0.00111	0.00128	0.136	<0.0001	<0.001	0.193	0.000018	79.1	0.0039	0.00071	0.00159	0.044	<0.0002	0.0381	21.6	0.0499	<0.000002	0.0201	0.0044	
RSEM-R6E-EOP	1/16/2020 15:20	XG0618	M	C003413	2.26	1.99	0.121	0.00105	0.00126	0.123	<0.0001	<0.001	0.178	0.000022	73.0	0.0037	0.00064	0.00141	0.057	<0.0002	0.0333	19.3	0.047	0.0000046	0.0212	0.004	
RSEM-R6E-EOP	1/17/2020 10:20	XG0611	M	C003412	2.25	2.18	0.126	0.00107	0.00124	0.125	<0.0001	<0.001	0.177	0.000017	72.6	0.0038	0.00068	0.00163	0.06	<0.0002	0.0331	19.4	0.051	<0.000002	0.0217	0.0041	
RSEM-R6E-EOP	1/17/2020 10:30	XG0612	D	C003412	2.01	2.06	0.121	0.00104	0.0013	0.126	<0.0001	<0.001	0.18	0.000019	74.9	0.0038	0.00067	0.00141	0.058	<0.0002	0.0343	19.6	0.0514	<0.000002	0.0221	0.0042	
RSEM-R6E-EOP	1/18/2020 13:15	XG2773	M	C003851	2.14	1.78	0.117	0.00114	0.00132	0.131	<0.0001	<0.001	0.198	0.000017	76.3	0.0038	0.00075	0.00151	0.051	<0.0002	0.0376	20.6	0.0578	<0.000002	0.0231	0.0044	
RSEM-R6E-EOP	1/18/2020 13:25	XG2774	D	C003851	2.26	1.87	0.121	0.00109	0.0013	0.132	<0.0001	<0.001	0.196	0.000018	77.4	0.0039	0.00074	0.00149	0.05	<0.0002	0.0371	20.5	0.058	<0.000002	0.0234	0.0044	
RSEM-R6E-EOP	1/19/2020 16:40	XG2757	M	C003847	2.25	1.93	0.12	0.00107	0.00133	0.127	<0.0001	<0.001	0.196	0.000023	76.3	0.0038	0.00075	0.00146	0.054	<0.0002	0.0364	20.6	0.0607	0.0000029	0.0231	0.0044	
RSEM-R6E-EOP	1/19/2020 16:50	XG2758	D	C003847	2.09	1.93	0.116	0.00111	0.00137	0.128	<0.0001	<0.001	0.199	0.000018	78.1	0.0039	0.00076	0.00142	0.054	<0.0002	0.0383	20.5	0.0611	0.000003	0.0231	0.0044	
RSEM-R6E-EOP	1/20/2020 10:15	XG2702	M	C003843	2.11	2.11	0.147	0.00121	0.00156	0.133	<0.0001	<0.001	0.21	0.000018	77.1	0.0036	0.00092	0.0016	0.084	<0.0002	0.0396	20.5	0.0851	<0.000002	0.0236	0.0048	
RSEM-R6E-EOP	1/20/2020 10:25	XG2703	D	C003843	2.06	2.19	0.152	0.00117	0.00158	0.133	<0.0001	<0.001	0.213	0.000021	75.4	0.0036	0.00093	0.00158	0.083	<0.0002	0.0389	20.6	0.0862	<0.000002	0.0239	0.0046	
RSEM-R6E-EOP	1/21/2020 15:00	XG5823	M	C004470	2.07	2.03	0.185	0.00129	0.00186	0.127	<0.0001	<0.001	0.199	0.000025	75.2	0.0032	0.00104	0.00193	0.124	<0.0002	0.0331	19.7	0.0932	<0.000002	0.0225	0.0052	
RSEM-R6E-EOP	1/22/2020 17:00	XG7451	M	C004860	2.26	2.33	0.177	0.00134	0.00176	0.135	<0.0001	<0.001	0.205	0.000018	73.2	0.003	0.00101	0.00167	0.113	<0.0002	0.0369	20.0	0.0897	<0.000002	0.0229	0.0047	
RSEM-R6E-EOP	1/23/2020 17:00	XG9561	M	C005172	2.09	2.03	0.135	0.00128	0.00162	0.126	<0.0001	<0.001	0.194	0.000023	70.3	0.003	0.00099	0.00166	0.067	<0.0002	0.0355	18.8	0.0803	<0.000002	0.0231	0.0047	
RSEM-R6E-EOP	1/24/2020 10:20	XG9567	M	C005174	1.86	2.18	0.152	0.00126	0.00167	0.126	<0.0001	<0.001	0.193	0.000021	68.8	0.0028	0.00105	0.00172	0.214	<0.0002	0.0354	18.9	0.0817	0.0000023	0.0223	0.0047	
RSEM-R6E-EOP	1/25/2020 11:00	XH2065	M	C005631	<0.50	1.82	0.139	0.00128	0.00163	0.126	<0.0001	<0.001	0.202	0.000019	67.2	0.0026	0.00099	0.00154	0.066	<0.0002	0.0402	18.9	0.0742	<0.000002	0.0208	0.0045	
RSEM-R6E-EOP	1/26/2020 12:30	XH2024	M	C005623	2.12	2.12	0.129	0.00122	0.00151	0.124	<0.0001	<0.001	0.198	0.000022	65.6	0.0022	0.00099	0.00144	0.068	<0.0002	0.0383	18.6	0.0756	<0.000002	0.02	0.0045	
RSEM-R6E-EOP	1/27/2020 16:30	XH3885	M	C005941	2.44	2.03	0.122	0.00127	0.00152	0.122	<0.0001	<0.001	0.215	0.000023	76.1	0.0023	0.00098	0.00139	0.061	<0.0002	0.0398	19.2	0.0678	<0.000002	0.0203	0.0046	
RSEM-R6E-EOP	1/28/2020 14:05	XH5362	M	C006197	1.58	1.93	0.108	0.00129	0.00151	0.127	<0.0001	<0.001	0.19	0.000023	68.0	0.0024	0.00102	0.00153	0.049	<0.0002	0.0335	19.3	0.0686	<0.000002	0.0202	0.0051	
RSEM-R6E-EOP	1/29/2020 12:25	XH6913	M	C006592	2.30	2.27	0.108	0.00132	0.0015	0.124	<0.0001	<0.001	0.197	0.000015	72.4	0.0026	0.00107	0.00164	0.053	<0.0002	0.0401	20.2	0.0682	<0.000002	0.0192	0.0058	
RSEM-R6E-EOP	1/30/2020 14:15	XH8749	M	C006955	2.32	2.22	0.0974	0.00122	0.0015	0.128	<0.0001	<0.001	0.208	0.000019	71.4	0.0024	0.00099	0.00141	0.042	<0.0002	0.0388	19.3	0.0632	<0.000002	0.0207	0.0048	
RSEM-R6E-EOP	1/31/2020 14:40	XH9852	M	C007079	2.37	2.31	0.111	0.00131	0.00148	0.132	<0.0001	<0.001	0.205	0.000022	73.9	0.0024	0.00095	0.00165	0.05	<0.0002	0.0379	20.3	0.0671	<0.000002	0.0206	0.0049	
RSEM-R6E-EOP	2/1/2020 12:30	XI1805	M	C007448	2.04	2.10	0.0969	0.00124	0.00149	0.127	<0.0001	<0.001	0.191	0.000022	70.1	0.0023	0.00095	0.0013	0.042	<0.0002	0.0364	19.5	0.0617	<0.000002	0.02	0.0045	
RSEM-R6E-EOP	2/2/2020 15:05	XI1835	M	C007454	2.23	2.01	0.0902	0.00123	0.00141	0.129	<0.0001	<0.001	0.195	0.000019	71.7	0.0023	0.00094	0.00132	0.043	<0.0002	0.0363	19.6	0.0607	<0.000002	0.0202	0.0048	
RSEM-R6E-EOP	2/3/2020 13:10	XI3482	M	C007820	2.25	2.14	0.089	0.00127	0.00137	0.13	<0.0001	<0.001	0.206	0.000023	71.8	0.0023	0.00095	0.00127	0.043	<0.0002	0.0372	19.9	0.0585	<0.000002	0.0198	0.0048	
RSEM-R6E-EOP	2/4/2020 12:55	XI3463	M	C007815	2.15	2.05	0.0846	0.00124	0.0013	0.127	<0.0001	<0.001	0.197	0.000021	70.2	0.0021	0.00089	0.00124	0.038	<0.0002	0.0367	19.4	0.0556	<0.000002	0.0189	0.0046	
RSEM-R6E-EOP	2/5/2020 14:15	XI6889	M	C008469	2.09	1.82	0.0771	0.00129	0.00131	0.129	<0.0001	<0.001	0.199	0.000021	71.4	0.002	0.00088	0.00118	0.04	<0.0002	0.0359	20.9	0.0564	<0.000002	0.0182	0.0049	
RSEM-R6E-EOP	2/6/2020 13:05	XI8760	M	C008772	2.27	1.94	0.074	0.00128	0.0012	0.124	<0.0001	<0.001	0.207	0.000026	71.0	0.002	0.00094	0.0013	0.04	<0.0002	0.0358	20.3	0.0618	<0.000002	0.0181	0.0051	
RSEM-R6E-EOP	2/7/2020 11:15	XI8779	M	C008775	2.11	1.91	0.0749	0.00129	0.00121	0.121	<0.0001	<0.001	0.202	0.00002	70.1	0.0023	0.00095	0.00126	0.046	<0.0002	0.0347	19.5	0.0604	<0.000002	0.0176	0.0049	
RSEM-R6E-EOP	2/7/2020 11:25	XI8780	D	C008775	2.08	1.72	0.0757	0.0013	0.00122	0.124	<0.0001	<0.001	0.215	0.000021	71.9	0.0024	0.00098	0.00132	0.048	<0.0002	0.036	20.1	0.0627	<0.000002	0.0183	0.0051	
RSEM-R6E-EOP	2/8/2020 13:00	XJ1673	M	C009232	2.21	1.77	0.0659	0.0013	0.00127	0.128	<0.0001	<0.001	0.198	0.00002	72.5	0.0026	0.00094	0.00126	0.042	<0.0002	0.0366	21.0	0.0608	<0.000002	0.0184	0.005	
RSEM-R6E-EOP	2/9/2020 14:30	XJ1693	M	C009242	1.88	1.83	0.0635	0.0013	0.00123	0.125	<0.0001	<0.001	0.194	0.000023	70.7	0.0025	0.0009	0.0014	0.038	<0.0002	0.0358	20.5	0.0571	<0.000002	0.018	0.0047	
RSEM-R6E-EOP	2/10/2020 10:05	XJ1713	M	C009249	2.08	1.83	0.0589	0.00132	0.00123	0.126	<0.0001	<0.001	0.195	0.000017	71.6	0.0026	0.0009	0.00127	0.034	<0.0002	0.0359	20.8	0.056	<0.000002	0.0182	0.0049	
RSEM-R6E-EOP	2/11/2020 13:15	XJ6270	M	C010122	1.85	1.88	0.0619	0.00132	0.00123	0.128	<0.0001	<0.001	0.2	0.000021	71.8	0.0026	0.00085	0.00126	0.035	<0.0002	0.0367	21.1	0.0528	<0.0000019	0.0184	0.0047	
RSEM-R6E-EOP	2/12/2020 13:50	XJ8070	M	C010503	2.33	1.84	0.12	0.00132	0.00134	0.134	<0.0001	<0.001	0.214	0.000029	75.0	0.0028	0.00135	0.00146	0.134	<0.0002	0.0358	20.9	0.074	<0.0000019	0.0188	0.0056	
RSEM-R6E-EOP	2/22/2020 14:35	XL1358	M	C013195	2.15	1.80	0.0507	0.00126	0.00115	0.12	<0.0001	<0.001	0.194	0.000019	69.2	0.0025	0.00083	0.00113	0.029	<0.0002	0.0346	19.6	0.0517	<0.0000019	0.0185	0.0046	
RSEM-R6E-EOP	2/23/2020 13:00	XL1345	M	C013192	2.35	1.75	0.054	0.00112	0.00109	0.119	<0.0001	<0.001	0.195	0.000021	73.0	0.004	0.00108	0.00127	0.05	<0.0002	0.0334	19.3	0.0705	<0.0000019	0.0209	0.0053	
RSEM-R6E-EOP	2/24/2020 10:30	XL1314	M	C013183	2.26	2.17	0.06	0.00115	0.00115	0.126	<0.0001	<0.001	0.178	0.000021	73.6	0.0041	0.00103	0.00137	0.047	<0.0002	0.0349	19.8	0.0709	<0.0000019	0.022	0.0051	
RSEM-R6E-EOP	2/24/2020 10:40	XL1315	D	C013183	2.49	1.65	0.0562	0.00121	0.00115	0.128	<0.0001	<0.001	0.192	0.000019	74.9	0.0044	0.00103	0.00132	0.046	<0.0002	0.0368	20.2	0.0721	<0.0000019	0.0229	0.0052	
RSEM-R6E-EOP	2/25/2020 12:50	XL5026	M	C014003	2.53	2.05	0.0594	0.00117	0.00112	0.13	<0.0001	<0.001	0.201	0.000021	81.9	0.0056	0.00113	0.00151	0.052	<0.0002	0.0363	20.6	0.0782	<0.0000019	0.0243	0.0057	
RSEM-R6E-EOP	2/26/2020 12:15	XL6614	M	C014425	2.43	2.36	0.0586	0.00118	0.00112	0.13	<0.0001	<0.001	0.199	0.000026	80.5	0.0063	0.00117	0.00166	0.05	<0.0002	0.0364	21.1	0.0823	<0.0000019	0.025	0.0061	
RSEM-R6E-EOP	2/27/2020 10:40	XL6654	M	C014448	2.98	2.62	0.0812	0.00112	0.00116	0.131	<0.0001	<0.001	0.189	0.000032	81.7	0.0096	0.00122	0.00179	0.091	<0.0002	0.0356	20.3	0.0953	<0.0000019	0.0285	0.006	
RSEM-R6E-EOP	2/27/2020 10:50	XL6655	D	C014448	3.09	2.42	0.0857	0.00115	0.00121	0.137	<0.0001	<0.001	0.199	0.000031	83.3	0.0101	0.0013	0.00188	0.091	<0.0002	0.037	21.5	0.0999	<0.0000019	0.0299	0.0062	
RSEM-R6E-EOP	2/28/2020 11:10	XL8817	M	C014870	3.80	2.93	0.388	0.00106	0.00142	0.145	<0.0001	<0.001	0.177	0.000026	80.2	0.0107	0.00119	0.00185	0.604	0.00028	0.0349	19.6	0.121	<0.0000019	0.0268	0.0056	
RSEM-R6E-EOP	2/28/2020 11:20	XL8818	D	C014870	3.81	2.92	0.392	0.00106	0.00146	0.143	<0.0001	<0.001	0.18	0.000026	86.1	0.0112	0.00119	0.00191	0.606	0.00027	0.0336	19.3	0.121	<0.0000019	0.0276	0.0056	
RSEM-R6E-EOP	2/29/2020 13:30	XM2599	M	C015563	4.09	3.57	0.262	0.00102	0.00136	0.134	<0.0001	<0.001	0.155	0.000032	82.0	0.0129	0.00096	0.00193	0.475	0.00023	0.0282	17.3	0.0871	<0.0000019	0.0283	0.0052	
RSEM-R6E-EOP	2/29/2020 13:40	XM2600	D	C015563	4.30	3.62	0.259	0.00102	0.00139	0.136	<0.0001	<0.001	0.154	0.00003	83.4	0.013	0.00099	0.0019	0.474	0.00024	0.0283	17.7	0.0881	<0.0000019	0.0286	0.005	
RSEM-R6E-EOP	3/1/2020 11:50	XM2631	M	C015569	4.71	3.85	0.127	0.00095	0.00123	0.127	<0.0001	<0.001	0.146	0.000027	80.2	0.0131	0.00084	0.00172	0.218	<0.0002	0.0261	16.5	0.0681	<0.0000019	0.0273	0.0047	
RSEM-R6E-EOP	3/1/2020 12:00	XM2632	D	C015569	4.57	3.99	0.141	0.00095	0.00124	0.124	<0.0001	<0.001	0.138	0.000027	77.4	0.0128	0.00081	0.00173	0.238	<0.0002	0.0256	16.2	0.0671	<0.0000019	0.0271	0.0046	
RSEM-R6E-EOP	3/2/2020 18:45	XM6320	M	C016408	5.74	4.41	0.321	0.001	0.00135	0.129	<0.0001	<0.001	0.154	0.000038	78.1	0.0136	0.00098	0.00232	0.572	0.0003	0.0284	15.0	0.0855	<0.0000019	0.0301	0.0051	
RSEM-R6E-EOP	3/3/2020 12:40	XM6546	M	C016468	5.52	4.69	0.192	0.001	0.00132	0.118	<0.0001	<0.001	0.131	0.000031	71.8	0.0134	0.0008	0.002	0.289	<0.0002	0.0237	14.5	0.0609	<0.0000019	0.031	0.0043	
RSEM-R6E-EOP	3/4/2020 14:30	XM8002	M	C016829	6.23	4.84	0.191	0.00095	0.00139	0.109	<0.0001	<0.001	0.127	0.000027	72.3	0.0129	0.00072	0.00186	0.274	<0.0002	0.0235	13.4	0.051	<0.0000019	0.0313	0.0041	
RSEM-R6E-EOP	3/5/2020 13:45	XN0418	M	C017276	4.61	4.68	0.0838	0.00101	0.00131	0.107	<0.0001	<0.001	0.13	0.000031	74.6	0.0137	0.0007	0.00183	0.112	<0.0002	0.0224	13.6	0.0485	<0.0000019	0.0323	0.0043	
RSEM-R6E-EOP	3/10/2020 12:45	XN6089	M	C018396	5.24	4.67	0.147	0.00104	0.0014	0.108	<0.0001	<0.001	0.132	0.000038	73.7	0.0142	0.00073	0.00225	0.216	<0.0002	0.0223	13.3	0.0479	<0.0000019	0.033	0.0045	
RSEM-R6E-EOP	3/10/2020 12:55	XN6090	D	C018396	6.38	5.06	0.149	0.00099	0.00134	0.104	<0.0001	<0.001	0.13	0.000041	71.9	0.0138	0.00072	0.00224	0.252	<0.0002	0.0216	12.9	0.0469	<0.0000019	0.032	0.0044	
RSEM-R6E-EOP	3/11/2020 14:25	XN7891	M	C018851	6.09	6.43	0.363	0.00092	0.0014	0.106	<0.0001	<0.001	0.108	0.000044	72.2	0.0157	0.00081	0.00248	0.555	0.00027	0.0212	12.6	0.0571	<0.0000019	0.0351	0.0048	
RSEM-R6E-EOP	3/11/2020 14:35	XN7892	D	C018851	5.93	6.35	0.363	0.00089	0.00137	0.102	<0.0001	<0.001	0.107	0.000037	70.2	0.0156	0.00081	0.009	0.492	0.00026	0.0209	12.4	0.0562	<0.0000019	0.0347	0.0047	
RSEM-R6E-EOP	3/12/2020 12:00	XN8894	M	C019027	7.22	6.39	0.162	0.00091	0.00128	0.0948	<0.0001	<0.001	0.107	0.000036	72.4	0.0171	0.00074	0.00246	0.214	<0.0002	0.0189	12.4	0.0464	<0.0000019	0.0363	0.0048	
RSEM-R6E-EOP	3/12/2020 12:10	XN8895	D	C019027	7.14	6.45	0.201	0.00091	0.00126	0.0967	<0.0001	<0.001	0.111	0.000049	71.2	0.0178	0.00076	0.00255	0.231	<0.0002	0.0195	12.7	0.0474	<0.0000019	0.0366	0.0054	
RSEM-R6E-EOP	3/13/2020 11:30	XN9529	M	C019176	7.12	5.36	0.188	0.00089	0.00126	0.093	<0.0001	<0.001	0.104	0.00004	70.3	0.0163	0.00069	0.00224	0.242	<0.0002	0.0203	12.0	0.0442	<0.0000019	0.036	0.0045	
RSEM-R6E-EOP	3/13/2020 11:40	XN9530	D	C019176	7.14	6.50	0.176	0.00091	0.00124	0.0955	<0.0001	<0.001	0.107	0.00004	71.0	0.0164	0.00069	0.00225	0.175	<0.0002	0.0207	12.2	0.044	<0.0000019	0.0368	0.0045	
RSEM-R6E-EOP	3/16/2020 13:45	XO2545	M	C019847	6.39	6.74	0.0917	0.00094	0.00127	0.0945	<0.0001	<0.001	0.12	0.000042	71.9	0.0172	0.00071	0.00223	0.117	<0.0002	0.0205	12.2	0.0435	<0.0000019	0.0389	0.0047	
RSEM-R6E-EOP	3/17/2020 13:15	XO3910	M	C020169	7.82	7.09	0.113	0.00097	0.00135	0.0981	<0.0001	<0.001	0.127	0.000041	73.6	0.0175	0.00074	0.00233	0.113	<0.0002	0.0211	12.5	0.0464	<0.0000019	0.0398	0.0049	
RSEM-R6E-EOP	3/18/2020 12:50	XO5560	M	C020445	8.42	<0.50	0.204	0.001	0.00137	0.0912	<0.0001	<0.001	0.114	0.000036	65.1	0.0156	0.00066	0.00234	0.165	<0.0002	0.0239	11.1	0.0435	<0.0000019	0.0352	0.0041	
RSEM-R6E-EOP	3/21/2020 12:05	XO8300	M	C021037	7.01	7.19	0.232	0.00108	0.00142	0.102	<0.0001	<0.001	0.131	0.000034	71.5	0.0179	0.00077	0.00266	0.144	<0.0002	0.0235	12.7	0.0471	<0.0000019	0.0392	0.0049	
RSEM-R6E-EOP	3/22/2020 12:10	XO8422	M	C021064	6.93	6.56	0.351	0.00104	0.00142	0.111	<0.0001	<0.001	0.136	0.000036	72.0	0.0209	0.00088	0.0031	0.255	<0.0002	0.0247	13.4	0.0574	<0.0000019	0.041	0.0049	
RSEM-R6E-EOP	3/23/2020 11:05	XO8462	M	C021073	6.28	7.14	0.212	0.00098	0.00136	0.106	<0.0001	<0.001	0.123	0.000037	71.1	0.0225	0.00085	0.00306	0.198	<0.0002	0.0239	13.2	0.0535	<0.0000019	0.0419	0.0049	
RSEM-R6E-EOP	3/23/2020 11:15	XO8463	D	C021073	6.52	6.90	0.216	0.00098	0.00137	0.105	<0.0001	<0.001	0.122	0.000034	70.2	0.0222	0.00085	0.00299	0.22	<0.0002	0.0229	13.0	0.053	<0.0000019	0.0415	0.0049	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6E-EOP	3/24/2020 11:00	XP0443	M	C021618	6.06	6.26	0.116	0.00079	0.00111	0.0942	<0.0001	<0.001	0.105	0.000036	71.4	0.0214	0.00071	0.00267	0.101	<0.0002	0.0205	12.6	0.0424	0.0000023	0.038	0.0045	
RSEM-R6E-EOP	3/25/2020 11:00	XP1312	M	C021872	6.83	5.97	0.108	0.00073	0.00103	0.0891	<0.0001	<0.001	0.089	0.000036	69.5	0.0209	0.0007	0.00247	0.077	<0.0002	0.0211	11.9	0.0371	0.0000035	0.0363	0.0046	
RSEM-R6E-EOP	3/26/2020 17:50	XP2431	M	C022151	6.50	6.37	0.227	0.00093	0.00129	0.113	<0.0001	<0.001	0.121	0.000034	76.7	0.0246	0.00089	0.0029	0.22	<0.0002	0.0253	13.3	0.0656	<0.0000019	0.0431	0.0048	
RSEM-R6E-EOP	3/27/2020 10:15	XP2501	M	C022160	6.17	6.00	0.241	0.00076	0.00115	0.1	<0.0001	<0.001	0.1	0.000035	73.5	0.025	0.00089	0.00289	0.258	<0.0002	0.0203	12.2	0.052	0.0000029	0.0394	0.0051	
RSEM-R6E-EOP	3/28/2020 11:45	XP3710	M	C022531	5.38	4.20	0.143	0.00054	0.00078	0.0789	<0.0001	<0.001	0.068	0.000034	61.4	0.0174	0.00082	0.0024	0.172	<0.0002	0.0165	10.4	0.0362	<0.0000019	0.0273	0.0053	
RSEM-R6E-EOP	4/7/2020 13:30	XQ3417	M	C024753	5.31	4.69	0.123	0.00076	0.00126	0.107	<0.0001	<0.001	0.107	0.000028	85.1	0.0328	0.00102	0.00277	0.231	<0.0002	0.0238	14.1	0.0699	<0.0000019	0.0504	0.006	
RSEM-R6E-EOP	4/8/2020 12:30	XQ4590	M	C024938	5.05	4.31	0.162	0.00073	0.00098	0.103	<0.0001	<0.001	0.088	0.00005	79.7	0.027	0.00111	0.00237	0.247	<0.0002	0.0203	13.1	0.0628	0.0000031	0.0419	0.0062	
RSEM-R6E-EOP	4/9/2020 11:00	XQ4583	M	C024937	4.90	4.84	0.33	0.0006	0.00103	0.105	<0.0001	<0.001	0.091	0.000044	79.4	0.0263	0.00125	0.00277	0.606	0.00031	0.02	13.3	0.0697	0.0000027	0.0399	0.0069	
RSEM-R6E-EOP	4/9/2020 11:10	XQ4584	D	C024937	4.96	4.49	0.222	0.00067	0.00089	0.107	<0.0001	<0.001	0.081	0.000051	80.0	0.0265	0.00119	0.00253	0.375	0.0003	0.0195	13.2	0.0688	0.0000027	0.0401	0.0067	
RSEM-R6E-EOP	4/10/2020 12:35	XQ5870	M	C025257	4.66	3.95	0.266	0.00056	0.00101	0.106	<0.0001	<0.001	0.073	0.000067	70.0	0.0209	0.00124	0.00345	0.6	0.0004	0.0172	11.4	0.0708	0.0000047	0.0331	0.0067	
RSEM-R6E-EOP	4/11/2020 18:10	XQ5963	M	C025274	4.41	3.60	0.142	0.00053	0.00063	0.0935	<0.0001	<0.001	0.066	0.000071	64.9	0.0192	0.00105	0.00303	0.27	0.00023	0.0157	10.5	0.0577	0.0000031	0.0288	0.0064	
RSEM-R6E-EOP	4/11/2020 18:20	XQ5964	D	C025274	4.10	3.83	0.157	0.00062	0.00069	0.0946	<0.0001	<0.001	0.07	0.000063	65.3	0.0183	0.00112	0.00309	0.291	0.00022	0.0158	10.7	0.0589	0.0000028	0.0298	0.0064	
RSEM-R6E-EOP	4/12/2020 15:15	XQ6096	M	C025305	3.99	3.77	0.141	0.0006	0.00097	0.0959	<0.0001	<0.001	0.072	0.000068	66.0	0.0184	0.00119	0.00313	0.257	<0.0002	0.016	11.0	0.0544	0.0000028	0.0301	0.0068	
RSEM-R6E-EOP	4/13/2020 10:30	XQ5690	D	C025217	3.45	3.17	0.166	0.00056	0.00071	0.0785	<0.0001	<0.001	0.055	0.000028	59.6	0.0156	0.00097	0.00184	0.237	<0.0002	0.0127	9.29	0.0429	0.0000023	0.024	0.006	
RSEM-R6E-EOP	4/13/2020 10:30	XQ5689	M	C025217	3.45	3.05	0.191	<0.0005	0.00069	0.0817	<0.0001	<0.001	0.053	0.000029	60.8	0.0158	0.00108	0.00207	0.278	<0.0002	0.0131	9.40	0.0462	0.0000021	0.0248	0.0057	
RSEM-R6E-EOP	4/14/2020 18:55	XQ8328	M	C025913	3.51	3.19	0.135	0.00055	0.0007	0.0938	<0.0001	<0.001	0.061	0.000043	68.9	0.022	0.00107	0.00276	0.191	<0.0002	0.0174	11.7	0.0559	<0.0000019	0.0331	0.0066	
RSEM-R6E-EOP	4/15/2020 14:25	XQ9341	M	C026226	3.75	2.80	0.102	0.00056	0.00046	0.0857	<0.0001	<0.001	0.056	0.000052	63.5	0.0191	0.00087	0.00307	0.169	<0.0002	0.016	10.5	0.0463	0.0000027	0.03	0.0061	
RSEM-R6E-EOP	4/16/2020 13:35	XR0409	M	C026516	3.51	2.72	0.0885	0.0006	0.00052	0.0806	<0.0001	<0.001	0.062	0.000061	66.5	0.0191	0.00083	0.00238	0.14	<0.0002	0.0158	11.0	0.0508	<0.0000019	0.028	0.0054	
RSEM-R6E-EOP	4/17/2020 10:30	XR0395	M	C026514	3.18	3.42	0.0779	0.00058	0.00064	0.0804	<0.0001	<0.001	0.059	0.000025	66.5	0.0186	0.0009	0.00221	0.101	<0.0002	0.0156	11.1	0.0483	0.0000029	0.0284	0.0055	
RSEM-R6E-EOP	4/17/2020 10:40	XR0396	D	C026514	3.29	3.42	0.0706	0.00051	0.00066	0.0764	<0.0001	<0.001	0.058	0.000013	64.9	0.0188	0.0009	0.00216	0.1	<0.0002	0.015	11.1	0.0489	0.0000024	0.0268	0.0056	
RSEM-R6E-EOP	4/18/2020 11:40	XR2302	M	C026869	2.54	2.79	0.0601	<0.0005	0.00041	0.0621	<0.0001	<0.001	<0.05	0.000012	49.8	0.0146	0.00064	0.00168	0.073	<0.0002	0.0115	8.73	0.0359	<0.0000019	0.0222	0.0042	
RSEM-R6E-EOP	4/19/2020 12:30	XR2516	M	C026927	<2.5	2.40	0.0646	<0.0005	0.00062	0.0667	<0.0001	<0.001	<0.05	<0.00001	53.8	0.0161	0.00076	0.00177	0.099	<0.0002	0.0134	10.6	0.0553	<0.0000019	0.0262	0.0047	
RSEM-R6E-EOP	4/20/2020 17:30	XR3426	M	C027099	2.32	1.87	0.121	<0.0005	0.00062	0.0801	<0.0001	<0.001	0.058	0.000013	62.8	0.0127	0.00086	0.00147	0.245	<0.0002	0.0154	11.6	0.0737	0.0000034	0.0253	0.0051	
RSEM-R6E-EOP	4/21/2020 12:25	XR4953	M	C027465	2.06	1.93	0.136	<0.0005	0.00057	0.0843	<0.0001	<0.001	0.059	0.000016	61.6	0.0113	0.00106	0.0014	0.303	<0.0002	0.0139	12.8	0.0917	0.0000022	0.0246	0.0052	
RSEM-R6E-EOP	4/22/2020 13:05	XR6356	M	C027799	1.61	1.96	0.133	<0.0005	0.00075	0.0786	<0.0001	<0.001	0.053	0.00002	54.1	0.0076	0.00108	0.00132	0.328	0.00032	0.0119	11.7	0.0948	<0.0000019	0.0199	0.0049	
RSEM-R6E-EOP	4/23/2020 15:05	XR7184	M	C027994	1.03	1.90	0.147	<0.0005	0.00059	0.0712	<0.0001	<0.001	<0.05	0.000012	45.7	0.0047	0.00077	0.00096	0.272	<0.0002	0.0115	9.72	0.0714	<0.0000019	0.016	0.0041	
RSEM-R6E-EOP	4/24/2020 12:40	XR7269	M	C028014	1.94	1.79	0.127	<0.0005	0.00042	0.0707	<0.0001	<0.001	<0.05	0.000017	47.5	0.0035	0.00078	0.00101	0.24	<0.0002	0.0107	10.2	0.0742	<0.0000019	0.0152	0.0041	
RSEM-R6E-EOP	4/25/2020 12:35	XR8896	M	C028412	1.94	1.49	0.119	<0.0005	0.00062	0.0782	<0.0001	<0.001	<0.05	0.000021	51.7	0.0028	0.00072	0.00094	0.203	<0.0002	0.0124	9.25	0.0705	<0.0000019	0.0158	0.004	
RSEM-R6E-EOP	4/26/2020 13:25	XR8994	M	C028429	1.88	2.08	0.16	<0.0005	0.00049	0.0809	<0.0001	<0.001	<0.05	0.000017	50.5	0.0027	0.00052	0.00089	0.214	<0.0002	0.0133	10.1	0.0671	<0.0000019	0.0151	0.004	
RSEM-R6E-EOP	4/27/2020 14:00	XS0060	M	C028666	1.92	1.57	0.107	<0.0005	0.00045	0.0704	<0.0001	<0.001	<0.05	0.000027	54.3	0.0023	0.00062	0.00096	0.167	<0.0002	0.0111	11.1	0.053	<0.0000019	0.0126	0.0036	
RSEM-R6E-EOP	4/28/2020 12:15	XS2084	M	C029151	1.70	1.70	0.107	<0.0005	0.00051	0.0879	<0.0001	<0.001	<0.05	0.000015	51.4	0.0021	0.00063	0.0012	0.214	<0.0002	0.0129	10.5	0.047	<0.0000019	0.0145	0.0051	
RSEM-R6E-EOP	4/28/2020 12:25	XS2085	D	C029151	1.76	2.05	0.112	<0.0005	0.00033	0.0716	<0.0001	<0.001	<0.05	0.000018	48.9	0.0018	0.00062	0.00102	0.201	<0.0002	0.0109	10.1	0.0455	<0.0000019	0.0122	0.004	
RSEM-R6E-EOP	4/29/2020 11:00	XS3516	M	C029452	1.90	2.22	0.127	<0.0005	0.0004	0.0813	<0.0001	<0.001	0.053	0.000017	53.1	0.0017	0.00066	0.00105	0.216	<0.0002	0.012	11.0	0.0523	<0.0000019	0.0132	0.0045	
RSEM-R6E-EOP	4/29/2020 11:10	XS3517	D	C029452	1.79	1.75	0.108	<0.0005	0.00045	0.0825	<0.0001	<0.001	<0.05	0.000016	49.0	0.0017	0.00055	0.00123	0.187	<0.0002	0.0116	10.9	0.0454	0.0000028	0.0132	0.0045	
RSEM-R6E-EOP	4/30/2020 11:10	XS4883	M	C029734	1.63	1.86	0.115	<0.0005	0.00061	0.0896	<0.0001	<0.001	0.059	0.000021	53.9	0.0015	0.00052	0.00096	0.176	<0.0002	0.0139	11.7	0.0396	<0.0000019	0.0138	0.0064	
RSEM-R6E-EOP	5/22/2020 12:50	XU8402	M	C034984	2.24	2.18	0.0766	<0.0005	0.00058	0.118	<0.0001	<0.001	0.072	<0.00001	76.1	<0.001	0.00022	0.00086	0.082	<0.0002	0.0164	17.5	0.0122	<0.0000019	0.0114	0.0025	
RSEM-R6E-EOP	5/23/2020 14:10	XU8587	M	C034993	2.43	2.02	0.0797	<0.0005	0.00061	0.136	<0.0001	<0.001	0.081	0.000014	95.6	<0.001	0.0003	0.00089	0.084	<0.0002	0.0185	21.7	0.0184	<0.0000019	0.0107	0.0031	
RSEM-R6E-EOP	5/24/2020 12:50	XU8645	M	C035010	1.97	2.04	0.0571	<0.0005	0.00054	0.138	<0.0001	<0.001	0.083	0.000011	95.7	<0.001	0.00026	0.00089	0.045	<0.0002	0.0187	21.7	0.0142	<0.0000019	0.0103	0.0029	
RSEM-R6E-EOP	5/25/2020 8:50	XU8663	M	C035018	2.18	2.12	0.0494	<0.0005	0.00055	0.142	<0.0001	<0.001	0.088	0.00001	106	<0.001	0.00028	0.00118	0.036	<0.0002	0.0213	22.9	0.0143	<0.0000019	0.0103	0.0031	
RSEM-R6E-EOP	5/26/2020 15:00	XV2882	M	C035941	2.14	2.05	0.0688	<0.0005	0.00051	0.141	<0.0001	<0.001	0.089	0.00001	106	<0.001	0.00028	0.0009	0.04	<0.0002	0.0219	23.6	0.0113	<0.0000019	0.0099	0.0031	
RSEM-R6E-EOP	5/27/2020 15:10	XV4564	M	C036323	2.38	2.09	0.0523	<0.0005	0.00049	0.136	<0.0001	<0.001	0.084	<0.00001	105	<0.001	0.00025	0.00093	0.038	<0.0002	0.0197	22.9	0.0078	<0.0000019	0.0091	0.0029	
RSEM-R6E-EOP	5/28/2020 14:30	XV5618	M	C036526	2.36	1.99	0.049	<0.0005	0.00048	0.142	<0.0001	<0.001	0.09	<0.00001	106	<0.001	0.00025	0.00095	0.028	<0.0002	0.0214	23.9	0.0068	<0.0000019	0.0092	0.003	
RSEM-R6E-EOP	5/29/2020 11:40	XV5614	M	C036525	2.19	2.28	0.0429	<0.0005	0.00048	0.142	<0.0001	<0.001	0.088	<0.00001	106	<0.001	0.00023	0.00095	0.022	<0.0002	0.022	24.2	0.0058	<0.0000019	0.009	0.003	
RSEM-R6E-EOP	5/30/2020 14:00	XV8353	M	C037043	2.58	2.14	0.0458	<0.0005	0.00046	0.144	<0.0001	<0.001	0.092	<0.00001	102	<0.001	0.00021	0.00098	0.021	<0.0002	0.0221	24.9	0.0048	<0.0000019	0.0088	0.003	
RSEM-R6E-EOP	5/31/2020 12:30	XV8399	M	C037057	2.66	2.34	0.0476	<0.0005	0.00045	0.142	<0.0001	<0.001	0.086	<0.00001	98.6	<0.001	0.00021	0.00095	0.027	<0.0002	0.0199	23.8	0.0047	<0.0000019	0.0083	0.0029	
RSEM-R6E-EOP	5/31/2020 13:00	XV8401	D	C037057	2.16	2.17	0.0497	<0.0005	0.00046	0.146	<0.0001	<0.001	0.089	<0.00001	103	<0.001	0.00022	0.00101	0.024	<0.0002	0.0207	24.6	0.005	<0.0000019	0.0087	0.003	
RSEM-R6E-EOP	6/1/2020 14:45	XW0112	M	C037316	2.30	2.06	0.0644	<0.0005	0.00049	0.142	<0.0001	<0.001	0.101	<0.00001	98.1	<0.001	0.00022	0.0012	0.05	<0.0002	0.0238	24.7	0.0052	<0.0000019	0.0085	0.003	
RSEM-R6E-EOP	6/2/2020 11:45	XW3133	M	C037913	2.41	2.35	0.0543	<0.0005	0.00047	0.137	<0.0001	<0.001	0.098	<0.00001	93.1	<0.001	<0.0002	0.00096	0.035	<0.0002	0.0238	23.6	0.004	<0.0000019	0.0081	0.0027	
RSEM-R6E-EOP	6/3/2020 13:00	XW5133	M	C038222	1.97	1.95	0.0448	<0.0005	0.00047	0.135	<0.0001	<0.001	0.101	<0.00001	92.6	<0.001	<0.0002	0.00093	0.022	<0.0002	0.0232	24.2	0.0034	<0.0000019	0.0079	0.0027	
RSEM-R6E-EOP	6/4/2020 12:50	XW6864	M	C038528	2.41	1.82	0.0409	<0.0005	0.00046	0.13	<0.0001	<0.001	0.103	<0.00001	87.4	<0.001	<0.0002	0.00105	0.021	<0.0002	0.022	23.6	0.0031	<0.0000019	0.0076	0.0026	
RSEM-R6E-EOP	6/5/2020 16:30	XW9908	M	C039108	2.26	2.57	0.0447	<0.0005	0.00047	0.131	<0.0001	<0.001	0.103	<0.00001	84.7	<0.001	<0.0002	0.00096	0.026	<0.0002	0.0238	23.6	0.0029	<0.0000019	0.0076	0.0024	
RSEM-R6E-EOP	6/6/2020 11:30	XX0124	M	C039138	2.35	2.33	0.0594	<0.0005	0.00047	0.128	<0.0001	<0.001	0.101	<0.00001	83.3	<0.001	<0.0002	0.00111	0.038	<0.0002	0.0228	24.1	0.0038	<0.0000019	0.0074	0.0025	
RSEM-R6E-EOP	6/7/2020 12:10	XW9323	M	C038976	2.23	2.25	0.0451	<0.0005	0.00047	0.134	<0.0001	<0.001	0.101	<0.00001	82.0	<0.001	<0.0002	0.0009	0.039	<0.0002	0.0229	23.7	0.0068	<0.0000019	0.0065	0.0024	
RSEM-R6E-EOP	6/8/2020 15:40	XX1066	M	C039370	3.69	2.40	0.193	<0.0005	0.00057	0.133	<0.0001	<0.001	0.096	0.000011	79.9	<0.001	0.00028	0.00123	0.257	0.00022	0.0203	22.7	0.0145	<0.0000019	0.006	0.0027	
RSEM-R6E-EOP	6/8/2020 15:50	XX1067	D	C039370	3.60	2.51	0.178	<0.0005	0.00054	0.135	<0.0001	<0.001	0.098	0.000014	81.7	<0.001	0.00027	0.00119	0.233	<0.0002	0.0209	22.8	0.0142	<0.0000019	0.0061	0.0028	
RSEM-R6E-EOP	6/9/2020 15:20	XX3624	M	C039793	2.64	2.15	0.103	<0.0005	0.00046	0.135	<0.0001	<0.001	0.1	0.000029	109	<0.001	0.00059	0.00116	0.134	<0.0002	0.024	23.8	0.0414	<0.0000019	0.0057	0.0044	
RSEM-R6E-EOP	6/9/2020 15:30	XX3625	D	C039793	2.58	2.53	0.0879	<0.0005	0.00046	0.134	<0.0001	<0.001	0.104	0.000029	108	<0.001	0.00058	0.00104	0.117	<0.0002	0.024	23.3	0.0399	<0.0000019	0.0057	0.0043	
RSEM-R6E-EOP	6/10/2020 13:20	XX4753	M	C040036	2.20	3.83	0.065	<0.0005	0.00045	0.136	<0.0001	<0.001	0.101	0.000021	112	<0.001	0.00051	0.00104	0.048	<0.0002	0.0232	24.7	0.0326	0.000002	0.006	0.0043	
RSEM-R6E-EOP	6/11/2020 13:30	XX7039	M	C040416	2.83	2.64	0.0438	<0.0005	0.00042	0.127	<0.0001	<0.001	0.099	0.000012	100	<0.001	0.00043	0.00096	0.025	<0.0002	0.0228	23.5	0.0234	<0.0000019	0.0057	0.0039	
RSEM-R6E-EOP	6/11/2020 13:40	XX7040	D	C040416	2.69	2.59	0.0516	<0.0005	0.0004	0.124	<0.0001	<0.001	0.096	0.000013	100	<0.001	0.00043	0.00102	0.028	<0.0002	0.023	23.0	0.0232	<0.0000019	0.0057	0.0039	
RSEM-R6E-EOP	6/12/2020 13:55	XX9580	M	C040980	2.40	1.93	0.0451	<0.0005	0.00042	0.128	<0.0001	<0.001	0.093	<0.00001	98.3	<0.001	0.00039	0.00096	0.026	<0.0002	0.0223	23.4	0.0196	<0.0000019	0.0057	0.0039	
RSEM-R6E-EOP	6/12/2020 14:05	XX9581	D	C040980	2.47	2.31	0.0437	<0.0005	0.00041	0.124	<0.0001	<0.001	0.093	<0.00001	98.1	<0.001	0.00038	0.00093	0.024	<0.0002	0.0223	23.1	0.0192	<0.0000019	0.0057	0.0038	
RSEM-R6E-EOP	6/13/2020 14:35	XX9598	M	C040986	2.24	2.16	0.044	<0.0005	0.00042	0.121	<0.0001	<0.001	0.096	<0.00001	94.3	<0.001	0.00033	0.00095	0.021	<0.0002	0.0227	23.5	0.0146	<0.0000019	0.0057	0.0038	
RSEM-R6E-EOP	6/13/2020 14:45	XX9599	D	C040986	2.55	2.34	0.038	<0.0005	0.00042	0.117	<0.0001	<0.001	0.093	<0.00001	94.1	<0.001	0.00033	0.00095	0.019	<0.0002	0.0222	23.1	0.014	<0.0000019	0.0056	0.0037	
RSEM-R6E-EOP	6/14/2020 14:00	XX9646	M	C040993	2.63	2.04	0.162	<0.0005	0.00057	0.135	<0.0001	<0.001	0.087	0.00002	94.7	<0.001	0.00057	0.00127	0.268	<0.0002	0.0208	22.1	0.0333	<0.0000019	0.0055	0.0045	
RSEM-R6E-EOP	6/15/2020 14:45	XY1602	M	C041415	2.29	1.77	0.205	<0.0005	0.00039	0.114	<0.0001	<0.001	0.07	0.000174	93.7	<0.001	0.00682	0.0026	0.224	<0.0002	0.0292	18.9	0.184	<0.0000019	0.0043	0.0267	
RSEM-R6E-EOP	6/16/2020 10:45	XY1504	M	C041388	2.30	1.67	0.201	<0.0005	0.00032	0.123	<0.0001	<0.001	0.073	0.000274	101	<0.001	0.0124	0.00174	0.161	<0.0002	0.0387	22.7	0.278	<0.0000019	0.0043	0.0462	
RSEM-R6E-EOP	6/17/2020 15:30	XY6277	M	C042380	<2.5	2.08	0.134	<0.0005	0.00026	0.126	<0.0001	<0.001	0.079	0.000278	102	<0.001	0.0137	0.00185	0.06	<0.0002	0.0427	23.7	0.272	<0.0000019	0.0043	0.0492	
RSEM-R6E-EOP	6/18/2020 16:20	XY6284	M	C042383	2.25	2.25	0.169	<0.0005	0.00029	0.131	<0.0001	<0.001	0.079	0.000254	99.9	<0.001	0.0127	0.00187	0.085	<0.0002	0.0415	24.3	0.232	<0.0000019	0.0044	0.0468	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6E-EOP	6/19/2020 11:30	XY6263	M	C042375	<2.5	1.89	0.159	<0.0005	0.00025	0.133	<0.0001	<0.001	0.086	0.000226	98.7	<0.001	0.0114	0.00187	0.042	<0.0002	0.0417	24.9	0.199	<0.0000019	0.0045	0.0431	
RSEM-R6E-EOP	6/20/2020 14:00	XY9027	M	C042884	2.31	1.79	0.167	<0.0005	0.00029	0.131	<0.0001	<0.001	0.089	0.000175	96.5	<0.001	0.00887	0.00188	0.042	<0.0002	0.0367	25.1	0.14	<0.0000019	0.0044	0.0366	
RSEM-R6E-EOP	6/21/2020 15:15	XY9120	M	C042904	2.05	1.42	0.183	<0.0005	0.0003	0.128	<0.0001	<0.001	0.084	0.000079	86.3	<0.001	0.00558	0.00182	0.072	<0.0002	0.0316	23.3	0.0815	<0.0000019	0.0041	0.0259	
RSEM-R6E-EOP	6/22/2020 13:00	XZ0403	M	C043197	2.33	1.75	0.192	<0.0005	0.0003	0.145	<0.0001	<0.001	0.078	0.00003	82.6	<0.001	0.0039	0.00166	0.046	<0.0002	0.0335	24.3	0.0528	<0.0000019	0.0042	0.0214	
RSEM-R6E-EOP	6/23/2020 16:00	XZ2249	M	C043604	2.30	2.30	0.186	<0.0005	0.00028	0.144	<0.0001	<0.001	0.069	0.000011	74.4	<0.001	0.00238	0.00156	0.053	<0.0002	0.0259	22.2	0.0287	<0.0000019	0.0035	0.0146	
RSEM-R6E-EOP	6/24/2020 13:00	XZ5349	M	C044267	2.04	2.34	0.164	<0.0005	0.00032	0.134	<0.0001	<0.001	0.077	<0.00001	73.8	<0.001	0.00174	0.00161	0.033	<0.0002	0.0236	21.9	0.0185	<0.0000019	0.0032	0.0125	
RSEM-R6E-EOP	6/25/2020 15:20	XZ5981	M	C044346	2.12	1.99	0.158	<0.0005	0.00031	0.132	<0.0001	<0.001	0.077	<0.00001	68.7	<0.001	0.0012	0.00156	0.032	<0.0002	0.022	21.7	0.0117	<0.0000019	0.0033	0.0103	
RSEM-R6E-EOP	6/25/2020 15:30	XZ5982	D	C044346	2.35	2.22	0.154	<0.0005	0.00031	0.13	<0.0001	<0.001	0.076	<0.00001	68.1	<0.001	0.00116	0.00153	0.025	<0.0002	0.022	21.6	0.0116	<0.0000019	0.0032	0.0102	
RSEM-R6E-EOP	6/26/2020 12:20	XZ7315	M	C044624	2.22	<2.5	0.161	<0.0005	0.0003	0.139	<0.0001	<0.001	0.086	<0.00001	69.5	<0.001	0.00098	0.00153	0.031	<0.0002	0.0213	21.3	0.01	<0.0000019	0.0032	0.0088	
RSEM-R6E-EOP	6/26/2020 12:30	XZ7316	D	C044624	2.33	<2.5	0.156	<0.0005	0.00029	0.138	<0.0001	<0.001	0.085	<0.00001	69.6	<0.001	0.00098	0.0022	0.028	<0.0002	0.0215	21.5	0.0101	<0.0000019	0.0032	0.0091	
RSEM-R6E-EOP	6/27/2020 19:00	XZ9069	M	C044897	1.93	2.13	0.133	<0.0005	0.00031	0.137	<0.0001	<0.001	0.073	<0.00001	67.2	<0.001	0.00073	0.00143	0.024	<0.0002	0.0193	20.9	0.0074	<0.0000019	0.0032	0.0075	
RSEM-R6E-EOP	6/28/2020 12:40	XZ9159	M	C044916	<2.0	1.85	0.126	<0.0005	0.00029	0.143	<0.0001	<0.001	0.075	<0.00001	69.6	<0.001	0.00078	0.0015	0.034	<0.0002	0.0191	21.2	0.0099	<0.0000019	0.0032	0.0071	
RSEM-R6E-EOP	6/28/2020 12:50	XZ9160	D	C044916	<2.0	1.74	0.127	<0.0005	0.00032	0.142	<0.0001	<0.001	0.074	<0.00001	68.7	<0.001	0.00076	0.00142	0.03	<0.0002	0.0187	20.6	0.0098	<0.0000019	0.0032	0.0072	
RSEM-R6E-EOP	6/29/2020 15:55	YA0783	M	C045275	2.21	2.09	0.116	<0.0005	0.00029	0.14	<0.0001	<0.001	0.072	<0.00001	69.3	<0.001	0.00084	0.00139	0.038	<0.0002	0.0183	20.5	0.0108	<0.0000019	0.003	0.0074	
RSEM-R6E-EOP	6/30/2020 13:50	YA2738	M	C045692	<2.5	1.60	0.124	<0.0005	0.00028	0.145	<0.0001	<0.001	0.074	<0.00001	71.3	<0.001	0.00096	0.00393	0.045	<0.0002	0.0174	20.7	0.0121	<0.0000019	0.0029	0.0079	
RSEM-R6E-EOP	6/30/2020 14:00	YA2739	D	C045692	2.19	3.12	0.118	<0.0005	0.00028	0.144	<0.0001	<0.001	0.073	<0.00001	71.2	<0.001	0.00096	0.00151	0.044	<0.0002	0.0176	20.6	0.0119	<0.0000019	0.003	0.0076	
RSEM-R6E-EOP	7/1/2020 11:30	YA2706	M	C045689	2.64	2.08	0.18	<0.0005	0.00032	0.162	<0.0001	<0.001	0.061	0.000024	74.1	<0.001	0.00114	0.00178	0.171	<0.0002	0.0146	19.1	0.0236	<0.0000019	0.0025	0.0074	
RSEM-R6E-EOP	7/1/2020 11:40	YA2707	D	C045689	2.32	2.30	0.176	<0.0005	0.00038	0.169	<0.0001	<0.001	0.063	0.000027	76.7	<0.001	0.0012	0.00182	0.18	<0.0002	0.0149	19.6	0.0251	<0.0000019	0.0027	0.0077	
RSEM-R6E-EOP	7/2/2020 13:30	YA4188	M	C045985	2.12	1.69	0.293	<0.0005	0.00048	0.136	<0.0001	<0.001	0.064	0.000085	85.9	0.0016	0.00313	0.00188	0.418	0.0002	0.0223	17.0	0.126	0.000002	0.0049	0.0145	
RSEM-R6E-EOP	7/2/2020 13:40	YA4189	D	C045985	1.97	1.84	0.269	<0.0005	0.00045	0.132	<0.0001	<0.001	0.062	0.00008	85.7	0.0013	0.00297	0.00178	0.364	<0.0002	0.0217	16.5	0.12	<0.0000019	0.0048	0.0137	
RSEM-R6E-EOP	7/3/2020 16:10	YA5155	M	C046179	2.22	1.96	0.456	<0.0005	0.0006	0.131	<0.0001	<0.001	0.062	0.000134	81.9	0.0014	0.00548	0.00245	0.86	0.00035	0.0257	16.5	0.176	<0.0000019	0.0048	0.0224	
RSEM-R6E-EOP	7/4/2020 15:05	YA6735	M	C046470	1.1	1.77	0.429	<0.0005	0.00034	0.136	<0.0001	<0.001	0.054	0.000245	75.1	<0.001	0.00987	0.00206	0.364	<0.0002	0.0306	18.6	0.255	<0.0000019	0.0039	0.0368	
RSEM-R6E-EOP	7/5/2020 10:05	YA6916	M	C046500	<2.0	<0.50	0.239	<0.0005	0.00026	0.142	<0.0001	<0.001	0.056	0.000263	79.8	<0.001	0.0116	0.00217	0.198	<0.0002	0.0354	20.0	0.238	<0.0000019	0.0039	0.0424	
RSEM-R6E-EOP	7/5/2020 10:15	YA6917	D	C046500	1.52	<0.50	0.246	<0.0005	0.00025	0.14	<0.0001	<0.001	0.052	0.000267	77.1	<0.001	0.0117	0.00224	0.194	<0.0002	0.0289	20.0	0.24	<0.0000019	0.0038	0.0419	
RSEM-R6E-EOP	7/6/2020 11:30	YA8348	D	C046846	2.00	1.85	0.238	<0.0005	0.00025	0.144	<0.0001	<0.001	0.058	0.000241	80.2	<0.001	0.0104	0.00237	0.16	<0.0002	0.0303	19.8	0.192	0.0000019	0.0037	0.0389	
RSEM-R6E-EOP	7/6/2020 23:20	YA8347	M	C046846	2.06	1.93	0.237	<0.0005	0.00023	0.145	<0.0001	<0.001	0.059	0.000245	81.1	<0.001	0.0104	0.00234	0.196	<0.0002	0.0316	19.9	0.191	<0.0000019	0.0035	0.0378	
RSEM-R6E-EOP	7/7/2020 12:30	YB0051	M	C047206	2.13	2.10	0.265	<0.0005	0.00025	0.16	<0.0001	<0.001	0.055	0.000215	88.2	<0.001	0.00924	0.00272	0.168	<0.0002	0.0271	21.1	0.136	<0.0000019	0.0037	0.0351	
RSEM-R6E-EOP	7/8/2020 12:30	YB2460	M	C047619	2.40	2.10	0.318	<0.0005	0.00028	0.173	<0.0001	<0.001	0.056	0.000178	87.3	<0.001	0.0074	0.00295	0.232	<0.0002	0.0249	21.0	0.107	<0.0000019	0.004	0.0292	
RSEM-R6E-EOP	7/9/2020 14:00	YB4136	M	C047920	2.3	1.77	0.339	<0.0005	0.00031	0.179	<0.0001	<0.001	0.055	0.000161	85.3	<0.001	0.00619	0.00305	0.266	<0.0002	0.0224	20.3	0.0836	<0.0000019	0.0039	0.0245	
RSEM-R6E-EOP	7/9/2020 14:10	YB4139	D	C047920	2.68	1.91	0.333	<0.0005	0.0003	0.175	<0.0001	<0.001	0.055	0.000151	84.7	<0.001	0.00613	0.00308	0.275	<0.0002	0.0226	20.1	0.083	<0.0000019	0.0039	0.0243	
RSEM-R6E-EOP	7/10/2020 10:00	YB4116	M	C047917	2.17	2.7	0.302	<0.0005	0.00027	0.185	<0.0001	<0.001	0.054	0.000128	85.0	<0.001	0.00494	0.0027	0.205	<0.0002	0.0203	20.1	0.0651	<0.0000019	0.0034	0.0203	
RSEM-R6E-EOP	7/11/2020 15:10	YB7193	M	C048486	2.57	1.76	0.215	<0.0005	0.00029	0.189	<0.0001	<0.001	<0.05	0.000045	80.9	<0.001	0.00323	0.0021	0.142	<0.0002	0.0149	19.5	0.0379	0.0000021	0.0027	0.0146	
RSEM-R6E-EOP	7/12/2020 14:00	YB7108	M	C048462	2.15	1.81	0.181	<0.0005	0.00025	0.201	<0.0001	<0.001	<0.05	0.000026	81.6	0.0027	0.00228	0.00182	0.122	<0.0002	0.0137	19.2	0.0261	<0.0000019	0.0024	0.0127	
RSEM-R6E-EOP	7/13/2020 14:30	YB9219	M	C048875	2.25	1.94	0.167	<0.0005	0.00028	0.2	<0.0001	<0.001	<0.05	0.000016	80.1	<0.001	0.00177	0.00166	0.11	<0.0002	0.0132	19.5	0.0196	<0.0000019	0.0023	0.0095	
RSEM-R6E-EOP	7/14/2020 14:30	YC1074	M	C049344	2.37	2.14	0.15	<0.0005	0.00025	0.198	<0.0001	<0.001	<0.05	0.000014	82.0	<0.001	0.00139	0.00158	0.115	<0.0002	0.0123	19.6	0.016	<0.0000019	0.0023	0.0084	
RSEM-R6E-EOP	7/15/2020 12:45	YC2137	M	C049614	1.94	2.15	0.146	<0.0005	0.00026	0.199	<0.0001	<0.001	<0.05	0.000012	80.6	<0.001	0.00116	0.00154	0.102	<0.0002	0.0129	20.2	0.0143	<0.0000019	0.0023	0.0078	
RSEM-R6E-EOP	7/16/2020 15:30	YC4665	M	C049952	2.10	1.85	0.131	<0.0005	0.00028	0.198	<0.0001	<0.001	0.05	0.000013	79.4	<0.001	0.00099	0.00144	0.094	<0.0002	0.0123	20.0	0.0149	0.0000022	0.0022	0.0066	
RSEM-R6E-EOP	7/17/2020 13:55	YC5481	M	C050110	2.10	2.00	0.121	<0.0005	0.00024	0.184	<0.0001	<0.001	<0.05	<0.00001	75.5	<0.001	0.00085	0.0014	0.087	<0.0002	0.0123	19.2	0.0115	<0.0000019	0.0021	0.0062	
RSEM-R6E-EOP	7/18/2020 13:05	YC7458	M	C050583	2.19	1.93	0.129	<0.0005	0.00028	0.186	<0.0001	<0.001	0.056	<0.00001	77.7	<0.001	0.00075	0.00144	0.098	<0.0002	0.0129	20.2	0.0125	<0.000019	0.0023	0.0062	
RSEM-R6E-EOP	7/19/2020 13:30	YC7536	M	C050603	2.25	2.33	0.117	<0.0005	0.00028	0.18	<0.0001	<0.001	0.055	<0.00001	75.6	<0.001	0.00061	0.00148	0.095	<0.0002	0.0124	20.4	0.0107	<0.0000019	0.0027	0.0057	
RSEM-R6E-EOP	7/20/2020 10:40	YC8542	M	C050811	2.21	2.28	0.12	<0.0005	0.00031	0.179	<0.0001	<0.001	0.055	<0.00001	75.4	<0.001	0.00058	0.00136	0.093	<0.0002	0.0133	20.5	0.0107	<0.0000019	0.0026	0.0055	
RSEM-R6E-EOP	7/21/2020 13:55	YD0796	M	C051251	2.24	2.26	0.105	<0.0005	0.00033	0.166	<0.0001	<0.001	0.055	<0.00001	74.9	<0.001	0.00055	0.00126	0.079	<0.0002	0.0123	20.2	0.0113	<0.0000019	0.0026	0.0052	
RSEM-R6E-EOP	7/22/2020 13:30	YD2617	M	C051641	2.33	2.33	0.103	<0.0005	0.00035	0.168	<0.0001	<0.001	0.05	<0.00001	71.8	<0.001	0.00047	0.00117	0.09	<0.0002	0.0124	19.6	0.0119	<0.0000019	0.0026	0.0048	
RSEM-R6E-EOP	7/23/2020 11:55	YD4254	M	C051864	2.51	2.30	0.102	<0.0005	0.00034	0.169	<0.0001	<0.001	0.051	<0.00001	72.9	<0.001	0.00046	0.0011	0.084	<0.0002	0.0125	20.1	0.0119	<0.0000019	0.0025	0.0046	
RSEM-R6E-EOP	7/24/2020 15:20	YD5909	M	C052038	2.69	2.64	0.0909	<0.0005	0.00032	0.168	<0.0001	<0.001	0.061	<0.00001	73.4	<0.001	0.00036	0.00119	0.076	<0.0002	0.0136	21.6	0.0107	<0.0000019	0.003	0.0042	
RSEM-R6E-EOP	7/25/2020 11:05	YD7674	M	C052402	2.64	2.48	0.083	<0.0005	0.00034	0.176	<0.0001	<0.001	0.063	<0.00001	76.3	0.0013	0.00036	0.00114	0.106	<0.0002	0.0138	21.6	0.0124	<0.0000019	0.0036	0.0042	
RSEM-R6E-EOP	7/26/2020 14:15	YD7713	M	C052420	2.95	2.36	0.0734	<0.0005	0.00028	0.167	<0.0001	<0.001	0.061	<0.00001	71.3	0.0016	0.00027	0.00111	0.079	<0.0002	0.0132	21.0	0.0076	<0.0000019	0.0042	0.0036	
RSEM-R6E-EOP	7/27/2020 10:30	YD7769	M	C052432	2.92	2.25	0.0671	<0.0005	0.00033	0.166	<0.0001	<0.001	0.066	<0.00001	68.5	0.0016	0.00024	0.00107	0.076	<0.0002	0.0131	21.0	0.0061	<0.0000019	0.0042	0.0035	
RSEM-R6E-EOP	7/28/2020 12:30	YE2029	M	C053295	2.24	2.02	0.0704	<0.0005	0.00034	0.172	<0.0001	<0.001	0.063	<0.00001	69.7	0.0017	0.00023	0.00115	0.064	<0.0002	0.0143	21.8	0.0059	<0.0000019	0.0043	0.0034	
RSEM-R6E-EOP	7/30/2020 12:30	YE4008	M	C053695	3.01	2.25	0.0567	<0.0005	0.00035	0.166	<0.0001	<0.001	0.056	<0.00001	66.8	0.0012	0.00021	0.00118	0.059	<0.0002	0.013	20.1	0.0076	<0.0000019	0.004	0.0029	
RSEM-R6E-EOP	7/30/2020 16:30	YE5556	M	C054021	3.23	2.55	0.0569	<0.0005	0.00035	0.17	<0.0001	<0.001	0.053	<0.00001	67.5	<0.001	<0.0002	0.001	0.076	<0.0002	0.0113	19.8	0.0075	<0.0000019	0.0036	0.0026	
RSEM-R6E-EOP	7/31/2020 11:00	YE5650	M	C054023	3.27	2.89	0.0531	<0.0005	0.00036	0.182	<0.0001	<0.001	0.056	<0.00001	68.1	<0.001	<0.0002	0.00178	0.088	<0.0002	0.0118	20.6	0.0089	<0.0000019	0.0035	0.0026	
RSEM-R6E-EOP	8/1/2020 12:15	YE6665	M	C054219	2.92	2.87	0.0569	<0.0005	0.00035	0.177	<0.0001	<0.001	0.058	<0.00001	67.0	<0.001	<0.0002	0.00099	0.096	<0.0002	0.0118	20.5	0.0086	<0.0000019	0.0031	0.0024	
RSEM-R6E-EOP	8/2/2020 12:40	YE8516	M	C054579	3.24	2.77	0.05	<0.0005	0.00041	0.187	<0.0001	<0.001	0.058	<0.00001	67.0	<0.001	0.00021	0.00102	0.101	<0.0002	0.0117	19.4	0.0131	<0.0000019	0.0029	0.0026	
RSEM-R6E-EOP	8/3/2020 13:00	YE8524	M	C054582	3.35	2.90	0.0511	<0.0005	0.00044	0.189	<0.0001	<0.001	0.062	<0.00001	66.3	<0.001	0.00024	0.00113	0.116	<0.0002	0.0118	19.6	0.0162	<0.0000019	0.003	0.0024	
RSEM-R6E-EOP	8/4/2020 12:50	YF1643	M	C055153	3.20	2.97	0.0444	<0.0005	0.00045	0.19	<0.0001	<0.001	0.059	<0.00001	65.2	<0.001	0.0002	0.00102	0.104	<0.0002	0.0114	18.8	0.0105	<0.0000019	0.0028	0.0022	
RSEM-R6E-EOP	8/4/2020 13:00	YF1644	D	C055153	3.18	2.76	0.0466	<0.0005	0.00046	0.19	<0.0001	<0.001	0.058	0.000011	65.1	<0.001	<0.0002	0.001	0.1	<0.0002	0.0114	19.1	0.0103	<0.0000019	0.0029	0.0023	
RSEM-R6E-EOP	8/5/2020 12:20	YF2976	M	C055442	2.83	3.01	0.0439	<0.0005	0.00054	0.189	<0.0001	<0.001	0.061	0.000016	64.9	<0.001	<0.0002	0.00107	0.094	<0.0002	0.0116	19.4	0.0091	<0.0000019	0.0028	0.0022	
RSEM-R6E-EOP	8/5/2020 12:30	YF2977	D	C055442	3.14	2.75	0.0407	<0.0005	0.00045	0.186	<0.0001	<0.001	0.06	<0.00001	64.8	<0.001	<0.0002	0.00105	0.091	<0.0002	0.0115	19.0	0.0086	<0.0000019	0.0027	0.0021	
RSEM-R6E-EOP	8/6/2020 11:20	YF2968	M	C055440	2.78	3.07	0.038	<0.0005	0.00044	0.192	<0.0001	<0.001	0.057	<0.00001	66.6	<0.001	<0.0002	0.00094	0.105	<0.0002	0.0111	18.5	0.0101	<0.0000019	0.0027	0.002	
RSEM-R6E-EOP	8/7/2020 11:55	YF4856	M	C055741	3.13	3.07	0.0368	<0.0005	0.00049	0.198	<0.0001	<0.001	0.054	<0.00001	63.3	<0.001	<0.0002	0.00095	0.101	<0.0002	0.0108	18.4	0.0084	<0.0000019	0.003	0.002	
RSEM-R6E-EOP	8/7/2020 12:05	YF4857	D	C055741	2.91	3.06	0.0383	<0.0005	0.00048	0.193	<0.0001	<0.001	0.052	<0.00001	61.5	<0.001	<0.0002	0.00087	0.096	<0.0002	0.0104	17.8	0.0082	<0.0000019	0.0029	0.0019	
RSEM-R6E-EOP	8/8/2020 12:40	YF8358	M	C056281	2.68	3.09	0.0394	<0.0005	0.0004	0.186	<0.0001	<0.001	0.055	<0.00001	58.9	<0.001	<0.0002	0.00094	0.089	<0.0002	0.0111	18.1	0.0053	<0.0000019	0.0028	0.0019	
RSEM-R6E-EOP	8/9/2020 14:10	YF8361	M	C056282	2.74	2.85	0.0422	<0.0005	0.00037	0.179	<0.0001	<0.001	0.054	<0.00001	57.8	<0.001	<0.0002	0.00093	0.088	<0.0002	0.0109	17.6	0.0069	<0.0000019	0.0027	0.002	
RSEM-R6E-EOP	8/10/2020 12:50	YG0105	M	C056587	3.22	3.09	0.0387	<0.0005	0.00041	0.188	<0.0001	<0.001	0.056	<0.00001	60.6	<0.001	<0.0002	0.00087	0.097	<0.0002	0.0115	19.7	0.0051	<0.0000019	0.0028	0.0019	
RSEM-R6E-EOP	8/11/2020 13:10	YG2366	M	C056973	2.66	2.41	0.0391	<0.0005	0.00046	0.178	<0.0001	<0.001	0.061	<0.00001	57.6	<0.001	<0.0002	0.00087	0.101	<0.0002	0.0111	19.5	0.0053	<0.0000019	0.0031	0.002	
RSEM-R6E-EOP	8/12/2020 17:30	YG4635	M	C057417	2.86	2.99	0.0369	<0.0005	0.0005	0.172	<0.0001	<0.001	0.065	<0.00001	55.2	<0.001	<0.0002	0.00095	0.106	<0.0002	0.0118	19.4	0.0049	<0.0000019	0.0033	0.0018	
RSEM-R6E-EOP	8/13/2020 13:20	YG7260	M	C057823	2.49	2.67	0.0358	<0.0005	0.00046	0.166	<0.0001	<0.001	0.075	<0.00001	53.1	<0.001	<0.0002	0.00104	0.096	<0.0002	0.012	19.2	0.0049	<0.0000019	0.0035	0.0018	
RSEM-R6E-EOP	8/13/2020 13:30	YG7261	D	C057823	2.15	2.00	0.0371	<0.0005	0.00042	0.166	<0.0001	<0.001	0.073	<0.00001	53.6	<0.001	<0.0002	0.00242	0.096	<0.0002	0.0123	19.6	0.005	<0.0000019	0.0036	0.0018	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6E-EOP	8/14/2020 12:45	YG7189	M	C057817	2.12	2.76	0.0368	<0.0005	0.00045	0.169	<0.0001	<0.001	0.075	<0.00001	52.6	<0.001	<0.0002	0.00093	0.1	<0.0002	0.0126	20.1	0.0051	<0.0000019	0.0042	0.0018	
RSEM-R6E-EOP	8/15/2020 14:45	YH0060	M	C058356	2.50	2.79	0.0383	<0.0005	0.00047	0.151	<0.0001	<0.001	0.065	<0.00001	49.9	0.001	<0.0002	0.00092	0.114	<0.0002	0.0109	19.5	0.0055	<0.0000019	0.0045	0.0019	
RSEM-R6E-EOP	8/16/2020 11:40	YH0172	M	C058389	3.17	2.62	0.0354	<0.0005	0.00048	0.15	<0.0001	<0.001	0.071	<0.00001	51.0	0.0011	<0.0002	0.00095	0.11	<0.0002	0.0112	19.6	0.0065	<0.0000019	0.0048	0.0019	
RSEM-R6E-EOP	8/17/2020 9:20	YG9869	M	C058326	2.90	2.63	0.0333	<0.0005	0.00048	0.143	<0.0001	<0.001	0.082	<0.00001	48.3	0.0013	<0.0002	0.00095	0.106	<0.0002	0.0132	19.3	0.006	<0.0000019	0.0048	0.0019	
RSEM-R6E-EOP	8/18/2020 16:30	YH3312	M	C059056	2.93	2.78	0.0411	<0.0005	0.00047	0.139	<0.0001	<0.001	0.077	<0.00001	40.7	0.0013	<0.0002	0.00112	0.126	<0.0002	0.0141	19.4	0.0078	<0.0000019	0.0051	0.0019	
RSEM-R6E-EOP	8/19/2020 15:00	YH5387	M	C059422	3.42	2.46	0.0475	<0.0005	0.00044	0.126	<0.0001	<0.001	0.079	<0.00001	39.3	0.0012	<0.0002	0.00097	0.13	<0.0002	0.0137	19.9	0.0062	<0.0000019	0.005	0.0019	
RSEM-R6E-EOP	8/20/2020 14:50	YH7341	M	C059760	3.10	2.84	0.0579	<0.0005	0.00049	0.137	<0.0001	<0.001	0.084	<0.00001	41.4	0.0013	0.00023	0.00106	0.152	<0.0002	0.0145	20.9	0.0088	<0.0000019	0.0055	0.0021	
RSEM-R6E-EOP	8/21/2020 11:10	YH7339	M	C059759	3.38	3.12	0.0444	<0.0005	0.00049	0.135	<0.0001	<0.001	0.085	<0.00001	43.2	0.0012	<0.0002	0.00116	0.128	<0.0002	0.0147	20.4	0.0067	<0.0000019	0.0056	0.0019	
RSEM-R6E-EOP	8/22/2020 11:30	YI0129	M	C060262	2.72	2.28	0.0947	<0.0005	0.00046	0.136	<0.0001	<0.001	0.087	0.000035	98.8	0.0016	0.00075	0.00118	0.153	<0.0002	0.0241	24.0	0.0445	<0.0000019	0.008	0.0066	
RSEM-R6E-EOP	8/23/2020 14:50	YI0109	M	C060255	2.70	2.22	0.053	<0.0005	0.00044	0.13	<0.0001	<0.001	0.086	0.000021	98.0	0.0013	0.00041	0.00096	0.086	<0.0002	0.0231	23.1	0.0212	<0.0000019	0.0076	0.0058	
RSEM-R6E-EOP	8/23/2020 15:00	YI0112	D	C060255	2.65	2.20	0.0547	<0.0005	0.00045	0.135	<0.0001	<0.001	0.09	0.00002	102	0.0013	0.00041	0.00097	0.088	<0.0002	0.0239	23.5	0.0217	<0.0000019	0.0078	0.006	
RSEM-R6E-EOP	8/24/2020 13:40	YI2198	M	C060702	2.55	2.26	0.0481	<0.0005	0.00044	0.136	<0.0001	<0.001	0.087	0.000013	96.9	0.0012	0.00029	0.00138	0.089	<0.0002	0.0235	23.7	0.0142	<0.0000019	0.0075	0.0051	
RSEM-R6E-EOP	8/25/2020 12:20	YI3995	M	C061087	2.29	2.10	0.0456	<0.0005	0.00049	0.137	<0.0001	<0.001	0.092	<0.00001	96.2	0.0012	0.00021	0.00103	0.096	<0.0002	0.0229	22.7	0.0098	<0.0000019	0.0072	0.0047	
RSEM-R6E-EOP	8/26/2020 13:50	YI6263	M	C061565	2.56	1.98	0.0443	<0.0005	0.00051	0.125	<0.0001	<0.001	0.093	<0.00001	91.4	0.0011	<0.0002	0.00105	0.102	<0.0002	0.0231	23.0	0.0076	<0.0000019	0.007	0.0044	
RSEM-R6E-EOP	8/27/2020 12:40	YI7773	M	C061827	2.77	2.46	0.0421	<0.0005	0.00047	0.116	<0.0001	<0.001	0.101	<0.00001	84.2	<0.001	<0.0002	0.00084	0.1	<0.0002	0.0229	22.9	0.0069	<0.0000019	0.0067	0.0041	
RSEM-R6E-EOP	8/28/2020 13:45	YI9493	M	C062013	2.85	2.62	0.0448	<0.0005	0.00047	0.117	<0.0001	<0.001	0.098	<0.00001	82.1	<0.001	<0.0002	0.00084	0.098	<0.0002	0.0226	22.7	0.0064	<0.0000019	0.0066	0.0039	
RSEM-R6E-EOP	8/29/2020 10:35	YJ1737	M	C062465	2.97	2.28	0.0366	<0.0005	0.00046	0.113	<0.0001	<0.001	0.092	<0.00001	74.9	<0.001	<0.0002	0.00118	0.093	<0.0002	0.0199	22.5	0.0047	<0.0000019	0.0064	0.0034	
RSEM-R6E-EOP	8/29/2020 10:45	YJ1738	D	C062465	2.81	2.52	0.0361	<0.0005	0.0005	0.111	<0.0001	<0.001	0.092	<0.00001	73.6	<0.001	<0.0002	0.00087	0.092	<0.0002	0.0196	22.7	0.0046	<0.0000019	0.0064	0.0035	
RSEM-R6E-EOP	8/30/2020 11:50	YJ1569	M	C062426	2.62	2.74	0.0358	<0.0005	0.00048	0.114	<0.0001	<0.001	0.089	<0.00001	72.0	0.0011	<0.0002	0.00077	0.095	<0.0002	0.0188	22.3	0.0045	<0.0000019	0.0065	0.0033	
RSEM-R6E-EOP	8/31/2020 17:00	YJ3638	M	C062857	2.66	2.41	0.0414	<0.0005	0.00048	0.115	<0.0001	<0.001	0.104	<0.00001	69.0	0.0013	<0.0002	0.00073	0.099	<0.0002	0.0224	22.7	0.0045	<0.0000019	0.0068	0.003	
RSEM-R6E-EOP	8/31/2020 17:10	YJ3639	D	C062857	2.54	2.48	0.0407	<0.0005	0.00049	0.115	<0.0001	<0.001	0.102	<0.00001	67.8	0.0013	<0.0002	0.00073	0.096	<0.0002	0.0221	22.8	0.0044	<0.0000019	0.0066	0.003	
RSEM-R6E-EOP	9/1/2020 14:10	YJ6690	M	C063433	2.84	2.64	0.0398	<0.0005	0.00048	0.116	<0.0001	<0.001	0.1	<0.00001	64.0	0.0014	<0.0002	0.00077	0.089	<0.0002	0.0217	20.9	0.0039	<0.0000019	0.0067	0.0029	
RSEM-R6E-EOP	9/2/2020 13:45	YJ7830	M	C063666	2.59	3.49	0.0416	<0.0005	0.00049	0.117	<0.0001	<0.001	0.1	<0.00001	64.0	0.0014	<0.0002	0.00077	0.094	<0.0002	0.0223	21.3	0.0041	<0.0000019	0.0069	0.0029	
RSEM-R6E-EOP	9/3/2020 14:20	YK0030	M	C064047	3.06	2.52	0.0417	<0.0005	0.00048	0.116	<0.0001	<0.001	0.1	<0.00001	62.5	0.0014	<0.0002	0.00075	0.1	<0.0002	0.021	22.3	0.0045	<0.0000019	0.0071	0.0027	
RSEM-R6E-EOP	9/4/2020 11:50	YK0085	M	C064051	2.86	2.83	0.0377	<0.0005	0.00048	0.116	<0.0001	<0.001	0.098	<0.00001	60.5	0.0014	<0.0002	0.00075	0.101	<0.0002	0.0206	21.8	0.0052	<0.0000019	0.007	0.0026	
RSEM-R6E-EOP	9/5/2020 12:20	YK1344	M	C064288	3.24	2.62	0.0401	<0.0005	0.00049	0.122	<0.0001	<0.001	0.102	<0.00001	60.4	0.0014	<0.0002	0.00075	0.108	<0.0002	0.0211	22.7	0.0069	<0.0000019	0.0071	0.0027	
RSEM-R6E-EOP	9/5/2020 12:30	YK1345	D	C064288	2.88	2.87	0.0397	<0.0005	0.00045	0.114	<0.0001	<0.001	0.097	<0.00001	56.8	0.0013	<0.0002	0.00073	0.103	<0.0002	0.0201	21.1	0.0064	<0.0000019	0.0068	0.0026	
RSEM-R6E-EOP	9/6/2020 10:50	YK2529	M	C064579	2.90	2.34	0.0392	<0.0005	0.00047	0.115	<0.0001	<0.001	0.097	<0.00001	56.3	0.0013	<0.0002	0.00076	0.098	<0.0002	0.0198	21.1	0.0058	<0.0000019	0.007	0.0025	
RSEM-R6E-EOP	9/6/2020 11:00	YK2530	D	C064579	3.26	2.24	0.0398	<0.0005	0.00047	0.114	<0.0001	<0.001	0.095	<0.00001	55.0	0.0014	<0.0002	0.0007	0.096	<0.0002	0.0195	20.8	0.0057	<0.0000019	0.0069	0.0025	
RSEM-R6E-EOP	9/7/2020 10:15	YK2584	M	C064592	2.65	2.89	0.0574	<0.0005	0.00051	0.118	<0.0001	<0.001	0.096	<0.00001	55.4	0.0013	<0.0002	0.00071	0.138	<0.0002	0.0197	20.9	0.0065	<0.0000019	0.0068	0.0025	
RSEM-R6E-EOP	9/8/2020 10:45	YK6314	M	C065313	3.19	2.76	0.0412	<0.0005	0.00047	0.111	<0.0001	<0.001	0.097	<0.00001	52.9	0.0011	<0.0002	0.0007	0.114	<0.0002	0.0181	21.4	0.0056	<0.0000019	0.0065	0.0024	
RSEM-R6E-EOP	9/9/2020 14:30	YK6316	M	C065314	3.40	3.10	0.0535	<0.0005	0.00056	0.12	<0.0001	<0.001	0.103	<0.00001	53.3	0.0012	<0.0002	0.00078	0.136	<0.0002	0.0194	22.5	0.0063	<0.0000019	0.0073	0.0025	
RSEM-R6E-EOP	9/10/2020 11:40	YK8213	M	C065709	3.85	3.28	0.0483	<0.0005	0.00053	0.125	<0.0001	<0.001	0.106	<0.00001	53.8	0.0011	<0.0002	0.0011	0.125	<0.0002	0.0193	22.6	0.009	<0.0000019	0.0071	0.0028	
RSEM-R6E-EOP	9/11/2020 11:30	YK8182	M	C065706	3.42	3.04	0.046	<0.0005	0.00053	0.124	<0.0001	<0.001	0.105	<0.00001	52.8	0.001	<0.0002	0.00074	0.119	<0.0002	0.019	22.3	0.006	<0.0000019	0.0069	0.0023	
RSEM-R6E-EOP	9/12/2020 14:10	YL1185	M	C066169	3.25	3.06	0.046	<0.0005	0.00052	0.125	<0.0001	<0.001	0.107	<0.00001	50.4	<0.001	<0.0002	0.00071	0.117	<0.0002	0.0194	22.3	0.0054	<0.0000019	0.0068	0.0022	
RSEM-R6E-EOP	9/13/2020 12:50	YL1414	M	C066239	2.99	2.77	0.0521	<0.0005	0.00053	0.135	<0.0001	<0.001	0.112	<0.00001	51.5	<0.001	<0.0002	0.00075	0.127	<0.0002	0.0205	22.5	0.0056	<0.0000019	0.0069	0.0023	
RSEM-R6E-EOP	9/14/2020 12:30	YL3784	M	C066659		2.70	0.0515	<0.0005	0.00052	0.138	<0.0001	<0.001	0.11	<0.00001	51.2	<0.001	<0.0002	0.00067	0.127	<0.0002	0.0199	21.4	0.0054	<0.0000019	0.0064	0.0022	
RSEM-R6E-EOP	9/15/2020 14:40	YL6685	M	C067245	3.35	3.42	0.101	<0.0005	0.00049	0.152	<0.0001	<0.001	0.111	0.000014	90.8	0.0017	0.00047	0.00103	0.157	<0.0002	0.021	22.3	0.0188	<0.0000019	0.0103	0.0047	
RSEM-R6E-EOP	9/15/2020 14:50	YL6686	D	C067245	3.08	2.47	0.103	<0.0005	0.0005	0.151	<0.0001	<0.001	0.106	0.000016	91.2	0.0017	0.00046	0.00103	0.154	<0.0002	0.021	22.4	0.0186	<0.0000019	0.0103	0.0044	
RSEM-R6E-EOP	9/16/2020 15:20	YL8113	M	C067490	3.33	2.34	0.0781	<0.0005	0.00046	0.148	<0.0001	<0.001	0.103	0.00001	79.6	0.0012	0.0003	0.00091	0.109	<0.0002	0.0195	21.7	0.0107	<0.0000019	0.0087	0.004	
RSEM-R6E-EOP	9/17/2020 12:50	YL8047	M	C067474	2.35	2.24	0.0632	<0.0005	0.00044	0.147	<0.0001	<0.001	0.102	<0.00001	76.3	0.0011	0.00025	0.00091	0.095	<0.0002	0.019	21.0	0.0082	<0.0000019	0.0081	0.0037	
RSEM-R6E-EOP	9/17/2020 13:00	YL8048	D	C067474	2.32	2.26	0.0585	<0.0005	0.00046	0.147	<0.0001	<0.001	0.103	<0.00001	75.9	0.0011	0.00024	0.00082	0.093	<0.0002	0.0191	20.5	0.0082	<0.0000019	0.0084	0.0037	
RSEM-R6E-EOP	9/18/2020 9:40	YL9984	M	C067838	2.29	2.17	0.0614	<0.0005	0.00042	0.152	<0.0001	<0.001	0.094	<0.00001	75.0	0.001	0.00027	0.00086	0.091	<0.0002	0.0183	20.6	0.0095	<0.0000019	0.0079	0.0037	
RSEM-R6E-EOP	9/19/2020 12:30	YM3342	M	C068349	2.40	2.63	0.0613	<0.0005	0.00046	0.152	<0.0001	<0.001	0.094	<0.00001	73.5	<0.001	0.00023	0.00085	0.087	<0.0002	0.0177	20.5	0.0085	<0.0000019	0.0078	0.0035	
RSEM-R6E-EOP	9/19/2020 12:40	YM3343	D	C068349	2.44	2.62	0.0623	<0.0005	0.00045	0.15	<0.0001	<0.001	0.095	<0.00001	72.6	<0.001	0.00023	0.00084	0.089	<0.0002	0.0178	20.3	0.0085	<0.0000019	0.0078	0.0036	
RSEM-R6E-EOP	9/20/2020 11:30	YM3373	M	C068353	2.37	2.76	0.0655	<0.0005	0.00043	0.147	<0.0001	<0.001	0.096	<0.00001	70.1	<0.001	<0.0002	0.00081	0.079	<0.0002	0.0176	19.8	0.0066	<0.0000019	0.0076	0.0033	
RSEM-R6E-EOP	9/21/2020 12:30	YM6391	M	C068837	2.13	2.49	0.0573	<0.0005	0.00044	0.15	<0.0001	<0.001	0.094	<0.00001	69.5	<0.001	<0.0002	0.0009	0.071	<0.0002	0.0165	18.8	0.0052	0.0000029	0.0076	0.0032	
RSEM-R6E-EOP	9/21/2020 12:40	YM6392	D	C068837	2.52	2.33	0.0503	<0.0005	0.00044	0.149	<0.0001	<0.001	0.095	<0.00001	67.6	<0.001	<0.0002	0.00086	0.073	<0.0002	0.0165	18.0	0.0052	<0.0000019	0.0077	0.0031	
RSEM-R6E-EOP	9/22/2020 13:45	YM9230	M	C069318	2.35	2.29	0.0504	<0.0005	0.00043	0.145	<0.0001	<0.001	0.091	<0.00001	63.4	<0.001	<0.0002	0.00079	0.065	<0.0002	0.0155	18.0	0.0041	<0.0000019	0.0072	0.003	
RSEM-R6E-EOP	9/23/2020 15:20	YN0385	M	C069533	2.20	2.13	0.0559	<0.0005	0.00043	0.141	<0.0001	<0.001	0.102	<0.00001	62.9	<0.001	<0.0002	0.00077	0.065	<0.0002	0.0185	18.5	0.0042	<0.0000019	0.0072	0.0029	
RSEM-R6E-EOP	9/23/2020 15:30	YN0386	D	C069533	2.24	2.62	0.0527	<0.0005	0.00045	0.145	<0.0001	<0.001	0.106	<0.00001	63.8	<0.001	<0.0002	0.00078	0.064	<0.0002	0.0185	19.2	0.0042	<0.0000019	0.0072	0.0029	
RSEM-R6E-EOP	9/24/2020 13:50	YN2678	M	C069910	1.84	1.96	0.0543	<0.0005	0.00041	0.142	<0.0001	<0.001	0.099	<0.00001	65.4	<0.001	<0.0002	0.00086	0.066	<0.0002	0.0174	19.5	0.0039	<0.0000019	0.007	0.0029	
RSEM-R6E-EOP	9/25/2020 13:10	YN2672	M	C069908	2.02	2.26	0.0559	<0.0005	0.00038	0.143	<0.0001	<0.001	0.092	<0.00001	66.4	<0.001	<0.0002	0.00078	0.066	<0.0002	0.0164	19.4	0.0041	<0.0000019	0.0061	0.0028	
RSEM-R6E-EOP	9/25/2020 13:20	YN2673	D	C069908	2.02	2.16	0.0527	<0.0005	0.0004	0.146	<0.0001	<0.001	0.097	<0.00001	68.4	<0.001	<0.0002	0.00086	0.066	<0.0002	0.0173	20.2	0.0037	<0.0000019	0.0065	0.0029	
RSEM-R6E-EOP	9/26/2020 13:00	YN7495	M	C070621	2.20	2.70	0.052	<0.0005	0.00035	0.144	<0.0001	<0.001	0.09	<0.00001	65.8	<0.001	<0.0002	0.00079	0.063	<0.0002	0.0165	19.6	0.0036	<0.0000019	0.0057	0.0028	
RSEM-R6E-EOP	9/27/2020 16:00	YN7528	M	C070629	2.15	1.09	0.0494	<0.0005	0.00036	0.144	<0.0001	<0.001	0.084	<0.00001	65.9	<0.001	<0.0002	0.00089	0.059	<0.0002	0.0158	19.3	0.003	<0.0000019	0.0054	0.0028	
RSEM-R6E-EOP	9/27/2020 16:10	YN7529	D	C070629	2.23	1.85	0.0464	<0.0005	0.00033	0.138	<0.0001	<0.001	0.081	<0.00001	62.4	<0.001	<0.0002	0.00085	0.057	<0.0002	0.0153	18.6	0.003	<0.0000019	0.0053	0.0028	
RSEM-R6E-EOP	9/28/2020 9:30	YN7449	M	C070613	2.21	1.94	0.0491	<0.0005	0.00034	0.146	<0.0001	<0.001	0.081	<0.00001	65.5	<0.001	<0.0002	0.00092	0.056	<0.0002	0.0155	19.2	0.0027	<0.0000019	0.0053	0.0029	
RSEM-R6E-EOP	9/29/2020 16:00	YO1377	M	C071354	1.83	2.35	0.0447	<0.0005	0.00038	0.149	<0.0001	<0.001	0.082	<0.00001	64.0	<0.001	<0.0002	0.00074	0.048	<0.0002	0.0151	19.1	0.0023	<0.0000019	0.0051	0.0027	
RSEM-R6E-EOP	9/30/2020 13:00	YO4160	M	C071825	2.06	1.85	0.0423	<0.0005	0.00037	0.146	<0.0001	<0.001	0.075	<0.00001	62.1	<0.001	<0.0002	0.00078	0.055	<0.0002	0.014	19.5	0.0022	<0.0000019	0.005	0.0026	
RSEM-R6E-EOP	10/1/2020 0:05	YO6613	D	C072228	2.10	2.24	0.042	<0.0005	0.00033	0.144	<0.0001	<0.001	0.078	<0.00001	59.8	<0.001	<0.0002	0.00073	0.046	<0.0002	0.0156	19.1	0.0023	<0.0000019	0.0048	0.0027	
RSEM-R6E-EOP	10/1/2020 11:55	YO6611	M	C072228	2.13	2.37	0.0476	<0.0005	0.00034	0.148	<0.0001	<0.001	0.078	<0.00001	60.6	<0.001	<0.0002	0.00079	0.046	<0.0002	0.0156	19.7	0.0022	<0.0000019	0.0048	0.0028	
RSEM-R6E-EOP	10/2/2020 11:20	YO6594	M	C072223	2.09	1.92	0.0493	<0.0005	0.00035	0.151	<0.0001	<0.001	0.081	<0.00001	63.1	<0.001	<0.0002	0.00077	0.052	<0.0002	0.0165	20.5	0.0026	<0.0000019	0.0052	0.0029	
RSEM-R6E-EOP	10/3/2020 16:00	YP0034	M	C072771	1.76	1.51	0.0422	<0.0005	0.00033	0.138	<0.0001	<0.001	0.079	<0.00001	56.6	<0.001	<0.0002	0.00071	0.049	<0.0002	0.0165	19.1	0.0027	<0.0000019	0.0052	0.0027	
RSEM-R6E-EOP	10/4/2020 16:00	YP0008	M	C072767	1.85	2.19	0.0454	<0.0005	0.00033	0.137	<0.0001	<0.001	0.078	<0.00001	56.2	0.0013	<0.0002	0.00074	0.055	<0.0002	0.0162	19.0	0.0028	<0.0000019	0.0052	0.0029	
RSEM-R6E-EOP	10/4/2020 16:10	YP0012	D	C072767	1.89	2.05	0.0466	<0.0005	0.00036	0.14	<0.0001	<0.001	0.081	<0.00001	57.3	<0.001	<0.0002	0.00072	0.053	<0.0002	0.0169	19.8	0.0028	<0.0000019	0.0054	0.0027	
RSEM-R6E-EOP	10/5/2020 17:00	YP2998	M	C073260	2.01	2.85	0.0536	<0.0005	0.00035	0.142	<0.0001	<0.001	0.082	<0.00001	55.6	0.0011	<0.0002	0.00082	0.069	<0.0002	0.0168	20.2	0.0027	<0.0000019	0.0056	0.0028	
RSEM-R6E-EOP	10/6/2020 14:50	YP5777	M	C073719	1.98	1.39	0.0516	<0.0005	0.00035	0.138	<0.0001	<0.001	0.083	<0.00001	58.1	0.001	<0.0002	0.00078	0.069	<0.0002	0.0165	19.9	0.0025	<0.0000019	0.0054	0.0028	
RSEM-R6E-EOP	10/6/2020 15:00	YP5778	D	C073719	1.80	1.60	0.0511	<0.0005	0.00036	0.138	<0.0001	<0.001	0.082	<0.00001	58.2	<0.001	<0.0002	0.00072	0.068	<0.0002	0.0164	19.8	0.0025	<0.0000019	0.0054	0.0027	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6E-EOP	10/7/2020 14:10	YP7387	M	C074014	2.46	2.07	0.0503	<0.0005	0.00034	0.134	<0.0001	<0.001	0.08	<0.00001	54.8	0.001	<0.0002	0.00076	0.061	<0.0002	0.0161	20.5	0.0025	<0.0000019	0.0055	0.0027	
RSEM-R6E-EOP	10/8/2020 11:10	YP9901	M	C074375	1.35	2.41	0.0505	<0.0005	0.00032	0.136	<0.0001	<0.001	0.085	<0.00001	56.6	<0.001	<0.0002	0.00081	0.064	<0.0002	0.0157	20.8	0.0023	<0.0000019	0.0053	0.0027	
RSEM-R6E-EOP	10/8/2020 11:20	YP9902	D	C074375	1.68	2.61	0.049	<0.0005	0.00031	0.139	<0.0001	<0.001	0.084	<0.00001	58.5	<0.001	<0.0002	0.00081	0.065	<0.0002	0.0158	21.2	0.0023	<0.0000019	0.0055	0.0028	
RSEM-R6E-EOP	10/9/2020 11:10	YQ0240	M	C074391	0.61	1.55	0.0484	<0.0005	0.00033	0.144	<0.0001	<0.001	0.084	<0.00001	66.8	<0.001	<0.0002	0.00079	0.065	<0.0002	0.0172	21.6	0.0026	<0.0000019	0.0051	0.0028	
RSEM-R6E-EOP	10/10/2020 11:50	YQ1626	M	C074557	2.71	1.94	0.0516	<0.0005	0.00035	0.161	<0.0001	<0.001	0.095	<0.00001	84.2	<0.001	<0.0002	0.00073	0.064	<0.0002	0.0236	23.8	0.0047	<0.0000019	0.0049	0.0031	
RSEM-R6E-EOP	10/10/2020 12:00	YQ1627	D	C074557	7.9	1.32	0.0468	<0.0005	0.00034	0.16	<0.0001	<0.001	0.095	<0.00001	83.6	<0.001	<0.0002	0.00079	0.06	<0.0002	0.0236	24.4	0.0049	<0.0000019	0.0048	0.0033	
RSEM-R6E-EOP	10/11/2020 11:30	YQ4407	M	C075136	2.34	1.76	0.0579	<0.0005	0.00048	0.199	<0.0001	<0.001	0.108	<0.00001	183	0.0041	0.00039	0.0008	0.078	<0.0002	0.033	30.6	0.022	<0.0000019	0.0098	0.0049	
RSEM-R6E-EOP	10/12/2020 13:30	YQ4365	M	C075125	1.91	1.86	0.0521	<0.0005	0.00048	0.199	<0.0001	<0.001	0.109	<0.00001	209	0.0052	0.00058	0.00082	0.057	<0.0002	0.0351	32.2	0.0247	<0.0000019	0.0118	0.0059	
RSEM-R6E-EOP	10/12/2020 13:40	YQ4366	D	C075125	1.98	1.54	0.0521	<0.0005	0.00047	0.199	<0.0001	<0.001	0.111	<0.00001	212	0.0052	0.00058	0.00085	0.062	<0.0002	0.0357	32.6	0.025	<0.0000019	0.012	0.0061	
RSEM-R6E-EOP	10/13/2020 13:50	YQ8015	M	C075829	1.87	1.92	0.181	<0.0005	0.00043	0.233	<0.0001	<0.001	0.055	0.000033	132	0.0024	0.00051	0.00107	0.337	0.00021	0.0162	21.0	0.0265	<0.0000019	0.0054	0.0036	
RSEM-R6E-EOP	10/14/2020 14:50	YQ9242	M	C076027	2.0	1.86	0.0794	<0.0005	0.00031	0.21	<0.0001	<0.001	0.055	0.000019	120	0.0018	0.00035	0.00086	0.132	<0.0002	0.0155	20.9	0.0189	<0.0000019	0.0048	0.0035	
RSEM-R6E-EOP	10/15/2020 11:45	YR1302	M	C076291	2.18	2.15	0.113	<0.0005	0.00036	0.214	<0.0001	<0.001	0.059	0.000032	120	0.0017	0.00048	0.00094	0.194	<0.0002	0.0165	21.9	0.022	<0.0000019	0.0047	0.004	
RSEM-R6E-EOP	10/16/2020 11:50	YR1520	M	C076320	1.93	1.94	0.0718	<0.0005	0.00028	0.204	<0.0001	<0.001	0.061	0.000019	119	0.0015	0.00037	0.0008	0.096	<0.0002	0.017	22.1	0.0146	<0.0000019	0.0047	0.0042	
RSEM-R6E-EOP	10/16/2020 12:00	YR1521	D	C076320	2.13	2.25	0.0691	<0.0005	0.0003	0.209	<0.0001	<0.001	0.058	0.000017	118	0.0014	0.00037	0.0008	0.099	<0.0002	0.0165	22.2	0.0151	<0.0000019	0.0045	0.0039	
RSEM-R6E-EOP	10/17/2020 10:20	YR5391	M	C076925	1.72	1.57	0.103	<0.0005	0.00037	0.208	<0.0001	<0.001	<0.05	0.000012	109	0.0013	0.0004	0.00087	0.192	<0.0002	0.0132	20.1	0.0168	<0.0000019	0.0043	0.0039	
RSEM-R6E-EOP	10/18/2020 12:45	YR5379	M	C076923	2.29	1.66	0.156	<0.0005	0.00047	0.222	<0.0001	<0.001	<0.05	0.000021	108	0.0011	0.00066	0.00112	0.295	0.00027	0.0133	20.4	0.035	<0.0000019	0.0039	0.0046	
RSEM-R6E-EOP	10/19/2020 10:10	YR5408	M	C076929	1.81	1.65	0.0894	<0.0005	0.00034	0.165	<0.0001	<0.001	0.075	<0.00001	124	0.0014	0.0006	0.00091	0.111	<0.0002	0.0193	24.3	0.0157	<0.0000019	0.0053	0.0066	
RSEM-R6E-EOP	10/20/2020 14:40	YR8828	M	C077551	1.15	1.64	0.101	<0.0005	0.00036	0.179	<0.0001	<0.001	0.086	<0.00001	118	0.0014	0.00056	0.00094	0.124	<0.0002	0.0229	24.2	0.0169	<0.0000019	0.0055	0.0061	
RSEM-R6E-EOP	10/21/2020 16:00	YS1500	M	C077998	1.68	1.57	0.105	<0.0005	0.0003	0.164	<0.0001	<0.001	0.086	<0.00001	109	0.0014	0.00053	0.00096	0.141	<0.0002	0.0229	23.3	0.0189	<0.0000019	0.0053	0.0058	
RSEM-R6E-EOP	10/22/2020 12:20	YS3854	M	C078323	1.93	1.99	0.0767	<0.0005	0.00028	0.163	<0.0001	<0.001	0.086	<0.00001	107	0.0013	0.00045	0.00088	0.078	<0.0002	0.0228	22.9	0.0174	<0.0000019	0.0053	0.0054	
RSEM-R6E-EOP	10/22/2020 12:30	YS3856	D	C078323	2.14	2.68	0.0846	<0.0005	0.00029	0.166	<0.0001	<0.001	0.087	<0.00001	107	0.0012	0.00044	0.00086	0.089	<0.0002	0.0234	22.6	0.0173	<0.0000019	0.0053	0.0054	
RSEM-R6E-EOP	10/23/2020 10:20	YS3573	M	C078301	1.70	2.30	0.0744	<0.0005	0.00026	0.164	<0.0001	<0.001	0.081	<0.00001	110	0.0013	0.00046	0.00088	0.074	<0.0002	0.0194	23.2	0.018	<0.0000019	0.0053	0.0058	
RSEM-R6E-EOP	10/24/2020 15:20	YS7915	M	C078871	2.00	1.96	0.063	<0.0005	0.00031	0.161	<0.0001	<0.001	0.079	<0.00001	102	0.0012	0.00038	0.00085	0.06	<0.0002	0.0176	22.1	0.016	<0.0000019	0.0052	0.0049	
RSEM-R6E-EOP	10/25/2020 13:40	YS7913	M	C078870	2.11	2.17	0.048	<0.0005	0.00028	0.161	<0.0001	<0.001	0.082	0.000011	102	0.0012	0.00034	0.00081	0.048	<0.0002	0.0176	22.6	0.0153	<0.0000019	0.0051	0.0048	
RSEM-R6E-EOP	10/26/2020 14:25	YT0276	M	C079297	2.03	1.82	0.0556	<0.0005	0.0003	0.166	<0.0001	<0.001	0.083	0.000012	101	0.0013	0.00035	0.00098	0.063	<0.0002	0.0196	23.6	0.0165	<0.0000019	0.0052	0.0046	
RSEM-R6E-EOP	10/26/2020 14:35	YT0278	D	C079297	2.23	1.93	0.0542	<0.0005	0.00031	0.168	<0.0001	<0.001	0.085	0.000011	99.2	0.0012	0.00035	0.00086	0.064	<0.0002	0.0185	23.5	0.0165	<0.0000019	0.0053	0.0045	
RSEM-R6E-EOP	10/27/2020 12:30	YT3320	M	C079639	2.08	1.95	0.051	<0.0005	0.00036	0.165	<0.0001	<0.001	0.084	<0.00001	104	0.0014	0.00037	0.00093	0.076	<0.0002	0.019	23.1	0.0177	<0.0000019	0.0055	0.0049	
RSEM-R6E-EOP	10/28/2020 14:10	YT5232	M	C079984	2.37	1.97	0.0404	<0.0005	0.0003	0.157	<0.0001	<0.001	0.079	0.000011	94.1	0.0012	0.00029	0.00085	0.053	<0.0002	0.0182	21.9	0.014	<0.0000019	0.005	0.0041	
RSEM-R6E-EOP	10/29/2020 14:15	YT7960	M	C080439	2.21	2.20	0.038	<0.0005	0.00027	0.154	<0.0001	<0.001	0.08	<0.00001	106	0.001	0.00026	0.0008	0.059	<0.0002	0.0182	21.6	0.0132	<0.0000019	0.005	0.0041	
RSEM-R6E-EOP	10/30/2020 12:00	YT7954	M	C080436	2.48	2.32	0.0425	<0.0005	0.00032	0.156	<0.0001	<0.001	0.078	0.00001	98.3	<0.001	0.00026	0.00086	0.076	<0.0002	0.0176	21.5	0.0135	<0.0000019	0.0047	0.004	
RSEM-R6E-EOP	10/31/2020 14:20	YU1484	M	C081008	2.21	2.18	0.041	<0.0005	0.00026	0.152	<0.0001	<0.001	0.082	<0.00001	87.4	<0.001	0.00031	0.00081	0.064	<0.0002	0.0192	21.4	0.0141	<0.0000019	0.0045	0.0043	
RSEM-R6E-EOP	10/31/2020 14:30	YU1487	D	C081008	2.00	2.09	0.0452	<0.0005	0.00028	0.147	<0.0001	<0.001	0.081	<0.00001	86.0	<0.001	0.00032	0.00082	0.064	<0.0002	0.0185	21.1	0.0139	<0.0000019	0.0045	0.0042	
RSEM-R6E-EOP	11/1/2020 13:10	YU1489	M	C081010	1.66	1.76	0.0486	<0.0005	0.00028	0.146	<0.0001	<0.001	0.082	0.00001	85.8	<0.001	0.00038	0.00089	0.071	<0.0002	0.0187	21.5	0.0158	<0.0000019	0.0045	0.0044	
RSEM-R6E-EOP	11/2/2020 13:40	YU2810	M	C081296	2.33	2.10	0.12	0.00061	0.00053	0.111	<0.0001	<0.001	0.099	0.000032	77.8	0.0017	0.00117	0.00148	0.184	<0.0002	0.0296	24.4	0.0318	<0.0000019	0.008	0.0073	
RSEM-R6E-EOP	11/3/2020 14:10	YU4781	M	C081741	1.33	2.07	0.11	0.00088	0.00074	0.0825	<0.0001	<0.001	0.107	0.000038	62.2	0.0024	0.00096	0.00142	0.16	<0.0002	0.0384	24.9	0.024	<0.0000019	0.0094	0.0067	
RSEM-R6E-EOP	11/3/2020 14:20	YU4782	D	C081741	1.66	2.35	0.126	0.00092	0.00077	0.0866	<0.0001	<0.001	0.115	0.000041	63.4	0.0026	0.00103	0.00152	0.187	<0.0002	0.0434	26.2	0.0257	<0.0000019	0.0099	0.0072	
RSEM-R6E-EOP	11/4/2020 14:25	YU7151	M	C082156	2.27	2.55	0.109	0.00102	0.00082	0.0686	<0.0001	<0.001	0.12	0.000039	55.8	0.0031	0.00081	0.00157	0.144	<0.0002	0.0498	27.4	0.0187	<0.0000019	0.01	0.0064	
RSEM-R6E-EOP	11/5/2020 13:20	YU9363	M	C082511	2.24	2.07	0.153	0.0011	0.00094	0.0656	<0.0001	<0.001	0.123	0.000036	52.8	0.0034	0.00073	0.00164	0.296	<0.0002	0.0534	26.6	0.0204	<0.0000019	0.0106	0.0063	
RSEM-R6E-EOP	11/5/2020 13:30	YU9364	D	C082511	2.21	1.92	0.143	0.00114	0.00094	0.0661	<0.0001	<0.001	0.125	0.000033	52.6	0.0034	0.00074	0.00158	0.271	<0.0002	0.0556	26.8	0.0204	<0.0000019	0.0104	0.0063	
RSEM-R6E-EOP	11/6/2020 13:10	YU9362	M	C082510	2.48	2.34	0.114	0.00125	0.00096	0.0675	<0.0001	<0.001	0.129	0.000031	54.6	0.0034	0.00061	0.00156	0.2	<0.0002	0.0592	27.7	0.019	<0.0000019	0.011	0.0067	
RSEM-R6E-EOP	11/7/2020 13:10	YV3091	M	C082988	2.07	1.30	0.115	0.00124	0.00098	0.0668	<0.0001	<0.001	0.139	0.000029	55.8	0.0033	0.00061	0.00132	0.184	<0.0002	0.0557	30.3	0.0193	<0.0000019	0.011	0.0068	
RSEM-R6E-EOP	11/7/2020 13:20	YV3092	D	C082988	2.98	1.36	0.111	0.0012	0.00092	0.0662	<0.0001	<0.001	0.139	0.000027	54.7	0.0032	0.00058	0.00127	0.17	<0.0002	0.0544	28.7	0.0184	<0.0000019	0.0107	0.0065	
RSEM-R6E-EOP	11/8/2020 13:27	YV3108	M	C082994	2.37	2.18	0.114	0.00118	0.00092	0.0702	<0.0001	<0.001	0.128	0.000029	56.6	0.0031	0.00057	0.00647	0.149	<0.0002	0.0499	28.9	0.018	<0.0000019	0.0103	0.0067	
RSEM-R6E-EOP	11/9/2020 10:30	YV4611	M	C083253	2.02	2.12	0.0869	0.00111	0.00088	0.072	<0.0001	<0.001	0.131	0.000028	60.1	0.0028	0.00056	0.00121	0.13	<0.0002	0.0505	28.1	0.018	<0.0000019	0.0103	0.0065	
RSEM-R6E-EOP	11/9/2020 10:40	YV4612	D	C083253	2.32	1.98	0.0931	0.00116	0.00087	0.0738	<0.0001	<0.001	0.134	0.000028	61.6	0.003	0.00058	0.00124	0.141	<0.0002	0.0509	29.0	0.0188	<0.0000019	0.0104	0.0067	
RSEM-R6E-EOP	11/10/2020 13:30	YV4533	M	C083245	1.99	1.98	0.0772	0.00106	0.00083	0.0703	<0.0001	<0.001	0.131	0.000023	60.3	0.0026	0.00052	0.00111	0.114	<0.0002	0.049	26.9	0.024	<0.0000019	0.01	0.0059	
RSEM-R6E-EOP	11/11/2020 12:50	YV8316	M	C083838	1.82	2.21	0.0708	0.00101	0.00077	0.0735	<0.0001	<0.001	0.129	0.000022	61.3	0.0025	0.00053	0.00113	0.095	<0.0002	0.0484	28.1	0.0326	<0.0000019	0.0099	0.006	
RSEM-R6E-EOP	11/11/2020 13:00	YV8317	D	C083838	1.95	1.94	0.0657	0.00105	0.00082	0.0747	<0.0001	<0.001	0.13	0.000025	61.0	0.0026	0.00057	0.00111	0.088	<0.0002	0.0484	29.0	0.0337	<0.0000019	0.0101	0.0063	
RSEM-R6E-EOP	11/12/2020 10:35	YV9792	M	C084025	1.90	1.92	0.0638	0.0009	0.00076	0.0695	<0.0001	<0.001	0.113	0.000021	59.8	0.0022	0.00052	0.00099	0.088	<0.0002	0.0427	25.2	0.0402	<0.0000019	0.0091	0.0054	
RSEM-R6E-EOP	11/13/2020 9:40	YV9728	M	C084016	2.16	2.06	0.0643	0.00091	0.00078	0.0744	<0.0001	<0.001	0.112	0.000025	64.5	0.0021	0.00052	0.00098	0.085	<0.0002	0.0412	26.3	0.0461	<0.0000019	0.0094	0.0054	
RSEM-R6E-EOP	11/13/2020 9:50	YV9729	D	C084016	1.83	1.73	0.0642	0.00094	0.00079	0.0748	<0.0001	<0.001	0.112	0.000025	63.6	0.0022	0.00054	0.00104	0.084	<0.0002	0.0418	26.0	0.0458	<0.0000019	0.0093	0.0055	
RSEM-R6E-EOP	11/14/2020 12:05	YW2819	M	C084420	2.17	2.14	0.0688	0.00091	0.00074	0.079	<0.0001	<0.001	0.116	0.000025	65.2	0.0021	0.00057	0.00106	0.093	<0.0002	0.0446	28.2	0.0474	<0.0000019	0.0093	0.0059	
RSEM-R6E-EOP	11/15/2020 12:30	YW2809	M	C084417	2.25	1.81	0.0489	0.00077	0.00064	0.0823	<0.0001	<0.001	0.109	0.000022	72.1	0.0018	0.00057	0.00098	0.078	<0.0002	0.0401	28.5	0.0484	<0.0000019	0.0087	0.0056	
RSEM-R6E-EOP	11/15/2020 12:40	YW2810	D	C084417	2.31	1.76	0.0546	0.00081	0.00067	0.0857	<0.0001	<0.001	0.113	0.000022	72.7	0.0019	0.00058	0.00102	0.08	<0.0002	0.0416	29.6	0.0505	<0.0000019	0.009	0.0057	
RSEM-R6E-EOP	11/16/2020 10:20	YW2813	M	C084418	2.12	1.90	0.0457	0.00071	0.00065	0.0853	<0.0001	<0.001	0.104	0.00002	74.1	0.0016	0.00057	0.00098	0.072	<0.0002	0.0369	29.6	0.0499	<0.0000019	0.0081	0.0056	
RSEM-R6E-EOP	11/17/2020 12:45	YW6847	M	C085190	2.55	2.11	0.0421	0.00068	0.00062	0.0879	<0.0001	<0.001	0.095	0.000022	79.0	0.0013	0.00052	0.00093	0.066	<0.0002	0.0325	27.2	0.0511	<0.0000019	0.0078	0.0053	
RSEM-R6E-EOP	11/18/2020 16:00	YW9288	M	C085621	2.14	2.00	0.0511	0.00062	0.00055	0.091	<0.0001	<0.001	0.099	0.00002	81.0	0.001	0.00051	0.00092	0.056	<0.0002	0.0304	27.7	0.0496	0.0000047	0.0072	0.0052	
RSEM-R6E-EOP	11/19/2020 13:30	YX1119	M	C085951	2.45	2.55	0.0313	0.00055	0.00047	0.0953	<0.0001	<0.001	0.082	0.000021	85.6	<0.001	0.00055	0.00084	0.052	<0.0002	0.0205	26.9	0.0486	<0.0000019	0.0068	0.0053	
RSEM-R6E-EOP	11/19/2020 13:40	YX1121	D	C085951	2.47	2.59	0.0319	0.00056	0.00046	0.0941	<0.0001	<0.001	0.082	0.000019	87.2	<0.001	0.00054	0.00082	0.049	<0.0002	0.0205	27.8	0.0486	<0.0000019	0.0066	0.0054	
RSEM-R6E-EOP	11/20/2020 11:30	YX1116	M	C085949	2.19	2.17	0.0332	0.00052	0.00044	0.0962	<0.0001	<0.001	0.082	0.000018	86.2	<0.001	0.00051	0.00078	0.053	<0.0002	0.0227	27.3	0.0471	<0.0000019	0.0064	0.0052	
RSEM-R6E-EOP	11/21/2020 13:30	YX3969	M	C086434	2.24	2.16	0.0342	<0.0005	0.00046	0.0997	<0.0001	<0.001	0.094	0.000022	89.1	<0.001	0.00055	0.00079	0.056	<0.0002	0.0274	30.5	0.0497	<0.0000019	0.0062	0.0053	
RSEM-R6E-EOP	11/22/2020 13:45	YX3965	M	C086433	2.01	2.16	0.0338	<0.0005	0.00045	0.102	<0.0001	<0.001	0.093	0.000021	93.2	<0.001	0.0005	0.00077	0.053	<0.0002	0.027	29.5	0.047	<0.0000019	0.0061	0.0053	
RSEM-R6E-EOP	11/22/2020 13:55	YX3968	D	C086433	2.41	1.94	0.0334	<0.0005	0.00044	0.0995	<0.0001	<0.001	0.093	0.000019	89.7	<0.001	0.00051	0.00075	0.05	<0.0002	0.0266	29.1	0.0462	<0.0000019	0.0059	0.0053	
RSEM-R6E-EOP	11/23/2020 13:30	YX5756	M	C086734	1.65	1.72	0.0347	<0.0005	0.00041	0.0977	<0.0001	<0.001	0.086	0.000021	90.7	<0.001	0.00052	0.0007	0.049	<0.0002	0.0251	28.1	0.0455	<0.0000019	0.0056	0.0053	
RSEM-R6E-EOP	11/24/2020 13:45	YX7832	M	C087146	2.47	2.05	0.0347	<0.0005	0.0004	0.1	<0.0001	<0.001	0.073	0.000019	88.1	<0.001	0.00052	0.00066	0.055	<0.0002	0.0239	25.5	0.0442	<0.0000019	0.0054	0.0053	
RSEM-R6E-EOP	11/24/2020 13:55	YX7833	D	C087146	2.51	2.13	0.034	<0.0005	0.0004	0.0998	<0.0001	<0.001	0.075	0.000018	88.0	<0.001	0.00051	0.00067	0.046	<0.0002	0.0238	26.2	0.0447	<0.0000019	0.0056	0.0054	
RSEM-R6E-EOP	11/25/2020 14:00	YY0221	M	C087472	2.49	2.48	0.0291	<0.0005	0.00039	0.097	<0.0001	<0.001	0.08	0.000021	88.4	<0.001	0.00057	0.00071	0.05	<0.0002	0.0233	27.8	0.0516	<0.0000019	0.0052	0.0055	
RSEM-R6E-EOP	11/26/2020 11:40	YY2047	M	C087819	2.43	1.80	0.0349	<0.0005	0.0004	0.0947	<0.0001	<0.001	0.079	0.000022	88.2	<0.001	0.00057	0.00066	0.055	<0.0002	0.0214	26.2	0.0606	<0.0000019	0.0048	0.0053	
RSEM-R6E-EOP	11/26/2020 11:50	YY2048	D	C087819	2.36	2.19	0.0327	<0.0005	0.00039	0.096	<0.0001	<0.001	0.081	0.000021	87.0	<0.001	0.00058	0.00067	0.056	<0.0002	0.022	26.2	0.0606	<0.0000019	0.005	0.0053	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6E-EOP	11/27/2020 11:20	YY2095	M	C087822	2.24	1.75	0.039	<0.0005	0.00038	0.0962	<0.0001	<0.001	0.08	0.000024	88.4	<0.001	0.00062	0.00068	0.06	<0.0002	0.0213	26.2	0.0602	<0.0000019	0.0047	0.0054	
RSEM-R6E-EOP	11/28/2020 12:50	YY5267	M	C088400	1.63	2.01	0.0531	<0.0005	0.00041	0.0995	<0.0001	<0.001	0.082	0.000021	96.0	<0.001	0.0006	0.00069	0.089	<0.0002	0.0209	27.9	0.0608	<0.0000019	0.0047	0.0051	
RSEM-R6E-EOP	11/28/2020 13:00	YY5268	D	C088400	2.01	2.25	0.046	<0.0005	0.0004	0.0973	<0.0001	<0.001	0.081	0.00002	93.5	<0.001	0.00058	0.00062	0.088	<0.0002	0.0206	28.0	0.0593	<0.0000019	0.0046	0.005	
RSEM-R6E-EOP	11/29/2020 12:35	YY5334	M	C088408	2.22	2.05	0.0616	<0.0005	0.00041	0.101	<0.0001	<0.001	0.077	0.000019	87.3	<0.001	0.00052	0.00062	0.089	<0.0002	0.0191	25.4	0.0579	<0.0000019	0.0045	0.0047	
RSEM-R6E-EOP	11/30/2020 14:00	YY7386	M	C088703	1.98	2.19	0.0525	<0.0005	0.00044	0.105	<0.0001	<0.001	0.073	0.000018	87.7	<0.001	0.00048	0.00064	0.086	<0.0002	0.0189	24.7	0.055	<0.0000019	0.0046	0.0045	
RSEM-R6E-EOP	11/30/2020 14:10	YY7387	D	C088703	2.07	2.22	0.0434	<0.0005	0.00041	0.104	<0.0001	<0.001	0.074	0.000018	85.1	<0.001	0.00048	0.00061	0.085	<0.0002	0.0195	24.8	0.0551	<0.0000019	0.0045	0.0046	
RSEM-R6E-EOP	12/1/2020 13:45	YY9247	M	C089096	2.22	1.97	0.0486	<0.0005	0.00045	0.107	<0.0001	<0.001	0.074	0.000016	86.2	<0.001	0.00049	0.00061	0.09	<0.0002	0.019	24.8	0.0554	<0.0000019	0.0045	0.0045	
RSEM-R6E-EOP	12/2/2020 13:00	YZ1565	M	C089572	2.34	2.25	0.0428	<0.0005	0.00045	0.104	<0.0001	<0.001	0.077	0.000016	88.2	<0.001	0.00049	0.00059	0.083	<0.0002	0.019	25.0	0.0563	<0.0000019	0.0043	0.0046	
RSEM-R6E-EOP	12/2/2020 13:10	YZ1566	D	C089572	2.92	2.15	0.0458	<0.0005	0.00046	0.105	<0.0001	<0.001	0.077	0.000017	89.4	<0.001	0.00051	0.00061	0.09	<0.0002	0.0191	24.9	0.056	<0.0000019	0.0043	0.0046	
RSEM-R6E-EOP	12/3/2020 12:40	YZ2306	M	C089704	2.68	2.26	0.0409	<0.0005	0.00045	0.109	<0.0001	<0.001	0.078	0.000015	91.0	<0.001	0.00049	0.0006	0.075	<0.0002	0.0191	25.8	0.0561	<0.0000019	0.0042	0.0048	
RSEM-R6E-EOP	12/4/2020 13:20	YZ4236	M	C089912	2.30	1.81	0.0454	<0.0005	0.00041	0.112	<0.0001	<0.001	0.074	0.000014	91.5	<0.001	0.00044	0.00057	0.076	<0.0002	0.0188	25.7	0.0547	<0.0000019	0.0041	0.0045	
RSEM-R6E-EOP	12/4/2020 13:30	YZ4237	D	C089912	2.16	2.23	0.0447	<0.0005	0.00041	0.109	<0.0001	<0.001	0.072	0.000015	88.3	<0.001	0.00043	0.00057	0.073	<0.0002	0.0177	25.0	0.0534	0.0000025	0.004	0.0044	
RSEM-R6E-EOP	12/5/2020 13:20	YZ8273	M	C090368	2.04	1.62	0.0446	<0.0005	0.00043	0.107	<0.0001	<0.001	0.072	0.000014	90.2	<0.001	0.00042	0.00055	0.07	<0.0002	0.0184	24.4	0.0505	<0.0000019	0.004	0.0042	
RSEM-R6E-EOP	12/6/2020 12:50	YZ8304	M	C090376	1.76	2.03	0.0462	<0.0005	0.00041	0.109	<0.0001	<0.001	0.072	0.000013	88.0	<0.001	0.0004	0.00054	0.065	<0.0002	0.0191	24.8	0.0484	<0.0000019	0.0039	0.0042	
RSEM-R6E-EOP	12/6/2020 13:00	YZ8305	D	C090376	2.01	1.65	0.0479	<0.0005	0.00041	0.108	<0.0001	<0.001	0.07	0.000015	88.2	<0.001	0.00042	0.00057	0.065	<0.0002	0.0188	24.3	0.0481	<0.0000019	0.0038	0.0042	
RSEM-R6E-EOP	12/7/2020 10:05	YZ8152	M	C090358	1.92	1.83	0.0435	<0.0005	0.00038	0.105	<0.0001	<0.001	0.069	0.000015	88.8	<0.001	0.00044	0.00062	0.065	<0.0002	0.0187	25.4	0.046	<0.0000019	0.0037	0.0042	
RSEM-R6E-EOP	12/8/2020 15:10	ZA2149	M	C091061	1.72	2.11	0.0669	<0.0005	0.00038	0.0988	<0.0001	<0.001	0.069	0.000056	92.3	<0.001	0.00165	0.00087	0.108	<0.0002	0.0193	27.4	0.0559	<0.0000019	0.0039	0.0088	
RSEM-R6E-EOP	12/9/2020 15:30	ZA6284	M	C091815	2.23	2.14	0.206	<0.0005	0.00036	0.0959	<0.0001	<0.001	0.068	0.000094	97.1	<0.001	0.00304	0.00271	0.081	<0.0002	0.0211	28.8	0.0726	<0.0000019	0.0042	0.0139	
RSEM-R6E-EOP	12/10/2020 14:20	ZA6276	D	C091812	2.18	2.27	0.0658	<0.0005	0.00036	0.0989	<0.0001	<0.001	0.067	0.000123	96.5	<0.001	0.0039	0.00125	0.071	<0.0002	0.0213	29.0	0.0809	<0.0000019	0.0043	0.0172	
RSEM-R6E-EOP	12/10/2020 14:30	ZA6277	M	C091812	2.29	1.87	0.0591	<0.0005	0.00036	0.0998	<0.0001	<0.001	0.07	0.000119	98.9	<0.001	0.00387	0.00126	0.065	<0.0002	0.0221	28.8	0.0802	<0.0000019	0.0042	0.0169	
RSEM-R6E-EOP	12/11/2020 23:40	ZA6280	M	C091813	2.27	2.44	0.0723	<0.0005	0.00035	0.1	<0.0001	<0.001	0.069	0.000112	96.1	<0.001	0.00356	0.00128	0.061	<0.0002	0.0219	28.0	0.0716	<0.0000019	0.0043	0.0169	
RSEM-R6E-EOP	12/13/2020 15:10	ZA8556	M	C092267	2.33	1.94	0.0516	<0.0005	0.00035	0.106	<0.0001	<0.001	0.075	0.000095	99.1	<0.001	0.00284	0.0013	0.04	<0.0002	0.0247	26.5	0.0552	<0.0000019	0.0048	0.0174	
RSEM-R6E-EOP	12/13/2020 16:50	ZA8523	M	C092261	2.17	2.17	0.0545	<0.0005	0.00035	0.102	<0.0001	<0.001	0.073	0.000096	95.9	<0.001	0.00306	0.00128	0.045	<0.0002	0.0242	26.1	0.0603	<0.0000019	0.0048	0.0171	
RSEM-R6E-EOP	12/14/2020 13:00	ZA8428	M	C092250	2.05	2.60	0.0501	<0.0005	0.00032	0.101	<0.0001	<0.001	0.074	0.000103	97.0	<0.001	0.00293	0.00129	0.036	<0.0002	0.0242	26.0	0.0564	<0.0000019	0.0046	0.0171	
RSEM-R6E-EOP	12/15/2020 15:10	ZB1647	M	C092932	2.59	2.24	0.0516	<0.0005	0.00034	0.11	<0.0001	<0.001	0.073	0.000107	99.1	<0.001	0.00283	0.00139	0.036	<0.0002	0.0251	28.9	0.0564	<0.0000019	0.0049	0.0171	
RSEM-R6E-EOP	12/15/2020 15:20	ZB1648	D	C092932	2.43	2.24	0.0455	<0.0005	0.00035	0.109	<0.0001	<0.001	0.076	0.000101	100	<0.001	0.00278	0.00135	0.035	<0.0002	0.0256	27.8	0.0553	0.0000033	0.0049	0.0166	
RSEM-R6E-EOP	12/16/2020 14:10	ZB3421	M	C093364	2.12	3.06	0.0346	<0.0005	0.00037	0.108	<0.0001	<0.001	0.067	0.000098	95.1	<0.001	0.00247	0.00121	0.026	<0.0002	0.0249	26.0	0.0505	0.0000027	0.0046	0.0157	
RSEM-R6E-EOP	12/17/2020 14:30	ZB5911	M	C093625	2.28	2.48	0.0375	<0.0005	0.00038	0.108	<0.0001	<0.001	0.073	0.000077	88.7	<0.001	0.00196	0.00117	0.025	<0.0002	0.0219	26.9	0.0437	<0.0000019	0.0047	0.0139	
RSEM-R6E-EOP	12/17/2020 14:40	ZB5912	D	C093625	1.94	2.07	0.0378	<0.0005	0.00035	0.107	<0.0001	<0.001	0.073	0.000077	85.0	<0.001	0.00189	0.00115	0.023	<0.0002	0.0214	26.7	0.0433	<0.0000019	0.0047	0.0137	
RSEM-R6E-EOP	12/18/2020 13:25	ZB5852	M	C093610	2.20	3.17	0.037	<0.0005	0.00035	0.112	<0.0001	<0.001	0.072	0.000067	89.1	<0.001	0.00171	0.00112	0.026	<0.0002	0.0212	26.3	0.0411	<0.0000019	0.0047	0.0124	
RSEM-R6E-EOP	12/19/2020 12:50	ZB8418	M	C094046	2.20	2.49	0.0306	<0.0005	0.00036	0.118	<0.0001	<0.001	0.069	0.000057	96.4	<0.001	0.00139	0.00123	0.024	<0.0002	0.02	26.0	0.0364	<0.0000019	0.0047	0.0116	
RSEM-R6E-EOP	12/20/2020 12:45	ZB8513	M	C094070	2.54	1.59	0.0328	<0.0005	0.00039	0.122	<0.0001	<0.001	0.07	0.000059	96.1	<0.001	0.00135	0.00109	0.025	<0.0002	0.0207	26.3	0.0409	<0.0000019	0.0046	0.0111	
RSEM-R6E-EOP	12/20/2020 12:55	ZB8514	D	C094070	2.49	2.62	0.0325	<0.0005	0.00037	0.124	<0.0001	<0.001	0.069	0.000061	97.6	<0.001	0.00139	0.00109	0.028	<0.0002	0.0202	26.5	0.0409	<0.0000019	0.0045	0.0112	
RSEM-R6E-EOP	12/21/2020 10:40	ZB8328	M	C094023	2.81	2.54	0.0304	<0.0005	0.00034	0.127	<0.0001	<0.001	0.061	0.000053	94.3	<0.001	0.00116	0.00103	0.028	<0.0002	0.0168	25.5	0.038	<0.0000019	0.0043	0.0102	
RSEM-R6E-EOP	12/22/2020 11:30	ZC0503	M	C094296	2.25	2.41	0.0294	<0.0005	0.00036	0.123	<0.0001	<0.001	0.073	0.000053	93.1	<0.001	0.00107	0.00107	0.03	<0.0002	0.0182	24.8	0.0365	<0.0000019	0.0043	0.0096	
RSEM-R6E-EOP	12/23/2020 13:00	ZC1950	M	C094642	2.47	2.51	0.0345	<0.0005	0.0004	0.13	<0.0001	<0.001	0.071	0.00005	96.0	<0.001	0.00106	0.00102	0.03	<0.0002	0.0182	25.5	0.0396	<0.0000019	0.0043	0.0095	
RSEM-R6E-EOP	12/24/2020 9:30	ZC3450	M	C094856	2.26	2.47	0.0289	<0.0005	0.00033	0.125	<0.0001	<0.001	0.069	0.000046	92.7	<0.001	0.00091	0.00116	0.028	<0.0002	0.0177	25.2	0.0381	<0.0000019	0.0043	0.009	
RSEM-R6E-EOP	12/24/2020 9:40	ZC3451	D	C094856	2.33	2.18	0.028	<0.0005	0.00038	0.127	<0.0001	<0.001	0.069	0.000041	94.2	<0.001	0.00094	0.001	0.027	<0.0002	0.0181	25.4	0.0382	<0.0000019	0.0042	0.0092	
RSEM-R6E-EOP	12/25/2020 15:00	ZC3693	M	C094909	2.01	2.75	0.0255	<0.0005	0.0004	0.13	<0.0001	<0.001	0.072	0.000042	94.0	<0.001	0.00085	0.00102	0.027	<0.0002	0.0179	25.6	0.038	<0.0000019	0.0043	0.0091	
RSEM-R6E-EOP	12/26/2020 16:00	ZC3699	M	C094911	2.49	2.46	0.0314	<0.0005	0.00038	0.131	<0.0001	<0.001	0.068	0.000036	92.9	<0.001	0.0008	0.00102	0.028	<0.0002	0.0177	24.8	0.0383	<0.0000019	0.0044	0.0085	
RSEM-R6E-EOP	12/27/2020 16:10	ZC4643	M	C095191	2.60	1.78	0.0273	<0.0005	0.00038	0.13	<0.0001	<0.001	0.059	0.000041	91.9	<0.001	0.00087	0.00125	0.035	<0.0002	0.018	24.4	0.0453	<0.0000019	0.0044	0.009	
RSEM-R6E-EOP	12/27/2020 16:20	ZC4645	D	C095191	2.25	1.93	0.0366	<0.0005	0.00038	0.13	<0.0001	<0.001	0.062	0.000045	94.7	<0.001	0.00089	0.00097	0.036	<0.0002	0.018	24.6	0.0453	<0.0000019	0.0045	0.0089	
RSEM-R6E-EOP	12/28/2020 9:30	ZC4618	M	C095179	2.49	2.05	0.0288	<0.0005	0.00039	0.132	<0.0001	<0.001	0.058	0.000042	96.2	<0.001	0.00082	0.00093	0.034	<0.0002	0.0177	24.4	0.0445	<0.0000019	0.0043	0.0086	
RSEM-R6E-EOP	12/29/2020 13:55	ZC5602	M	C095537	2.42	1.94	0.0258	<0.0005	0.00039	0.13	<0.0001	<0.001	0.064	0.000037	94.2	<0.001	0.00073	0.00087	0.029	<0.0002	0.0167	23.8	0.0417	<0.0000019	0.0044	0.008	
RSEM-R6E-EOP	12/30/2020 14:50	ZC6411	M	C100028	2.95	2.48	0.0317	<0.0005	0.0004	0.139	<0.0001	<0.001	0.064	0.000041	96.4	<0.001	0.00078	0.00093	0.032	<0.0002	0.0176	25.0	0.0443	<0.0000019	0.0045	0.0085	
RSEM-R6E-EOP	12/30/2020 14:55	ZC6410	D	C100028	2.65	2.54	0.0313	<0.0005	0.0004	0.134	<0.0001	<0.001	0.061	0.000035	95.9	<0.001	0.00078	0.00094	0.034	<0.0002	0.0176	25.3	0.0443	<0.0000019	0.0045	0.0084	
RSEM-R6E-EOP	12/31/2020 14:45	ZC6408	M	C100027	2.67	2.71	0.0287	<0.0005	0.00039	0.133	<0.0001	<0.001	0.06	0.000041	95.0	<0.001	0.00081	0.00091	0.035	<0.0002	0.0177	24.3	0.046	<0.0000019	0.0043	0.0086	
RSEM-R6-EP-US-SD	4/8/2020 14:40	XQ4592	M	C024938	2.20	1.89	5.89	0.00074	0.00504	0.307	0.00027	<0.001	0.063	0.00043	69.5	0.0166	0.00678	0.0157	14.1	0.00605	0.0186	14.0	0.275	0.000101	0.0111	0.0236	
RSEM-R6-EP-US-SD	6/15/2020 15:20	XY1606	M	C041415	4.21	1.53	60.9	<0.0025	0.0389	3.08	0.00658	<0.005	<0.25	0.0123	496	0.149	0.158	0.32	174	0.07	0.171	102	5.01	0.00053	0.0051	0.488	
RSEM-R6-EP-US-SD	10/11/2020 12:10	YQ4409	M	C075136	1.94	1.28	1.12	<0.0005	0.00077	0.158	0.00019	<0.001	0.093	0.000291	107	0.0019	0.00809	0.0069	1.72	0.00042	0.029	25.4	0.108	<0.000019	0.0046	0.0288	
RSEM-R6W-EOP	4/27/2020 14:10	XS0061	M	C028666	1.83	1.39	0.795	0.00113	0.00152	0.0759	<0.0001	<0.001	0.136	0.000013	25.8	0.0026	0.00033	0.00233	0.507	0.00031	0.0202	7.56	0.0168	<0.0000019	0.0138	0.0023	
RSEM-R6W-EOP	4/28/2020 12:45	XS2087	M	C029151	1.50	1.22	0.48	0.00116	0.00168	0.0925	<0.0001	<0.001	0.182	<0.00001	29.4	0.0028	0.00055	0.00279	0.557	0.00047	0.0246	8.50	0.0221	0.000006	0.0178	0.0027	
RSEM-R6W-EOP	4/29/2020 11:30	XS3519	M	C029452	1.63	1.73	0.593	0.00132	0.0017	0.0903	<0.0001	<0.001	0.181	0.000036	30.9	0.0034	0.00056	0.00322	0.811	0.00052	0.0246	9.07	0.0257	0.0000081	0.0178	0.003	
RSEM-R6W-EOP	4/30/2020 10:40	XS4880	M	C029734	1.78	1.58	0.747	0.00174	0.00199	0.0883	<0.0001	<0.001	0.168	0.000024	28.2	0.0051	0.00049	0.00261	0.66	0.00044	0.0253	8.43	0.0179	0.0000052	0.0179	0.0027	
RSEM-R6W-EOP	4/30/2020 10:50	XS4881	D	C029734	1.88	1.22	0.757	0.00181	0.00222	0.0953	<0.0001	<0.001	0.192	0.000032	31.8	0.0057	0.00053	0.00272	0.609	0.00051	0.028	9.35	0.0212	0.0000041	0.02	0.003	
RSEM-R6W-EOP	5/1/2020 11:25	XS5995	M	C029956	1.48	2.11	0.96	0.00192	0.00202	0.103	<0.0001	<0.001	0.194	0.000038	33.3	0.0054	0.00053	0.00297	0.805	0.00054	0.0296	9.82	0.0185	0.0000051	0.0218	0.0027	
RSEM-R6W-EOP	5/1/2020 11:35	XS5996	D	C029956	1.81	1.50	0.913	0.00177	0.00206	0.0964	<0.0001	<0.001	0.174	0.000018	28.4	0.0048	0.00048	0.00261	0.742	0.00057	0.0267	8.62	0.0182	0.0000046	0.0198	0.0027	
RSEM-R6W-EOP	5/2/2020 11:40	XS7460	M	C030328	1.87	1.29	0.585	0.00179	0.00179	0.0891	<0.0001	<0.001	0.153	0.000034	29.6	0.0042	0.00037	0.00213	0.489	0.0004	0.0253	8.17	0.014	0.000005	0.02	0.0025	
RSEM-R6W-EOP	5/2/2020 11:50	XS7461	D	C030328	1.64	1.45	0.574	0.00173	0.00145	0.0935	<0.0001	<0.001	0.164	0.000026	30.2	0.0044	0.00035	0.0021	0.448	0.00036	0.0264	8.32	0.0134	0.0000052	0.0209	0.0022	
RSEM-R6W-EOP	5/3/2020 7:40	XS7389	M	C030307	1.71	1.69	0.553	0.00192	0.00208	0.0941	<0.0001	<0.001	0.178	0.000032	32.6	0.0047	0.00038	0.00221	0.562	0.00037	0.0279	9.03	0.014	0.0000031	0.0209	0.0025	
RSEM-R6W-EOP	5/3/2020 7:50	XS7390	D	C030307	1.85	1.55	0.362	0.00189	0.00187	0.0907	<0.0001	<0.001	0.185	0.000027	31.6	0.0048	0.00039	0.00254	0.411	0.00033	0.0281	9.29	0.0144	0.0000034	0.0217	0.0021	
RSEM-R6W-EOP	5/4/2020 13:00	XS8355	M	C030506	1.70	1.45	0.535	0.00154	0.00197	0.0865	<0.0001	<0.001	0.188	0.000033	30.1	0.0056	0.00034	0.00303	0.418	0.00028	0.0269	9.44	0.0117	0.0000034	0.0204	0.0088	
RSEM-R6W-EOP	5/5/2020 16:45	XT0141	M	C030949	1.27	1.68	0.35	0.00157	0.00187	0.0842	<0.0001	<0.001	0.179	0.000012	32.7	0.0046	0.00034	0.00202	0.255	0.00022	0.0261	9.50	0.0137	0.0000021	0.0191	0.002	
RSEM-R6W-EOP	5/6/2020 13:15	XT1600	M	C031246	1.69	1.26	0.329	0.00164	0.00198	0.1	<0.0001	<0.001	0.197	0.000013	37.0	0.0043	0.00032	0.00344	0.293	0.00021	0.0261	11.2	0.011	0.0000028	0.024	0.0021	
RSEM-R6W-EOP	5/7/2020 11:30	XT2576	M	C031444	1.78	1.71	0.264	0.00183	0.00164	0.105	<0.0001	<0.001	0.233	0.000017	36.5	0.0042	0.00028	0.00251	0.175	0.00027	0.0353	10.8	0.0084	0.0000028	0.0245	0.002	
RSEM-R6W-EOP	5/8/2020 12:45	XT2570	M	C031442	1.47	1.72	0.235	0.0018	0.00178	0.103	<0.0001	<0.001	0.241	0.000012	35.0	0.0041	0.00021	0.00201	0.392	<0.0002	0.0365	9.84	0.0072	0.0000021	0.0254	0.0017	
RSEM-R6W-EOP	5/9/2020 11:15	XT4486	M	C031859	1.74	1.80	0.169	0.0016	0.00163	0.0824	<0.0001	<0.001	0.228	<0.00001	33.7	0.0049	<0.0002	0.00164	0.103	<0.0002	0.0258	10.6	0.0061	<0.0000019	0.021	0.0019	
RSEM-R6W-EOP	5/10/2020 15:30	XT4527	M	C031867	2.04	2.01	0.174	0.00171	0.0014	0.0745	<0.0001	<0.001	0.208	<0.00001	32.5	0.004	0.00021	0.00143	0.097	<0.0002	0.0361	12.5	0.0046	<0.0000019	0.0207	0.0019	
RSEM-R6W-EOP	5/11/2020 11:30	XT5200	M	C032074	2.43	2.06	0.204	0.00207	0.0024	0.0744	<0.0001	<0.001	0.256	0.000025	32.1	0.0033	<0.0002	0.00139	0.091	<0.0002	0.0534	12.5	0.0047	<0.0000019	0.0215	0.0022	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6W-EOP	5/12/2020 12:55	XT7070	M	C032509	1.64	2.23	0.201	0.00242	0.00217	0.0716	<0.0001	<0.001	0.267	0.000011	32.2	0.0035	<0.0002	0.0015	0.089	0.00092	0.0662	14.5	0.0046	<0.0000019	0.0226	0.0026	
RSEM-R6W-EOP	5/12/2020 13:05	XT7071	D	C032509	2.42	2.26	0.201	0.0024	0.00268	0.0715	<0.0001	<0.001	0.271	0.000015	32.3	0.0034	0.0002	0.00141	0.087	<0.0002	0.0676	15.0	0.0053	<0.0000019	0.0234	0.0026	
RSEM-R6W-EOP	5/13/2020 13:20	XT8153	M	C032775	2.63	2.15	0.177	0.00223	0.0018	0.0608	<0.0001	<0.001	0.229	0.000014	27.2	0.0028	0.00023	0.00121	0.078	<0.0002	0.0685	13.8	0.0043	<0.0000019	0.0222	0.0023	
RSEM-R6W-EOP	5/13/2020 13:30	XT8154	D	C032775	2.56	2.79	0.178	0.00262	0.00175	0.0624	<0.0001	<0.001	0.242	0.000027	27.1	0.0028	<0.0002	0.00127	0.081	<0.0002	0.0725	13.9	0.0042	<0.0000019	0.0228	0.0025	
RSEM-R6W-EOP	5/14/2020 12:40	XU0098	M	C033161	1.99	1.93	0.168	0.00224	0.00188	0.0545	<0.0001	<0.001	0.212	0.000015	24.7	0.0026	0.00021	0.00113	0.07	<0.0002	0.0743	14.0	0.0043	<0.0000019	0.021	0.0026	
RSEM-R6W-EOP	5/14/2020 12:50	XU0099	D	C033161	2.04	1.94	0.159	0.00225	0.00164	0.0528	<0.0001	<0.001	0.214	0.000023	24.3	0.0021	0.00022	0.00115	0.072	<0.0002	0.0749	14.0	0.0045	<0.0000019	0.0211	0.0024	
RSEM-R6W-EOP	5/15/2020 9:05	XU0130	M	C033173	1.91	2.06	0.179	0.00256	0.0022	0.0549	<0.0001	<0.001	0.238	0.000011	24.3	0.0025	0.00028	0.00106	0.069	<0.0002	0.0866	15.8	0.0038	<0.0000019	0.0217	0.0029	
RSEM-R6W-EOP	5/15/2020 9:15	XU0131	D	C033173	2.09	1.91	0.177	0.00248	0.00243	0.0539	<0.0001	<0.001	0.231	<0.00001	25.5	0.0027	<0.0002	0.00111	0.072	<0.0002	0.084	15.7	0.0031	<0.0000019	0.022	0.003	
RSEM-R6W-EOP	5/16/2020 13:30	XU2650	M	C033733	2.18	2.36	0.187	0.00323	0.00185	0.0582	<0.0001	<0.001	0.271	<0.00001	28.4	0.0028	0.00024	0.00224	0.097	<0.0002	0.0846	19.9	0.0045	<0.0000019	0.025	0.0039	
RSEM-R6W-EOP	5/16/2020 13:40	XU2651	D	C033733	2.43	2.34	0.181	0.00297	0.00225	0.0569	<0.0001	<0.001	0.271	<0.00001	27.3	0.003	0.00026	0.00124	0.093	<0.0002	0.0834	19.5	0.0052	<0.0000019	0.0242	0.0042	
RSEM-R6W-EOP	5/17/2020 12:10	XU2516	M	C033704	2.24	2.26	0.148	0.00259	0.0018	0.0462	<0.0001	<0.001	0.223	<0.00001	23.3	0.0022	0.00027	0.00153	0.061	<0.0002	0.0788	17.9	0.0028	<0.0000019	0.0216	0.0034	
RSEM-R6W-EOP	5/17/2020 12:20	XU2517	D	C033704	2.77	2.29	0.174	0.00304	0.00244	0.0553	<0.0001	<0.001	0.247	<0.00001	28.5	0.0023	0.00021	0.00168	0.053	<0.0002	0.092	21.4	0.0029	<0.0000019	0.0248	0.0032	
RSEM-R6W-EOP	5/18/2020 13:50	XU2637	M	C033728	2.12	2.38	0.164	0.00305	0.00202	0.0473	<0.0001	<0.001	0.258	<0.00001	25.9	0.0027	0.00025	0.00141	0.062	<0.0002	0.0909	21.1	0.0037	<0.0000019	0.0234	0.0053	
RSEM-R6W-EOP	5/18/2020 14:00	XU2638	D	C033728	2.47	2.13	0.17	0.00324	0.002	0.05	<0.0001	<0.001	0.271	<0.00001	27.4	0.0027	0.00029	0.00125	0.059	<0.0002	0.0958	22.6	0.0033	<0.0000019	0.0245	0.0044	
RSEM-R6W-EOP	5/19/2020 14:20	XU3584	M	C033944	2.36	2.15	0.181	0.00323	0.00211	0.0464	<0.0001	<0.001	0.257	<0.00001	26.1	0.003	0.0003	0.00085	0.042	<0.0002	0.0923	22.8	0.0034	<0.0000019	0.0233	0.0047	
RSEM-R6W-EOP	5/19/2020 14:30	XU3585	D	C033944	2.33	2.01	0.189	0.00356	0.002	0.0502	<0.0001	<0.001	0.288	<0.00001	28.7	0.0035	0.00031	0.00102	0.05	<0.0002	0.101	25.1	0.0034	<0.0000019	0.0255	0.0056	
RSEM-R6W-EOP	5/20/2020 12:50	XU5558	M	C034306	1.99	1.85	0.123	0.00255	0.00178	0.033	<0.0001	<0.001	0.257	<0.00001	23.0	0.0022	0.0004	0.00158	0.042	<0.0002	0.103	17.6	0.0023	<0.0000019	0.0136	0.0043	
RSEM-R6W-EOP	5/20/2020 13:00	XU5559	D	C034306	2.17	1.86	0.17	0.00282	0.00197	0.0381	<0.0001	<0.001	0.269	0.000011	22.3	0.006	0.00031	0.00105	0.065	<0.0002	0.0977	21.2	0.0044	<0.0000019	0.0196	0.0054	
RSEM-R6W-EOP	5/21/2020 11:55	XU6997	M	C034623	1.93	2.07	0.158	0.00263	0.00146	0.0344	<0.0001	<0.001	0.233	<0.00001	20.5	0.002	0.00025	0.00119	0.055	<0.0002	0.0913	19.5	0.0027	<0.0000019	0.0184	0.0043	
RSEM-R6W-EOP	5/21/2020 12:05	XU6998	D	C034623	2.40	2.48	0.146	0.00252	0.00171	0.0334	<0.0001	<0.001	0.232	<0.00001	20.4	0.002	0.00031	0.0012	0.052	<0.0002	0.0904	19.6	0.0028	<0.0000019	0.0178	0.0039	
RSEM-R6W-EOP	5/22/2020 12:20	XU8399	M	C034984	2.49	2.35	0.196	0.00259	0.00175	0.0369	<0.0001	<0.001	0.223	<0.00001	22.6	0.0025	0.00032	0.00119	0.09	<0.0002	0.088	20.7	0.0044	<0.0000019	0.0195	0.0047	
RSEM-R6W-EOP	5/22/2020 12:30	XU8400	D	C034984	1.96	2.16	0.182	0.00282	0.00168	0.0368	<0.0001	<0.001	0.221	<0.00001	22.2	0.0024	0.0003	0.00113	0.091	<0.0002	0.0859	20.5	0.0036	<0.0000019	0.0186	0.0046	
RSEM-R6W-EOP	5/23/2020 13:40	XU8584	M	C034993	2.06	2.24	0.279	0.00277	0.0024	0.0414	<0.0001	<0.001	0.253	0.000015	24.8	0.0026	0.00042	0.00122	0.163	<0.0002	0.0928	23.0	0.0062	<0.0000019	0.0206	0.0059	
RSEM-R6W-EOP	5/23/2020 13:50	XU8585	D	C034993	2.38	2.28	0.219	0.00282	0.00238	0.0412	<0.0001	<0.001	0.253	0.000012	24.7	0.0026	0.00043	0.00119	0.133	<0.0002	0.0907	23.3	0.0061	<0.0000019	0.0206	0.006	
RSEM-R6W-EOP	5/24/2020 13:00	XU8646	M	C035010	2.22	2.00	0.22	0.00287	0.00246	0.0418	<0.0001	<0.001	0.251	0.000011	25.8	0.0027	0.00039	0.00117	0.105	<0.0002	0.0918	23.1	0.0053	<0.0000019	0.0217	0.006	
RSEM-R6W-EOP	5/24/2020 13:10	XU8647	D	C035010	1.91	2.16	0.217	0.00276	0.00238	0.0397	<0.0001	<0.001	0.242	<0.00001	24.1	0.0026	0.00038	0.00116	0.101	<0.0002	0.091	22.4	0.0051	<0.0000019	0.021	0.0059	
RSEM-R6W-EOP	5/25/2020 9:00	XU8664	M	C035018	2.10	2.21	0.209	0.00288	0.00254	0.0401	<0.0001	<0.001	0.257	0.000012	24.9	0.0029	0.00038	0.00122	0.115	<0.0002	0.0918	22.9	0.0052	<0.0000019	0.0218	0.006	
RSEM-R6W-EOP	5/25/2020 9:10	XU8665	D	C035018	1.84	2.20	0.209	0.00288	0.0026	0.0408	<0.0001	<0.001	0.257	0.000012	24.9	0.003	0.00038	0.00117	0.109	<0.0002	0.0907	23.7	0.0051	<0.0000019	0.0222	0.0062	
RSEM-R6W-EOP	5/26/2020 15:10	XV2883	M	C035941	2.08	2.18	0.191	0.0032	0.00266	0.039	<0.0002	<0.002	0.285	<0.00002	26.2	0.0031	<0.0004	0.0015	0.068	<0.0004	0.1	24.2	0.0038	<0.0000019	0.0238	0.0058	
RSEM-R6W-EOP	5/27/2020 15:00	XV4565	M	C036323	2.52	2.12	0.309	0.00289	0.00284	0.05	<0.0001	<0.001	0.261	0.000016	25.8	0.0033	0.00052	0.00152	0.266	<0.0002	0.092	22.9	0.0084	<0.0000019	0.0237	0.006	
RSEM-R6W-EOP	5/28/2020 14:15	XV5619	M	C036526	2.47	1.85	0.143	0.00312	0.00281	0.0364	<0.0001	<0.001	0.263	<0.00001	26.3	0.0033	0.00021	0.00164	0.028	<0.0002	0.0938	23.8	0.0019	<0.0000019	0.0246	0.005	
RSEM-R6W-EOP	5/28/2020 14:40	XV5620	D	C036526	2.26	2.08	0.145	0.00315	0.00279	0.037	<0.0001	<0.001	0.265	0.000011	25.3	0.0033	0.0002	0.00112	0.028	<0.0002	0.0947	23.6	0.0019	<0.0000019	0.0243	0.0051	
RSEM-R6W-EOP	5/29/2020 11:30	XV5615	M	C036525	2.70	2.09	0.137	0.00315	0.00283	0.0368	<0.0001	<0.001	0.259	<0.00001	25.4	0.0033	<0.0002	0.00117	0.024	<0.0002	0.0909	23.0	0.0017	<0.0000019	0.0242	0.0049	
RSEM-R6W-EOP	5/30/2020 13:45	XV8354	M	C037043	2.09	2.28	0.151	0.0032	0.00279	0.0346	<0.0002	<0.002	0.267	<0.00002	24.8	0.0035	<0.0004	0.0012	0.024	<0.0004	0.0946	23.4	<0.002	<0.0000019	0.025	0.0048	
RSEM-R6W-EOP	5/31/2020 12:45	XV8400	M	C037057	2.49	2.44	0.163	0.0032	0.0029	0.0397	<0.0001	<0.001	0.266	0.000012	25.9	0.0035	0.00021	0.00148	0.052	<0.0002	0.0949	22.4	0.0021	<0.0000019	0.0255	0.0046	
RSEM-R6W-EOP	6/1/2020 15:00	XW0113	M	C037316	2.53	2.39	0.179	0.00325	0.00295	0.0396	<0.0001	<0.001	0.29	<0.00001	25.5	0.0043	0.00022	0.00135	0.067	<0.0002	0.105	22.9	0.0024	<0.0000019	0.0271	0.0047	
RSEM-R6W-EOP	6/2/2020 12:00	XW3134	M	C037913	2.85	2.93	0.186	0.00334	0.00301	0.0421	<0.0001	<0.001	0.283	0.000011	25.5	0.004	0.00023	0.00127	0.069	<0.0002	0.106	22.9	0.0024	<0.0000019	0.0273	0.0046	
RSEM-R6W-EOP	6/3/2020 12:45	XW5134	M	C038222	2.65	2.33	0.147	0.0033	0.0029	0.0371	<0.0002	<0.002	0.294	<0.00002	24.6	0.0036	<0.0004	0.0013	0.03	<0.0004	0.103	22.1	<0.002	<0.0000019	0.0255	0.0043	
RSEM-R6W-EOP	6/4/2020 12:20	XW6861	M	C038528	2.18	2.61	0.156	0.0033	0.00296	0.0366	<0.0002	<0.002	0.301	<0.00002	25.0	0.0038	<0.0004	0.0012	0.035	<0.0004	0.104	22.5	<0.002	<0.0000019	0.0257	0.0043	
RSEM-R6W-EOP	6/4/2020 12:30	XW6862	D	C038528	2.35	2.55	0.161	0.0033	0.00301	0.0365	<0.0002	<0.002	0.304	<0.00002	25.0	0.0038	<0.0004	0.0012	0.034	<0.0004	0.105	22.8	0.002	<0.0000019	0.026	0.0042	
RSEM-R6W-EOP	6/5/2020 16:40	XW9909	M	C039108	2.54	2.58	0.158	0.0033	0.003	0.0382	<0.0001	<0.001	0.284	<0.00001	25.1	0.0037	<0.0002	0.00117	0.042	<0.0002	0.105	22.1	0.0021	<0.0000019	0.0277	0.004	
RSEM-R6W-EOP	6/5/2020 16:50	XW9910	D	C039108	3.48	3.03	0.155	0.00337	0.00307	0.0388	<0.0001	<0.001	0.298	<0.00001	25.6	0.0038	<0.0002	0.0012	0.035	<0.0002	0.104	22.7	0.0021	<0.0000019	0.0288	0.004	
RSEM-R6W-EOP	6/6/2020 11:40	XX0125	M	C039138	2.77	2.78	0.157	0.0032	0.00295	0.0369	<0.0002	<0.002	0.292	<0.00002	24.0	0.0036	<0.0004	0.0014	0.04	<0.0004	0.102	21.7	0.0023	0.0000021	0.0249	0.004	
RSEM-R6W-EOP	6/6/2020 11:50	XX0126	D	C039138	3.17	2.88	0.162	0.0033	0.00295	0.0389	<0.0002	<0.002	0.303	<0.00002	24.9	0.0038	<0.0004	0.0014	0.041	<0.0004	0.108	22.9	0.0024	<0.0000019	0.0256	0.0042	
RSEM-R6W-EOP	6/7/2020 12:20	XW9324	M	C038976	2.77	3.07	0.243	0.00327	0.00299	0.0425	<0.0001	<0.001	0.299	0.000011	25.4	0.0038	0.00026	0.00159	0.128	<0.0002	0.11	22.9	0.0051	<0.0000019	0.0271	0.0045	
RSEM-R6W-EOP	6/7/2020 12:30	XW9325	D	C038976	2.57	2.43	0.246	0.0033	0.003	0.0429	<0.0002	<0.002	0.317	<0.00002	25.2	0.0038	<0.0004	0.0017	0.144	<0.0004	0.107	23.3	0.0051	<0.0000019	0.0257	0.0047	
RSEM-R6W-EOP	6/8/2020 16:00	XX1068	M	C039370	3.54	2.47	0.236	0.003	0.00274	0.0412	<0.0002	<0.002	0.291	<0.00002	23.3	0.0034	<0.0004	0.0019	0.191	<0.0004	0.0976	20.9	0.0078	0.0000019	0.022	0.0046	
RSEM-R6W-EOP	6/9/2020 15:40	XX3626	M	C039793	2.76	2.88	0.266	0.00316	0.00297	0.0527	<0.0001	<0.001	0.299	0.000017	28.2	0.0038	0.00035	0.00159	0.289	<0.0002	0.104	23.2	0.0123	0.0000028	0.0252	0.0046	
RSEM-R6W-EOP	6/10/2020 13:30	XX4754	M	C040036	2.33	2.46	0.325	0.00342	0.00299	0.0565	<0.0001	<0.001	0.304	0.000015	30.1	0.0044	0.00037	0.00174	0.282	<0.0002	0.102	24.3	0.0122	<0.0000019	0.0252	0.0048	
RSEM-R6W-EOP	6/11/2020 13:50	XX7041	M	C040416	6.54	3.09	0.314	0.00336	0.0028	0.0521	<0.0001	<0.001	0.295	0.000013	27.9	0.0043	0.00029	0.00143	0.228	<0.0002	0.0993	22.5	0.009	<0.0000019	0.024	0.0043	
RSEM-R6W-EOP	6/12/2020 14:15	XX9582	M	C040980	2.22	2.56	0.234	0.00334	0.00271	0.0509	<0.0001	<0.001	0.279	0.00001	28.5	0.0044	0.00027	0.00139	0.128	<0.0002	0.0949	21.7	0.0081	<0.0000019	0.0233	0.0043	
RSEM-R6W-EOP	6/13/2020 14:55	XX9600	M	C040986	2.85	2.60	0.194	0.00327	0.00266	0.0441	<0.0001	<0.001	0.29	<0.00001	26.2	0.0051	0.00027	0.00146	0.156	<0.0002	0.097	21.5	0.008	<0.0000019	0.0229	0.0045	
RSEM-R6W-EOP	6/14/2020 14:10	XX9647	M	C040993	3.46	2.57	0.325	0.00322	0.00278	0.0553	<0.0001	<0.001	0.279	0.00002	27.5	0.0051	0.0004	0.00205	0.477	0.00027	0.0943	21.3	0.0168	<0.0000019	0.0229	0.0046	
RSEM-R6W-EOP	6/15/2020 14:55	XY1603	M	C041415	2.96	2.54	1.73	0.0031	0.00323	0.109	<0.0002	<0.002	0.287	0.000122	38.9	0.0079	0.00292	0.0042	2.29	0.00127	0.0943	21.4	0.0781	<0.000019	0.0196	0.0125	
RSEM-R6W-EOP	6/15/2020 15:05	XY1604	D	C041415	2.90	2.77	1.64	0.003	0.00314	0.105	<0.0002	<0.002	0.295	0.000118	37.4	0.0074	0.00292	0.0042	2.37	0.00123	0.0895	20.6	0.0762	<0.000019	0.0188	0.0122	
RSEM-R6W-EOP	6/16/2020 10:55	XY1505	M	C041388	3.37	2.80	3.27	0.0029	0.00293	0.129	<0.0002	<0.002	0.281	0.000186	50.0	0.0096	0.00656	0.0058	2.85	0.00139	0.0967	22.2	0.16	<0.000019	0.0164	0.0241	
RSEM-R6W-EOP	6/16/2020 11:05	XY1506	D	C041388	3.19	2.94	3.59	0.003	0.00303	0.132	<0.0002	<0.002	0.299	0.000198	50.6	0.0107	0.00659	0.0051	2.91	0.00148	0.0998	23.1	0.163	<0.000019	0.0177	0.0245	
RSEM-R6W-EOP	6/17/2020 15:15	XY6280	M	C042380	3.66	3.11	0.78	0.0028	0.00224	0.0803	<0.0002	<0.002	0.278	0.000065	49.2	0.0067	0.0026	0.0025	0.77	0.00045	0.089	21.6	0.0801	0.0000022	0.0164	0.0117	
RSEM-R6W-EOP	6/18/2020 16:15	XY6285	M	C042383	3.32	3.01	1.15	0.0029	0.00247	0.1	<0.0002	<0.002	0.285	0.000045	57.8	0.0073	0.0015	0.0026	0.756	0.00049	0.0968	23.3	0.0528	0.0000048	0.0167	0.008	
RSEM-R6W-EOP	6/19/2020 11:40	XY6264	M	C042375	3.16	2.63	0.873	0.003	0.00241	0.0873	<0.0002	<0.002	0.292	0.000033	60.3	0.0061	0.00109	0.002	0.408	<0.0004	0.102	24.3	0.0344	0.0000019	0.0162	0.0062	
RSEM-R6W-EOP	6/20/2020 14:15	XY9028	M	C042884	2.37	2.33	0.279	0.00301	0.00237	0.0805	<0.0001	<0.001	0.283	0.000027	69.6	0.0055	0.0009	0.00154	0.183	<0.0002	0.0988	26.5	0.0259	<0.0000019	0.0173	0.0056	
RSEM-R6W-EOP	6/21/2020 15:30	XY9118	M	C042904	2.86	2.05	0.179	0.0027	0.00195	0.0734	<0.0002	<0.002	0.298	0.000026	80.4	0.0051	0.00086	0.0014	0.129	<0.0004	0.12	31.4	0.0235	<0.0000019	0.0151	0.0057	
RSEM-R6W-EOP	6/22/2020 13:10	XZ0404	M	C043197	2.57	2.03	0.113	0.00276	0.0019	0.0806	<0.0001	<0.001	0.261	0.000027	92.7	0.0048	0.00077	0.00123	0.098	<0.0002	0.131	35.5	0.0228	<0.0000019	0.0163	0.0054	
RSEM-R6W-EOP	6/22/2020 13:30	XZ0407	D	C043197	2.48	2.46	0.112	0.00268	0.00186	0.0795	<0.0001	<0.001	0.26	0.000025	91.3	0.0047	0.00075	0.00119	0.098	<0.0002	0.129	35.7	0.0221	<0.0000019	0.0159	0.0054	
RSEM-R6W-EOP	6/23/2020 16:10	XZ2250	M	C043604	2.41	2.07	0.103	0.00242	0.00151	0.0761	<0.0001	<0.001	0.253	0.000023	101	0.004	0.00066	0.00114	0.098	<0.0002	0.144	38.5	0.0143	<0.0000019	0.0141	0.0045	
RSEM-R6W-EOP	6/24/2020 12:50	XZ5348	M	C044267	2.04	2.01	0.0976	0.00223	0.00129	0.0681	<0.0001	<0.001	0.294	0.000018	104	0.0035	0.00066	0.00118	0.078	<0.0002	0.148	40.8	0.0119	<0.0000019	0.0127	0.0044	
RSEM-R6W-EOP	6/25/2020 15:40	XZ5983	M	C044346	2.28	2.09	0.0912	0.00227	0.00121	0.0671	<0.0001	<0.001	0.309	0.000023	110	0.003	0.00066	0.00119	0.058	<0.0002	0.158	44.5	0.0108	<0.0000019	0.0124	0.0044	
RSEM-R6W-EOP	6/26/2020 12:40	XZ7317	M	C044624	2.46	2.31	0.0948	0.00201	0.00107	0.0613	<0.0001	<0.001	0.312	0.000026	110	0.0023	0.00068	0.00118	0.066	<0.0002	0.162	46.0	0.0109	<0.0000019	0.0116	0.0046	
RSEM-R6W-EOP	6/27/2020 18:50	XZ9068	M	C044897	<2.0	<2.5	0.0824	0.0021	0.00092	0.0599	<0.0002	<0.002	0.304	0.000033	115	<0.002	0.00067	0.0011	0.057	<0.0004	0.155	46.9	0.0108	<0.0000019	0.0105	0.0046	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6W-EOP	6/28/2020 12:30	XZ9158	M	C044916	<2.0	<2.5	0.106	0.0018	0.0009	0.0547	<0.0002	<0.002	0.305	0.000032	106	<0.002	0.00072	0.0011	0.065	<0.0004	0.163	46.6	0.0118	<0.0000019	0.0103	0.0047	
RSEM-R6W-EOP	6/29/2020 16:05	YA0784	M	C045275	2.36	2.11	0.139	0.002	0.00104	0.066	<0.0002	<0.002	0.298	0.000022	108	<0.002	0.00073	0.0014	0.106	<0.0004	0.158	48.3	0.0133	<0.0000019	0.0102	0.0048	
RSEM-R6W-EOP	6/30/2020 14:20	YA2741	M	C045692	<2.5	1.70	0.0612	0.0019	0.00095	0.0623	<0.0002	<0.002	0.299	0.000026	102	<0.002	0.00068	0.001	0.044	<0.0004	0.165	47.9	0.0128	<0.0000019	0.0097	0.0047	
RSEM-R6W-EOP	7/1/2020 11:50	YA2708	M	C045689	1.94	2.08	0.0846	0.0017	0.0009	0.0557	<0.0002	<0.002	0.294	0.000032	93.5	<0.002	0.00086	0.0011	0.101	<0.0004	0.172	49.4	0.0175	<0.0000019	0.0087	0.0048	
RSEM-R6W-EOP	7/3/2020 16:20	YA5156	M	C046179	1.88	1.96	0.263	0.00136	0.00107	0.0838	<0.0001	<0.001	0.258	0.00005	78.2	0.0016	0.00085	0.00184	0.573	0.00028	0.128	38.9	0.0343	<0.0000019	0.0075	0.0045	
RSEM-R6W-EOP	7/4/2020 15:15	YA6736	M	C046470	3.0	1.02	0.936	0.00121	0.00102	0.117	<0.0001	<0.001	0.223	0.000061	65.4	0.0031	0.0011	0.00172	0.829	0.00041	0.101	34.3	0.046	<0.000019	0.0068	0.005	
RSEM-R6W-EOP	7/5/2020 10:25	YA6918	M	C046500	<1.0	<0.50	0.243	0.00117	0.00065	0.105	<0.0001	<0.001	0.217	0.00044	67.9	0.0016	0.00591	0.00247	0.403	<0.0002	0.104	36.1	0.117	<0.0000019	0.0065	0.0223	
RSEM-R6W-EOP	7/6/2020 11:40	YA8349	M	C046846	1.40	<2.5	0.103	0.00109	0.00043	0.0962	<0.0001	<0.001	0.209	0.000671	68.6	<0.001	0.00864	0.00243	0.199	0.0007	0.122	33.1	0.172	<0.0000019	0.0065	0.0325	
RSEM-R6W-EOP	7/7/2020 12:15	YB0050	M	C047206	1.69	1.55	0.1	0.00121	0.00044	0.0855	<0.0001	<0.001	0.233	0.000595	74.1	<0.001	0.00788	0.00203	0.12	<0.0002	0.134	38.1	0.146	<0.0000019	0.0068	0.0299	
RSEM-R6W-EOP	7/8/2020 12:40	YB2461	M	C047619	1.67	1.32	0.115	0.00119	0.00047	0.0844	<0.0001	<0.001	0.258	0.000432	71.6	<0.001	0.00601	0.00168	0.099	<0.0002	0.148	37.9	0.111	<0.0000019	0.0067	0.0242	
RSEM-R6W-EOP	7/9/2020 14:20	YB4137	M	C047920	<2.0	1.27	0.137	0.00122	0.00054	0.0901	<0.0001	<0.001	0.252	0.000246	70.7	0.0011	0.00365	0.00154	0.15	<0.0002	0.142	35.1	0.0672	<0.0000019	0.0072	0.0154	
RSEM-R6W-EOP	7/10/2020 10:10	YB4117	M	C047917	1.72	2.4	0.0903	0.00122	0.00053	0.087	<0.0001	<0.001	0.248	0.000217	71.3	<0.001	0.00303	0.00133	0.061	<0.0002	0.14	35.3	0.056	<0.0000019	0.007	0.0139	
RSEM-R6W-EOP	7/12/2020 14:10	YB7109	M	C048462	1.78	1.60	0.0988	0.00132	0.00071	0.0869	<0.0001	<0.001	0.232	0.000088	67.4	0.0012	0.0013	0.00117	0.069	<0.0002	0.135	32.9	0.0204	<0.0000019	0.0077	0.0083	
RSEM-R6W-EOP	7/12/2020 15:00	YB7194	M	C048486	2.11	1.59	0.117	0.00126	0.00064	0.0892	<0.0001	<0.001	0.224	0.000123	68.2	0.0011	0.00179	0.00119	0.085	<0.0002	0.133	33.7	0.0308	0.0000025	0.0075	0.0094	
RSEM-R6W-EOP	7/13/2020 14:45	YB9220	M	C048875	1.95	1.97	0.146	0.00156	0.00089	0.0903	<0.0001	<0.001	0.26	0.000052	66.0	0.0016	0.00103	0.00138	0.152	<0.0002	0.147	34.1	0.0169	<0.0000019	0.0088	0.0078	
RSEM-R6W-EOP	7/14/2020 14:10	YC1072	M	C049344	2.49	1.93	0.168	0.0016	0.00102	0.0965	<0.0001	<0.001	0.273	0.000044	67.7	0.0016	0.00107	0.00145	0.21	<0.0002	0.143	34.6	0.0155	<0.0000019	0.0093	0.0078	
RSEM-R6W-EOP	7/14/2020 14:20	YC1073	D	C049344	2.42	2.00	0.152	0.00169	0.001	0.0948	<0.0001	<0.001	0.279	0.000042	68.8	0.0016	0.0009	0.00143	0.161	<0.0002	0.145	35.2	0.0134	<0.0000019	0.0095	0.0076	
RSEM-R6W-EOP	7/15/2020 12:55	YC2138	M	C049614	2.10	2.07	0.0915	0.00167	0.00101	0.0964	<0.0001	<0.001	0.275	0.000032	67.3	0.0015	0.00062	0.00131	0.08	<0.0002	0.147	34.4	0.0096	<0.0000019	0.0092	0.0067	
RSEM-R6W-EOP	7/15/2020 13:05	YC2139	D	C049614	1.82	2.15	0.0917	0.00166	0.00101	0.0958	<0.0001	<0.001	0.281	0.000034	68.1	0.0015	0.00064	0.00159	0.083	<0.0002	0.143	34.8	0.0097	<0.0000019	0.0096	0.0068	
RSEM-R6W-EOP	7/16/2020 15:40	YC4666	M	C049952	2.05	1.76	0.0703	0.0016	0.00103	0.0952	<0.0001	<0.001	0.275	0.000031	66.0	0.0014	0.00045	0.00122	0.041	<0.0002	0.149	33.4	0.0073	<0.0000019	0.0096	0.0059	
RSEM-R6W-EOP	7/17/2020 14:05	YC5482	M	C050110	1.80	1.88	0.0626	0.0016	0.00091	0.0952	<0.0001	<0.001	0.271	0.000023	66.9	0.0016	0.00042	0.00119	0.037	<0.0002	0.149	33.1	0.0066	<0.0000019	0.0088	0.0057	
RSEM-R6W-EOP	7/18/2020 13:15	YC7459	M	C050583	2.27	1.60	0.0553	0.00162	0.00089	0.0941	<0.0001	<0.001	0.285	0.000018	72.4	0.0012	0.00052	0.00117	0.028	<0.0002	0.165	39.2	0.0075	<0.0000019	0.0089	0.0061	
RSEM-R6W-EOP	7/19/2020 13:40	YC7537	M	C050603	1.74	1.89	0.0527	0.00148	0.00073	0.0886	<0.0001	<0.001	0.274	0.000015	69.9	0.0013	0.00051	0.00106	0.029	<0.0002	0.158	39.0	0.0068	<0.0000019	0.008	0.0055	
RSEM-R6W-EOP	7/20/2020 10:50	YC8543	M	C050811	1.65	1.92	0.0513	0.00141	0.00077	0.0876	<0.0001	<0.001	0.272	0.00002	73.0	<0.001	0.00053	0.001	0.026	<0.0002	0.172	40.5	0.0071	<0.0000019	0.0076	0.0051	
RSEM-R6W-EOP	7/20/2020 11:00	YC8544	D	C050811	1.01	1.81	0.0502	0.00141	0.00078	0.0865	<0.0001	<0.001	0.272	0.00002	73.9	<0.001	0.00052	0.0011	0.027	<0.0002	0.166	40.1	0.007	<0.0000019	0.0078	0.0052	
RSEM-R6W-EOP	7/21/2020 13:35	YD0794	M	C051251	1.93	1.95	0.0529	0.00131	0.00069	0.0839	<0.0001	<0.001	0.251	0.000017	73.0	<0.001	0.00052	0.00101	0.031	<0.0002	0.157	39.2	0.007	<0.0000019	0.0075	0.005	
RSEM-R6W-EOP	7/21/2020 13:45	YD0795	D	C051251	2.22	1.76	0.05	0.0013	0.00073	0.0844	<0.0001	<0.001	0.258	0.000022	72.1	<0.001	0.00053	0.00104	0.029	<0.0002	0.155	39.2	0.0071	<0.0000019	0.0075	0.005	
RSEM-R6W-EOP	7/22/2020 13:40	YD2618	M	C051641	1.92	1.53	0.0458	0.00119	0.00061	0.0831	<0.0001	<0.001	0.239	0.000015	71.2	<0.001	0.0006	0.00094	0.027	<0.0002	0.148	38.3	0.0084	<0.0000019	0.0069	0.0052	
RSEM-R6W-EOP	7/23/2020 12:05	YD4255	M	C051864	1.99	1.70	0.0425	0.00108	0.00055	0.0774	<0.0001	<0.001	0.234	0.000011	67.6	<0.001	0.00061	0.00111	0.028	<0.0002	0.146	36.7	0.0083	<0.0000019	0.0062	0.0052	
RSEM-R6W-EOP	7/24/2020 15:30	YD5910	M	C052038	2.12	1.57	0.0512	0.0011	0.00059	0.0796	<0.0001	<0.001	0.265	0.000016	72.6	<0.001	0.0006	0.00096	0.029	<0.0002	0.16	40.1	0.0084	<0.0000019	0.0064	0.0056	
RSEM-R6W-EOP	7/25/2020 11:15	YD7675	M	C052402	2.09	1.90	0.0577	0.00111	0.00056	0.0823	<0.0001	<0.001	0.276	0.000015	73.4	<0.001	0.00061	0.00098	0.033	<0.0002	0.171	41.0	0.0084	<0.0000019	0.0064	0.0055	
RSEM-R6W-EOP	7/26/2020 14:25	YD7714	M	C052420	1.69	1.72	0.0636	0.00103	0.00049	0.0816	<0.0001	<0.001	0.259	0.000015	72.1	<0.001	0.00061	0.00088	0.05	<0.0002	0.159	39.3	0.0094	<0.0000019	0.0062	0.0048	
RSEM-R6W-EOP	7/27/2020 10:20	YD7768	M	C052432	2.11	1.93	0.0507	0.00104	0.00052	0.0779	<0.0001	<0.001	0.271	0.000015	73.1	<0.001	0.00056	0.00083	0.045	<0.0002	0.155	39.7	0.0087	<0.0000019	0.0067	0.0045	
RSEM-R6W-EOP	7/28/2020 12:20	YE2030	M	C053295	1.81	1.40	0.0558	0.0012	0.00057	0.0844	<0.0001	<0.001	0.274	0.000028	76.3	<0.001	0.00054	0.00089	0.043	<0.0002	0.169	42.6	0.0094	<0.0000019	0.0061	0.0045	
RSEM-R6W-EOP	7/29/2020 12:20	YE4006	M	C053695	1.71	1.83	0.0473	0.00115	0.00061	0.0747	<0.0001	<0.001	0.246	0.000017	68.4	<0.001	0.00044	0.00081	0.037	<0.0002	0.15	38.0	0.0079	<0.0000019	0.0069	0.0036	
RSEM-R6W-EOP	7/30/2020 15:00	YE5557	M	C054021	2.24	1.80	0.0399	<0.0005	0.00031	0.0849	<0.0001	<0.001	0.059	<0.00001	63.9	<0.001	<0.0002	0.00076	0.05	<0.0002	0.0145	28.9	0.0112	<0.0000019	0.0018	0.0023	
RSEM-R6W-EOP	7/30/2020 16:20	YE5558	M	C054021	2.16	1.72	0.071	0.00116	0.0006	0.077	<0.0001	<0.001	0.25	0.000012	73.2	<0.001	0.00042	0.00089	0.071	<0.0002	0.138	40.2	0.0083	<0.0000019	0.0067	0.0034	
RSEM-R6W-EOP	7/31/2020 11:10	YE5651	M	C054023	2.12	1.85	0.07	0.00121	0.00062	0.0763	<0.0001	<0.001	0.247	0.000015	69.7	<0.001	0.00036	0.00093	0.056	<0.0002	0.137	39.0	0.0075	<0.0000019	0.0068	0.0031	
RSEM-R6W-EOP	8/1/2020 12:30	YE6666	M	C054219	2.03	2.11	0.0474	0.00123	0.00061	0.0731	<0.0001	<0.001	0.242	0.000012	68.9	<0.001	0.00033	0.00081	0.037	<0.0002	0.134	37.9	0.0056	<0.0000019	0.007	0.0028	
RSEM-R6W-EOP	8/2/2020 12:50	YE8517	M	C054579	2.24	2.06	0.0562	0.00125	0.00074	0.0743	<0.0001	<0.001	0.253	0.000011	62.4	<0.001	0.00031	0.00085	0.047	<0.0002	0.133	35.4	0.0055	<0.0000019	0.0079	0.0026	
RSEM-R6W-EOP	8/3/2020 13:10	YE8525	M	C054582	2.43	2.09	0.0554	0.00131	0.00077	0.0763	<0.0001	<0.001	0.261	<0.00001	61.5	0.001	0.00029	0.00101	0.049	<0.0002	0.133	35.5	0.0047	<0.0000019	0.0082	0.0025	
RSEM-R6W-EOP	8/4/2020 13:10	YF1645	M	C055153	2.61	2.66	0.0663	0.00129	0.00081	0.0702	<0.0001	<0.001	0.233	<0.00001	54.1	0.0013	0.00028	0.00082	0.068	<0.0002	0.126	32.1	0.0058	<0.0000019	0.0082	0.0022	
RSEM-R6W-EOP	8/5/2020 12:40	YF2978	M	C055442	2.10	1.76	0.0737	0.00138	0.00087	0.0702	<0.0001	<0.001	0.247	<0.00001	53.1	0.0014	0.00027	0.00088	0.069	<0.0002	0.126	32.0	0.0057	<0.0000019	0.0085	0.0021	
RSEM-R6W-EOP	8/6/2020 11:30	YF2969	M	C055440	2.78	2.53	0.0705	0.00137	0.00096	0.0677	<0.0001	<0.001	0.25	<0.00001	52.2	0.0015	0.00026	0.00118	0.061	<0.0002	0.125	32.7	0.005	<0.0000019	0.0088	0.0023	
RSEM-R6W-EOP	8/7/2020 12:15	YF4858	M	C055741	2.90	2.28	0.0687	0.00151	0.001	0.068	<0.0001	<0.001	0.227	<0.00001	49.4	0.0015	0.00027	0.00104	0.059	<0.0002	0.115	31.9	0.0062	<0.0000019	0.0092	0.0026	
RSEM-R6W-EOP	8/8/2020 12:50	YF8357	M	C056281	2.62	3.31	0.0834	0.00153	0.00094	0.0626	<0.0001	<0.001	0.256	<0.00001	48.0	0.0015	0.00026	0.00092	0.071	<0.0002	0.124	34.7	0.0054	<0.0000019	0.0087	0.0028	
RSEM-R6W-EOP	8/9/2020 14:20	YF8362	M	C056282	2.32	2.50	0.0983	0.00157	0.001	0.059	<0.0001	<0.001	0.26	<0.00001	45.7	0.0015	0.00028	0.00095	0.084	<0.0002	0.117	35.3	0.0058	<0.0000019	0.0089	0.0028	
RSEM-R6W-EOP	8/10/2020 13:00	YG0106	M	C056587	2.63	2.66	0.0969	0.00161	0.00111	0.061	<0.0001	<0.001	0.264	0.000072	47.0	0.0019	0.00035	0.00114	0.102	<0.0002	0.119	37.4	0.0067	<0.0000019	0.0093	0.003	
RSEM-R6W-EOP	8/11/2020 13:20	YG2367	M	C056973	2.39	2.24	0.0987	0.00162	0.00112	0.0614	<0.0001	<0.001	0.265	0.000014	46.8	0.0016	0.0003	0.00098	0.102	<0.0002	0.108	37.1	0.0064	<0.0000019	0.0096	0.0029	
RSEM-R6W-EOP	8/12/2020 17:40	YG4636	M	C057417	2.65	2.50	0.0676	0.00163	0.00108	0.0602	<0.0001	<0.001	0.276	<0.00001	47.9	0.0015	0.00029	0.00102	0.074	<0.0002	0.112	36.0	0.006	<0.0000019	0.0097	0.0027	
RSEM-R6W-EOP	8/13/2020 13:40	YG7262	M	C057823	1.73	2.02	0.0574	0.00164	0.00104	0.0618	<0.0001	<0.001	0.306	<0.00001	49.5	0.0015	0.00029	0.00098	0.055	<0.0002	0.12	39.3	0.0058	<0.0000019	0.0099	0.0025	
RSEM-R6W-EOP	8/14/2020 12:55	YG7190	M	C057817	1.69	2.20	0.0443	0.00152	0.00096	0.0575	<0.0001	<0.001	0.283	<0.00001	46.6	0.0013	0.00024	0.00091	0.034	<0.0002	0.11	36.3	0.0042	<0.0000019	0.0093	0.0022	
RSEM-R6W-EOP	8/15/2020 14:55	YH0061	M	C058356	2.19	2.11	0.0428	0.00148	0.00094	0.0551	<0.0001	<0.001	0.246	<0.00001	45.6	0.0011	0.00023	0.00089	0.036	<0.0002	0.0909	36.0	0.0041	<0.0000019	0.009	0.0022	
RSEM-R6W-EOP	8/16/2020 11:50	YH0173	M	C058389	2.61	2.31	0.0461	0.0016	0.00092	0.0591	<0.0001	<0.001	0.294	<0.00001	48.4	0.0011	0.00026	0.00102	0.034	<0.0002	0.119	41.2	0.0052	<0.0000019	0.0093	0.0024	
RSEM-R6W-EOP	8/17/2020 9:30	YG9870	M	C058326	2.40	1.60	0.0534	0.0014	0.00102	0.0546	<0.0001	<0.001	0.271	0.000141	43.5	0.0012	0.00035	0.00198	0.05	<0.0002	0.103	34.9	0.0058	<0.0000019	0.0087	0.002	
RSEM-R6W-EOP	8/18/2020 16:20	YH3311	M	C059056	2.39	2.26	0.0483	0.00131	0.00077	0.0532	<0.0001	<0.001	0.249	<0.00001	40.9	0.0011	0.00023	0.00105	0.047	<0.0002	0.104	35.0	0.0049	<0.0000019	0.0081	0.002	
RSEM-R6W-EOP	8/19/2020 14:50	YH5388	M	C059422	2.44	2.13	0.0634	0.00129	0.00077	0.0519	<0.0001	<0.001	0.258	0.000011	39.7	0.0013	0.0002	0.00103	0.048	<0.0002	0.1	34.6	0.0045	<0.0000019	0.0084	0.0019	
RSEM-R6W-EOP	8/20/2020 14:40	YH7342	M	C059760	2.15	2.54	0.0824	0.00126	0.00084	0.0583	<0.0001	<0.001	0.238	0.000011	39.8	0.0015	0.00023	0.00113	0.076	<0.0002	0.0956	33.0	0.0054	<0.0000019	0.009	0.0019	
RSEM-R6W-EOP	8/21/2020 12:00	YH7340	M	C059759	2.45	2.43	0.148	0.00125	0.00094	0.0672	<0.0001	<0.001	0.222	0.000013	39.1	0.0016	0.00025	0.00129	0.136	<0.0002	0.0901	29.4	0.007	<0.0000019	0.0086	0.0019	
RSEM-R6W-EOP	8/22/2020 11:20	YI0128	M	C060262	2.07	1.83	0.512	0.00119	0.00145	0.091	<0.0001	<0.001	0.196	0.000043	37.0	0.0026	0.00066	0.00225	1.17	0.00063	0.0767	23.3	0.0281	<0.000019	0.0082	0.0028	
RSEM-R6W-EOP	8/23/2020 14:40	YI0110	M	C060255	2.53	2.10	0.185	0.00138	0.00128	0.0863	<0.0001	<0.001	0.209	0.00002	38.2	0.0027	0.00036	0.00163	0.349	0.00022	0.0727	21.7	0.0151	<0.0000019	0.0097	0.002	
RSEM-R6W-EOP	8/24/2020 13:50	YI2199	M	C060702	2.53	2.14	0.11	0.00136	0.00111	0.0782	<0.0001	<0.001	0.208	0.000016	35.7	0.0025	0.00025	0.00133	0.118	<0.0002	0.0744	21.6	0.0114	<0.0000019	0.0094	0.0018	
RSEM-R6W-EOP	8/25/2020 12:30	YI3996	M	C061087	2.01	2.07	0.0691	0.00137	0.00115	0.0775	<0.0001	<0.001	0.222	0.00001	39.4	0.0023	0.00023	0.00126	0.077	<0.0002	0.0747	19.4	0.011	<0.0000019	0.0094	0.002	
RSEM-R6W-EOP	8/26/2020 14:00	YI6264	M	C061565	2.56	1.97	0.0569	0.00129	0.00102	0.0773	<0.0001	<0.001	0.222	<0.00001	42.1	0.0023	0.00021	0.00114	0.046	<0.0002	0.0816	21.5	0.0095	<0.0000019	0.0096	0.0022	
RSEM-R6W-EOP	8/27/2020 12:50	YI7774	M	C061827	2.51	2.03	0.0511	0.00124	0.00092	0.0745	<0.0001	<0.001	0.237	<0.00001	48.6	0.0021	0.00022	0.00115	0.04	<0.0002	0.0875	23.7	0.0089	<0.0000019	0.0095	0.0023	
RSEM-R6W-EOP	8/28/2020 13:55	YI9494	M	C062013	2.59	2.57	0.0396	0.00124	0.00088	0.0747	<0.0001	<0.001	0.233	<0.00001	50.0	0.0019	<0.0002	0.00106	0.023	<0.0002	0.0883	23.6	0.008	<0.0000019	0.0093	0.0023	
RSEM-R6W-EOP	8/29/2020 10:55	YJ1739	M	C062465	2.16	2.03	0.0415	0.00125	0.00087	0.0729	<0.0001	<0.001	0.212	0.000011	49.4	0.0018	<0.0002	0.00101	0.029	<0.0002	0.0768	24.3	0.0089	<0.0000019	0.0094	0.0023	
RSEM-R6W-EOP	8/30/2020 12:00	YJ1570	M	C062426	2.36	2.15	0.038	0.00123	0.00085	0.073	<0.0001	<0.001	0.207	<0.00001	51.7	0.0017	<0.0002	0.00094	0.022	<0.0002	0.0765	24.2	0.0087	<0.0000019	0.0095	0.0022	
RSEM-R6W-EOP	8/31/2020 17:20	YJ3640	M	C062857	2.46	2.14	0.0679	0.00122	0.00084	0.08	<0.0001	<0.001	0.257	0.000016	58.4	0.0018	0.00023	0.00098	0.076	<0.0002	0.105	26.8	0.0075	<0.0000019	0.0094	0.0024	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6W-EOP	9/1/2020 14:20	YJ6691	M	C063433	1.55	2.19	0.0396	0.00128	0.00081	0.0816	<0.0001	<0.001	0.251	<0.00001	56.9	0.002	0.0002	0.0009	0.016	<0.0002	0.111	25.9	0.0055	<0.0000019	0.0097	0.0027	
RSEM-R6W-EOP	9/2/2020 13:55	YJ7831	M	C063666	1.89	1.97	0.0384	0.00135	0.00084	0.0795	<0.0001	<0.001	0.245	<0.00001	57.2	0.0023	0.0002	0.0009	0.014	<0.0002	0.108	26.5	0.0049	<0.0000019	0.0104	0.0029	
RSEM-R6W-EOP	9/3/2020 14:30	YK0031	M	C064047	2.29	1.20	0.0402	0.00144	0.00083	0.0788	<0.0001	<0.001	0.244	<0.00001	60.1	0.0027	0.0002	0.00094	0.018	<0.0002	0.107	28.1	0.0045	<0.0000019	0.0111	0.003	
RSEM-R6W-EOP	9/4/2020 12:00	YK0086	M	C064051	2.32	1.99	0.0362	0.00142	0.00083	0.0766	<0.0001	<0.001	0.245	<0.00001	58.9	0.0026	<0.0002	0.00087	0.013	<0.0002	0.107	27.5	0.004	<0.0000019	0.0111	0.0029	
RSEM-R6W-EOP	9/5/2020 12:40	YK1346	M	C064288	2.25	2.14	0.0356	0.00145	0.00083	0.0764	<0.0001	<0.001	0.244	<0.00001	57.2	0.0027	<0.0002	0.00103	0.011	<0.0002	0.108	27.5	0.0038	<0.0000019	0.0112	0.0028	
RSEM-R6W-EOP	9/6/2020 11:10	YK2531	M	C064579	1.86	1.74	0.0367	0.00147	0.0008	0.0775	<0.0001	<0.001	0.231	<0.00001	58.0	0.0028	<0.0002	0.0009	0.012	<0.0002	0.107	27.0	0.0037	<0.0000019	0.0115	0.0027	
RSEM-R6W-EOP	9/7/2020 10:25	YK2585	M	C064592	2.28	1.99	0.0345	0.00146	0.00086	0.0779	<0.0001	<0.001	0.224	<0.00001	56.9	0.0028	<0.0002	0.0009	0.011	<0.0002	0.102	26.6	0.0041	<0.0000019	0.0114	0.0026	
RSEM-R6W-EOP	9/8/2020 11:00	YK6315	M	C065313	1.93	2.10	0.0426	0.00151	0.00085	0.0804	<0.0001	<0.001	0.244	<0.00001	56.2	0.003	<0.0002	0.00092	0.022	<0.0002	0.101	26.6	0.0039	<0.0000019	0.0116	0.0027	
RSEM-R6W-EOP	9/9/2020 14:15	YK6317	M	C065314	3.05	2.32	0.0361	0.00161	0.0009	0.0799	<0.0001	<0.001	0.239	<0.00001	53.2	0.0031	<0.0002	0.00087	0.021	<0.0002	0.0949	25.4	0.0036	<0.0000019	0.0115	0.0024	
RSEM-R6W-EOP	9/10/2020 11:50	YK8214	M	C065709	2.91	2.33	0.0398	0.0016	0.00102	0.0771	<0.0001	<0.001	0.232	<0.00001	52.6	0.003	<0.0002	0.00085	0.024	<0.0002	0.0942	26.4	0.0038	<0.0000019	0.0114	0.0022	
RSEM-R6W-EOP	9/10/2020 12:00	YK8215	D	C065709	2.42	2.34	0.0388	0.00162	0.00101	0.077	<0.0001	<0.001	0.232	<0.00001	53.9	0.003	<0.0002	0.00086	0.022	<0.0002	0.0936	26.6	0.0037	<0.0000019	0.0114	0.0022	
RSEM-R6W-EOP	9/11/2020 11:40	YK8183	M	C065706	1.97	1.77	0.0676	0.00167	0.00112	0.0779	<0.0001	<0.001	0.228	0.000011	50.7	0.0041	<0.0002	0.00094	0.076	<0.0002	0.0899	25.8	0.005	<0.0000019	0.0115	0.0023	
RSEM-R6W-EOP	9/12/2020 14:20	YL1186	M	C066169	1.91	2.36	0.0664	0.00167	0.00116	0.0745	<0.0001	<0.001	0.225	<0.00001	47.7	0.0026	<0.0002	0.00097	0.068	<0.0002	0.0867	25.4	0.0045	<0.0000019	0.0109	0.0022	
RSEM-R6W-EOP	9/13/2020 12:40	YL1415	M	C066239	2.17	1.86	0.129	0.00166	0.00124	0.0754	<0.0001	<0.001	0.225	0.000012	45.4	0.0025	0.00021	0.00115	0.126	<0.0002	0.0792	23.7	0.0057	<0.0000019	0.0107	0.002	
RSEM-R6W-EOP	9/14/2020 12:40	YL3785	M	C066659		1.86	0.129	0.00169	0.00127	0.0745	<0.0001	<0.001	0.237	0.000018	45.3	0.0023	0.00024	0.00126	0.157	<0.0002	0.0862	24.0	0.0077	<0.0000019	0.0108	0.0023	
RSEM-R6W-EOP	9/15/2020 15:00	YL6687	M	C067245	2.36	2.20	0.247	0.00171	0.00134	0.0741	<0.0001	<0.001	0.226	0.000029	45.5	0.0025	0.00051	0.00141	0.353	0.00021	0.0786	22.8	0.0166	<0.0000019	0.0107	0.0034	
RSEM-R6W-EOP	9/16/2020 15:30	YL8114	M	C067490	2.49	1.76	0.233	0.00161	0.00123	0.0697	<0.0001	<0.001	0.226	0.000025	44.9	0.0024	0.00043	0.00134	0.26	<0.0002	0.0799	23.2	0.0153	<0.0000019	0.0106	0.0033	
RSEM-R6W-EOP	9/17/2020 13:10	YL8049	M	C067474	1.81	1.80	0.183	0.00157	0.00113	0.0653	<0.0001	<0.001	0.235	0.000019	46.0	0.0022	0.00037	0.00111	0.216	<0.0002	0.0803	22.9	0.0132	0.000002	0.0104	0.0032	
RSEM-R6W-EOP	9/18/2020 9:50	YL9985	M	C067838	1.83	1.42	0.08	0.00166	0.00111	0.0632	<0.0001	<0.001	0.22	0.000015	46.5	0.002	0.0003	0.00098	0.094	<0.0002	0.0768	24.8	0.0098	<0.0000019	0.011	0.0029	
RSEM-R6W-EOP	9/19/2020 12:50	YM3344	M	C068349	1.89	2.12	0.0673	0.00153	0.00106	0.0578	<0.0001	<0.001	0.216	0.000017	44.8	0.002	0.00025	0.00094	0.085	<0.0002	0.077	25.1	0.0081	<0.0000019	0.011	0.0028	
RSEM-R6W-EOP	9/20/2020 11:40	YM3374	M	C068353	1.83	2.07	0.0529	0.00147	0.001	0.0575	<0.0001	<0.001	0.211	0.000018	46.4	0.0018	0.00022	0.00098	0.066	<0.0002	0.0773	24.1	0.0069	<0.0000019	0.0107	0.0027	
RSEM-R6W-EOP	9/21/2020 12:50	YM6393	M	C068837	1.68	1.83	0.051	0.00141	0.00099	0.0628	<0.0001	<0.001	0.206	0.000017	47.1	0.0018	<0.0002	0.00087	0.055	<0.0002	0.0753	22.6	0.0058	<0.0000019	0.0107	0.0026	
RSEM-R6W-EOP	9/22/2020 13:55	YM9231	M	C069318	2.00	2.39	0.0498	0.0013	0.00089	0.0628	<0.0001	<0.001	0.191	0.000017	46.5	0.0017	<0.0002	0.00094	0.054	<0.0002	0.0743	22.7	0.005	<0.0000019	0.0105	0.0025	
RSEM-R6W-EOP	9/23/2020 15:40	YN0387	M	C069533	1.85	1.89	0.0564	0.00124	0.00091	0.0613	<0.0001	<0.001	0.202	0.000016	45.5	0.0018	<0.0002	0.00103	0.056	<0.0002	0.0817	24.3	0.0048	<0.0000019	0.0104	0.0025	
RSEM-R6W-EOP	9/24/2020 14:00	YN2679	M	C069910	1.70	1.85	0.0529	0.00133	0.00092	0.0652	<0.0001	<0.001	0.214	0.000016	49.6	0.0018	<0.0002	0.00094	0.053	<0.0002	0.085	24.8	0.004	<0.0000019	0.0111	0.0025	
RSEM-R6W-EOP	9/25/2020 13:30	YN2674	M	C069908	1.60	1.79	0.0608	0.00124	0.00089	0.0631	<0.0001	<0.001	0.195	0.000016	47.7	0.0018	<0.0002	0.00091	0.058	<0.0002	0.0779	23.8	0.0045	<0.0000019	0.0105	0.0024	
RSEM-R6W-EOP	9/26/2020 13:10	YN7496	M	C070621	1.71	2.23	0.0572	0.0012	0.00085	0.0651	<0.0001	<0.001	0.19	0.000014	48.0	0.0019	<0.0002	0.00223	0.056	<0.0002	0.0745	23.1	0.0047	<0.0000019	0.0105	0.0024	
RSEM-R6W-EOP	9/27/2020 16:20	YN7530	M	C070629	1.96	0.96	0.06	0.00108	0.00081	0.0648	<0.0001	<0.001	0.173	0.000013	47.0	0.0019	<0.0002	0.00102	0.048	<0.0002	0.0707	22.3	0.0047	<0.0000019	0.0099	0.0021	
RSEM-R6W-EOP	9/28/2020 9:40	YN7450	M	C070613	1.81	2.15	0.0679	0.00104	0.00075	0.0671	<0.0001	<0.001	0.172	0.000014	47.6	0.0019	<0.0002	0.00092	0.062	<0.0002	0.0677	21.9	0.0053	<0.0000019	0.0094	0.002	
RSEM-R6W-EOP	9/29/2020 16:10	YO1378	M	C071354	1.77	1.78	0.0512	0.00098	0.00083	0.0719	<0.0001	<0.001	0.168	<0.00001	48.1	0.002	<0.0002	0.00091	0.065	<0.0002	0.0654	21.7	0.0052	<0.0000019	0.0092	0.002	
RSEM-R6W-EOP	9/30/2020 13:10	YO4161	M	C071825	1.94	1.75	0.0449	0.00103	0.00086	0.0715	<0.0001	<0.001	0.171	0.000011	50.1	0.0021	<0.0002	0.0009	0.041	<0.0002	0.0701	24.6	0.0042	<0.0000019	0.0096	0.002	
RSEM-R6W-EOP	10/1/2020 12:15	YO6612	M	C072228	2.17	1.75	0.0356	0.00099	0.00083	0.0687	<0.0001	<0.001	0.165	<0.00001	48.5	0.0022	<0.0002	0.00086	0.032	<0.0002	0.0705	23.7	0.004	<0.0000019	0.0093	0.0019	
RSEM-R6W-EOP	10/2/2020 11:30	YO6595	M	C072223	2.12	2.00	0.0346	0.00099	0.00084	0.0673	<0.0001	<0.001	0.164	<0.00001	48.6	0.0024	<0.0002	0.00083	0.032	<0.0002	0.0695	23.6	0.0042	<0.0000019	0.0096	0.0019	
RSEM-R6W-EOP	10/3/2020 16:10	YP0035	M	C072771	1.68	1.78	0.0438	0.00098	0.00086	0.0643	<0.0001	<0.001	0.165	<0.00001	44.9	0.0028	<0.0002	0.00088	0.047	<0.0002	0.0704	21.9	0.0037	<0.0000019	0.0097	0.0022	
RSEM-R6W-EOP	10/4/2020 16:20	YP0009	M	C072767	1.61	1.51	0.054	0.00103	0.00092	0.0663	<0.0001	<0.001	0.165	<0.00001	44.7	0.0026	<0.0002	0.0008	0.066	<0.0002	0.07	22.5	0.0041	0.000002	0.01	0.002	
RSEM-R6W-EOP	10/5/2020 17:10	YP2999	M	C073260	1.81	0.95	0.0495	0.00114	0.00102	0.0698	<0.0001	<0.001	0.171	0.000012	47.4	0.003	<0.0002	0.00094	0.053	<0.0002	0.0748	24.6	0.004	<0.0000019	0.0108	0.002	
RSEM-R6W-EOP	10/6/2020 15:10	YP5779	M	C073719	1.81	1.72	0.0553	0.00111	0.00107	0.0659	<0.0001	<0.001	0.175	<0.00001	46.9	0.0031	<0.0002	0.00083	0.069	<0.0002	0.0711	23.4	0.0039	<0.0000019	0.0107	0.002	
RSEM-R6W-EOP	10/7/2020 14:20	YP7388	M	C074014	2.31	1.93	0.0514	0.00107	0.00102	0.0615	<0.0001	<0.001	0.156	<0.00001	44.0	0.003	<0.0002	0.00079	0.063	<0.0002	0.0633	22.3	0.0038	0.0000019	0.0102	0.0019	
RSEM-R6W-EOP	10/8/2020 11:30	YP9903	M	C074375	2.02	1.92	0.0513	0.0011	0.00112	0.0665	<0.0001	<0.001	0.169	<0.00001	45.4	0.0032	<0.0002	0.00088	0.056	<0.0002	0.0731	24.3	0.0038	0.0000022	0.011	0.0019	
RSEM-R6W-EOP	10/9/2020 11:20	YQ0241	M	C074391	1.54	1.33	0.0466	0.00113	0.0011	0.0641	<0.0001	<0.001	0.155	0.000012	47.3	0.0034	<0.0002	0.00086	0.059	<0.0002	0.0614	23.7	0.0038	<0.0000019	0.0113	0.0019	
RSEM-R6W-EOP	10/10/2020 12:10	YQ1628	M	C074557	1.82	1.15	0.216	0.00113	0.00118	0.0843	<0.0001	<0.001	0.166	0.000016	45.2	0.0035	0.00025	0.00103	0.285	<0.0002	0.0691	22.8	0.0108	<0.0000019	0.0112	0.0021	
RSEM-R6W-EOP	10/11/2020 11:40	YQ4408	M	C075136	1.67	1.42	0.14	0.00113	0.00116	0.094	<0.0001	<0.001	0.154	<0.00001	47.8	0.0034	0.00031	0.00106	0.235	<0.0002	0.0618	21.5	0.0118	<0.0000019	0.0116	0.0024	
RSEM-R6W-EOP	10/12/2020 13:50	YQ4367	M	C075125	2.09	1.61	0.266	0.00118	0.00117	0.0938	<0.0001	<0.001	0.161	<0.00001	52.1	0.0038	0.00065	0.00125	0.363	<0.0002	0.0647	22.3	0.0238	0.0000019	0.0124	0.0038	
RSEM-R6W-EOP	10/13/2020 14:00	YQ8016	M	C075829	1.64	2.70	0.106	0.0012	0.00104	0.0803	<0.0001	<0.001	0.153	0.000033	49.8	0.0042	0.00065	0.00136	0.193	<0.0002	0.063	21.7	0.0221	<0.0000019	0.0125	0.0043	
RSEM-R6W-EOP	10/14/2020 15:00	YQ9243	M	C076027	1.83	1.84	0.12	0.00125	0.00107	0.0759	<0.0001	<0.001	0.16	0.000026	49.7	0.0041	0.00062	0.0014	0.206	<0.0002	0.0633	22.2	0.0204	<0.0000019	0.0135	0.0046	
RSEM-R6W-EOP	10/14/2020 15:10	YQ9244	D	C076027	1.8	1.75	0.122	0.00124	0.00112	0.0771	<0.0001	<0.001	0.17	0.00003	50.8	0.0042	0.00061	0.00142	0.191	<0.0002	0.0647	23.0	0.0209	<0.0000019	0.0136	0.0046	
RSEM-R6W-EOP	10/15/2020 11:55	YR1303	M	C076291	1.64	2.12	0.073	0.00127	0.00106	0.0739	<0.0001	<0.001	0.169	0.000026	49.4	0.0042	0.00055	0.00131	0.1	<0.0002	0.0647	24.4	0.0178	<0.0000019	0.0138	0.0046	
RSEM-R6W-EOP	10/16/2020 12:10	YR1522	M	C076320	1.77	1.58	0.0795	0.00139	0.0011	0.0726	<0.0001	<0.001	0.173	0.000029	50.0	0.0045	0.00053	0.0013	0.074	<0.0002	0.0719	26.1	0.0156	<0.0000019	0.0151	0.005	
RSEM-R6W-EOP	10/17/2020 10:30	YR5392	M	C076925	1.10	0.93	0.0632	0.00136	0.00114	0.0671	<0.0001	<0.001	0.174	<0.00001	48.7	0.0045	0.00044	0.00118	0.083	<0.0002	0.0689	24.3	0.013	<0.0000019	0.0155	0.0049	
RSEM-R6W-EOP	10/18/2020 12:55	YR5380	M	C076923	1.97	2.19	0.0645	0.00147	0.00124	0.0654	<0.0001	<0.001	0.169	<0.00001	49.5	0.0047	0.00042	0.00116	0.084	<0.0002	0.0682	25.4	0.0113	<0.0000019	0.0169	0.0049	
RSEM-R6W-EOP	10/18/2020 13:05	YR5381	D	C076923	1.88	2.39	0.0627	0.00145	0.0012	0.0647	<0.0001	<0.001	0.173	<0.00001	50.0	0.0047	0.00041	0.00112	0.068	<0.0002	0.0712	25.7	0.0112	<0.0000019	0.0169	0.0049	
RSEM-R6W-EOP	10/19/2020 10:20	YR5409	M	C076929	2.06	2.09	0.0656	0.00156	0.00131	0.0636	<0.0001	<0.001	0.186	<0.00001	49.3	0.0049	0.00039	0.00116	0.082	<0.0002	0.0714	26.5	0.01	<0.0000019	0.0175	0.005	
RSEM-R6W-EOP	10/20/2020 14:50	YR8829	M	C077551	1.37	2.03	0.0571	0.00153	0.00134	0.0616	<0.0001	<0.001	0.216	<0.00001	48.0	0.0049	0.00033	0.00111	0.056	<0.0002	0.0895	26.9	0.0076	<0.0000019	0.0188	0.0048	
RSEM-R6W-EOP	10/21/2020 16:10	YS1501	M	C077998	2.22	3.14	0.0485	0.00154	0.0013	0.0594	<0.0001	<0.001	0.206	<0.00001	48.1	0.0047	0.0003	0.00099	0.037	<0.0002	0.0939	27.0	0.0068	<0.0000019	0.0188	0.0046	
RSEM-R6W-EOP	10/22/2020 12:40	YS3855	M	C078323	2.29	2.27	0.0443	0.00165	0.00134	0.0617	<0.0001	<0.001	0.217	<0.00001	49.6	0.0048	0.00029	0.00101	0.031	<0.0002	0.0952	27.7	0.0067	<0.0000019	0.0198	0.0046	
RSEM-R6W-EOP	10/23/2020 10:30	YS3574	M	C078301	2.51	2.48	0.0402	0.00161	0.00131	0.0597	<0.0001	<0.001	0.209	<0.00001	47.6	0.0048	0.00027	0.00107	0.028	<0.0002	0.0907	28.1	0.0059	<0.0000019	0.0193	0.0046	
RSEM-R6W-EOP	10/24/2020 15:10	YS7916	M	C078871	2.45	2.33	0.0425	0.00169	0.00138	0.0582	<0.0001	<0.001	0.193	0.000013	49.0	0.0049	0.00024	0.00101	0.019	<0.0002	0.078	30.3	0.0051	<0.0000019	0.02	0.0044	
RSEM-R6W-EOP	10/25/2020 13:50	YS7914	M	C078870	2.50	2.48	0.0541	0.00161	0.00142	0.0541	<0.0001	<0.001	0.184	0.000013	49.6	0.0049	0.00022	0.00106	0.037	<0.0002	0.0739	32.6	0.0056	<0.0000019	0.0181	0.0043	
RSEM-R6W-EOP	10/26/2020 14:45	YT0277	M	C079297	2.46	2.04	0.0609	0.00166	0.00139	0.0569	<0.0001	<0.001	0.181	0.00002	50.2	0.0046	0.00023	0.00111	0.058	<0.0002	0.0748	35.5	0.0074	<0.0000019	0.0181	0.0043	
RSEM-R6W-EOP	10/27/2020 12:40	YT3321	M	C079639	2.18	1.87	0.076	0.00149	0.00124	0.0549	<0.0001	<0.001	0.176	<0.00001	50.8	0.0046	0.00025	0.00123	0.112	<0.0002	0.0723	34.7	0.0103	<0.0000019	0.0163	0.0042	
RSEM-R6W-EOP	10/28/2020 14:20	YT5233	M	C079984	2.16	1.83	0.0929	0.00137	0.00122	0.0592	<0.0001	<0.001	0.154	0.00002	52.4	0.004	0.00025	0.00127	0.127	<0.0002	0.0679	33.5	0.0125	<0.0000019	0.0142	0.0037	
RSEM-R6W-EOP	10/29/2020 14:30	YT7961	M	C080439	2.28	2.21	0.0694	0.00127	0.00109	0.0523	<0.0001	<0.001	0.143	0.000016	54.7	0.0037	0.00022	0.00159	0.09	<0.0002	0.0631	32.1	0.0116	<0.0000019	0.0126	0.0034	
RSEM-R6W-EOP	10/30/2020 12:10	YT7955	M	C080436	2.20	2.45	0.0764	0.00123	0.00108	0.0471	<0.0001	<0.001	0.137	0.000015	47.3	0.0035	0.0002	0.00123	0.07	<0.0002	0.06	32.8	0.0105	<0.0000019	0.0117	0.0034	
RSEM-R6W-EOP	10/31/2020 14:40	YU1485	M	C081008	2.12	2.06	0.0781	0.00129	0.00103	0.0473	<0.0001	<0.001	0.146	0.00002	48.5	0.0036	<0.0002	0.00131	0.059	<0.0002	0.0666	33.6	0.0093	<0.0000019	0.0116	0.0033	
RSEM-R6W-EOP	11/1/2020 13:00	YU1490	M	C081010	1.93	1.62	0.063	0.00131	0.00103	0.0456	<0.0001	<0.001	0.148	0.000015	45.7	0.0037	<0.0002	0.00134	0.059	<0.0002	0.068	34.0	0.0088	<0.0000019	0.0114	0.0032	
RSEM-R6W-EOP	11/15/2020 13:00	YW2812	M	C084417	2.47	1.70	0.0806	0.00169	0.00144	0.0248	<0.0001	<0.001	0.154	<0.00001	34.8	0.0047	0.00033	0.00123	0.048	<0.0002	0.0864	31.6	0.0085	<0.0000019	0.0133	0.0083	
RSEM-R6W-EOP	11/16/2020 10:30	YW2814	M	C084418	1.49	1.57	0.0712	0.00171	0.00144	0.0271	<0.0001	<0.001	0.159	0.000013	35.1	0.0046	0.00032	0.00117	0.045	<0.0002	0.0859	32.5	0.0082	<0.0000019	0.0138	0.0081	
RSEM-R6W-EOP	11/17/2020 13:00	YW6848	M	C085190	2.38	1.92	0.0624	0.00173	0.00147	0.0265	<0.0001	<0.001	0.151	0.000011	35.2	0.0045	0.0003	0.00112	0.037	<0.0002	0.0897	30.1	0.0077	0.0000019	0.0145	0.0077	
RSEM-R6W-EOP	11/18/2020 16:10	YW9289	M	C085621	1.73	1.86	0.0665	0.00175	0.00152	0.0268	<0.0001	<0.001	0.171	<0.00001	35.4	0.0045	0.00031	0.00113	0.033	<0.0002	0.0894	32.6	0.0073	<0.0000019	0.0152	0.008	

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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
RSEM-R6W-EOP	11/19/2020 13:50	YX1120	M	C085951	2.16	2.07	0.0575	0.00178	0.00145	0.0274	<0.0001	<0.001	0.153	<0.00001	35.2	0.0043	0.00033	0.00108	0.025	<0.0002	0.0641	32.1	0.0073	<0.0000019	0.015	0.008	
RSEM-R6W-EOP	11/20/2020 11:40	YX1117	M	C085949	2.41	1.92	0.0621	0.00182	0.00154	0.0274	<0.0001	<0.001	0.162	0.000012	34.4	0.0043	0.0003	0.00106	0.027	<0.0002	0.0693	32.3	0.0062	<0.0000019	0.016	0.0077	
RSEM-R6W-EOP	11/21/2020 13:40	YX3970	M	C086434	2.04	1.83	0.0759	0.00183	0.0016	0.0306	<0.0001	<0.001	0.18	<0.00001	36.0	0.004	0.00031	0.00104	0.045	<0.0002	0.0874	35.0	0.0066	<0.0000019	0.0165	0.0072	
RSEM-R6W-EOP	11/22/2020 14:05	YX3966	M	C086433	2.11	2.06	0.075	0.00177	0.00163	0.0307	<0.0001	<0.001	0.179	<0.00001	37.0	0.0047	0.0003	0.00117	0.059	<0.0002	0.0849	35.5	0.0068	<0.0000019	0.0168	0.0073	
RSEM-R6W-EOP	11/23/2020 13:40	YX5757	M	C086734	1.24	2.03	0.0883	0.00179	0.00163	0.0296	<0.0001	<0.001	0.178	0.000024	35.6	0.0043	0.0003	0.00146	0.056	<0.0002	0.0853	34.6	0.0064	<0.0000019	0.0172	0.012	
RSEM-R6W-EOP	11/24/2020 14:05	YX7834	M	C087146	2.50	1.89	0.0832	0.00184	0.00171	0.0308	<0.0001	<0.001	0.159	<0.00001	34.3	0.0043	0.0003	0.0011	0.045	<0.0002	0.0957	33.9	0.0063	<0.0000019	0.018	0.0073	
RSEM-R6W-EOP	11/25/2020 14:10	YY0222	M	C087472	2.47	2.39	0.0776	0.00174	0.00168	0.0298	<0.0001	<0.001	0.172	<0.00001	33.8	0.0042	0.0003	0.00109	0.048	<0.0002	0.0829	33.8	0.0059	<0.0000019	0.0165	0.007	
RSEM-R6W-EOP	11/26/2020 12:10	YY2050	M	C087819	2.56	2.12	0.0778	0.00161	0.00151	0.0286	<0.0001	<0.001	0.171	<0.00001	32.8	0.0041	0.00028	0.00117	0.04	<0.0002	0.0797	31.7	0.0058	<0.0000019	0.0164	0.007	
RSEM-R6W-EOP	11/27/2020 11:30	YY2096	M	C087822	2.52	2.12	0.0828	0.00159	0.00151	0.0286	<0.0001	<0.001	0.171	<0.00001	32.7	0.004	0.00027	0.00111	0.042	<0.0002	0.082	31.3	0.0056	<0.0000019	0.016	0.0066	
RSEM-R6W-EOP	11/28/2020 13:10	YY5269	M	C088400	2.69	2.26	0.0979	0.00159	0.00151	0.0302	<0.0001	<0.001	0.164	<0.00001	34.5	0.0037	0.00025	0.00108	0.05	<0.0002	0.079	32.6	0.0055	<0.0000019	0.0157	0.0063	
RSEM-R6W-EOP	11/29/2020 12:45	YY5335	M	C088408	1.76	2.40	0.0898	0.00154	0.00146	0.0261	<0.0001	<0.001	0.167	<0.00001	32.6	0.0036	0.00023	0.00102	0.055	<0.0002	0.0804	31.9	0.0049	<0.0000019	0.015	0.0062	
RSEM-R6W-EOP	11/30/2020 14:20	YY7388	M	C088703	1.95	1.83	0.0792	0.00153	0.0014	0.0249	<0.0001	<0.001	0.161	<0.00001	30.0	0.0036	0.00024	0.001	0.042	<0.0002	0.0866	31.0	0.0047	<0.0000019	0.0158	0.0063	
RSEM-R6W-EOP	12/1/2020 13:55	YY9248	M	C089096	2.38	2.05	0.0819	0.00154	0.00145	0.0245	<0.0001	<0.001	0.161	<0.00001	30.6	0.0036	0.00024	0.00098	0.04	<0.0002	0.087	31.2	0.0046	<0.0000019	0.0155	0.0062	
RSEM-R6W-EOP	12/2/2020 13:20	YZ1567	M	C089572	2.39	2.43	0.0865	0.00154	0.00147	0.0239	<0.0001	<0.001	0.17	<0.00001	31.9	0.0037	0.00025	0.00103	0.042	<0.0002	0.0872	32.4	0.0045	<0.0000019	0.0158	0.0066	
RSEM-R6W-EOP	12/3/2020 12:50	YZ2307	M	C089704	2.46	2.42	0.086	0.00158	0.0015	0.0233	<0.0001	<0.001	0.184	<0.00001	32.9	0.004	0.00027	0.00108	0.045	<0.0002	0.0901	34.8	0.0048	<0.0000019	0.017	0.007	
RSEM-R6W-EOP	12/4/2020 13:40	YZ4238	M	C089912	2.24	1.74	0.0791	0.00156	0.00139	0.0219	<0.0001	<0.001	0.17	<0.00001	32.3	0.0037	0.00024	0.001	0.037	<0.0002	0.0816	34.6	0.0048	<0.0000019	0.0151	0.0065	
RSEM-R6W-EOP	12/5/2020 13:30	YZ8274	M	C090368	2.41	1.85	0.0945	0.00149	0.00142	0.0225	<0.0001	<0.001	0.193	<0.00001	36.1	0.0038	0.00026	0.00097	0.04	<0.0002	0.0963	36.2	0.0045	<0.0000019	0.0159	0.0062	
RSEM-R6W-EOP	12/6/2020 13:10	YZ8306	M	C090376	2.39	2.10	0.101	0.00154	0.00144	0.0236	<0.0001	<0.001	0.185	<0.00001	36.2	0.0042	0.00025	0.00104	0.044	<0.0002	0.0919	34.9	0.0038	<0.0000019	0.0156	0.0056	
RSEM-R6W-EOP	12/7/2020 10:15	YZ8153	M	C090358	2.74	2.55	0.102	0.00156	0.00144	0.0243	<0.0001	<0.001	0.187	<0.00001	36.2	0.0045	0.00025	0.00106	0.046	<0.0002	0.0929	34.5	0.0036	0.0000032	0.0152	0.0056	
RSEM-R6W-EOP	12/8/2020 15:20	ZA2150	M	C091061	2.75	2.63	0.0888	0.00162	0.00152	0.0253	<0.0001	<0.001	0.167	<0.00001	32.7	0.0047	0.00029	0.00113	0.064	<0.0002	0.0743	33.1	0.0039	<0.0000019	0.0146	0.0061	
RSEM-R6W-EOP	12/9/2020 15:40	ZA6285	M	C091815	3.23	3.27	0.09	0.00176	0.00157	0.0258	<0.0001	<0.001	0.178	<0.00001	34.1	0.0047	0.0003	0.00116	0.049	<0.0002	0.0803	35.0	0.0038	<0.0000019	0.0148	0.0062	
RSEM-R6W-EOP	12/10/2020 14:40	ZA6278	M	C091812	3.21	3.13	0.0884	0.00177	0.00154	0.0266	<0.0001	<0.001	0.182	<0.00001	34.5	0.0049	0.00034	0.0012	0.05	<0.0002	0.0815	37.0	0.0039	<0.0000019	0.015	0.0068	
RSEM-R6W-EOP	12/11/2020 23:50	ZA6281	M	C091813	3.05	3.41	0.0849	0.00177	0.00155	0.0254	<0.0001	<0.001	0.19	<0.00001	34.2	0.0047	0.00037	0.00122	0.042	<0.0002	0.0818	37.0	0.0041	<0.0000019	0.0148	0.0072	
RSEM-R6W-EOP	12/13/2020 15:20	ZA8557	M	C092267	2.72	2.77	0.0801	0.0017	0.00145	0.0275	<0.0001	<0.001	0.174	0.000011	38.5	0.0042	0.00064	0.0015	0.037	<0.0002	0.0845	36.0	0.0094	<0.0000019	0.0162	0.0096	
RSEM-R6W-EOP	12/13/2020 17:10	ZA8524	M	C092261	2.81	2.56	0.0733	0.00168	0.00145	0.0256	<0.0001	<0.001	0.183	<0.00001	36.4	0.0045	0.0004	0.00121	0.035	<0.0002	0.0862	36.0	0.0069	<0.0000019	0.0159	0.0078	
RSEM-R6W-EOP	12/14/2020 13:10	ZA8429	M	C092250	3.54	3.06	0.0927	0.00179	0.0014	0.0287	<0.0001	<0.001	0.185	<0.00001	39.4	0.0047	0.00108	0.00138	0.041	<0.0002	0.093	36.9	0.0095	<0.0000019	0.0157	0.0144	
RSEM-R6W-EOP	12/15/2020 15:30	ZB1649	M	C092932	4.28	3.68	0.101	0.00219	0.00149	0.0338	<0.0001	<0.001	0.179	0.000015	43.6	0.0058	0.0013	0.00151	0.046	<0.0002	0.111	40.4	0.0087	0.0000026	0.0173	0.0193	
RSEM-R6W-EOP	12/16/2020 14:20	ZB3422	M	C093364	3.62	4.74	0.0899	0.00222	0.00158	0.034	<0.0001	<0.001	0.168	0.000015	42.6	0.0059	0.0012	0.00136	0.043	<0.0002	0.109	37.5	0.0078	0.0000027	0.0167	0.0182	
RSEM-R6W-EOP	12/17/2020 14:50	ZB5913	M	C093625	3.70	3.86	0.0933	0.00229	0.00159	0.0318	<0.0001	<0.001	0.193	0.000012	39.7	0.0059	0.00104	0.00132	0.04	<0.0002	0.0927	37.7	0.0068	<0.0000019	0.0164	0.017	
RSEM-R6W-EOP	12/18/2020 13:35	ZB5853	M	C093610	3.46	4.39	0.116	0.00258	0.00169	0.0321	<0.0001	<0.001	0.184	0.000013	40.9	0.0064	0.00101	0.00141	0.053	<0.0002	0.0971	40.0	0.0066	<0.0000019	0.0171	0.017	
RSEM-R6W-EOP	12/19/2020 13:00	ZB8419	M	C094046	4.17	4.29	0.1	0.0027	0.00167	0.0297	<0.0001	<0.001	0.16	0.000011	42.5	0.0065	0.00085	0.00134	0.037	<0.0002	0.0889	39.2	0.0051	<0.0000019	0.0168	0.0146	
RSEM-R6W-EOP	12/20/2020 13:05	ZB8515	M	C094070	4.20	4.23	0.108	0.00277	0.00161	0.0278	<0.0001	<0.001	0.154	<0.00001	40.0	0.0059	0.00065	0.00124	0.04	<0.0002	0.0861	36.3	0.0039	<0.0000019	0.0157	0.0119	
RSEM-R6W-EOP	12/21/2020 10:50	ZB8329	M	C094023	4.21	3.97	0.11	0.00283	0.00164	0.0276	<0.0001	<0.001	0.145	<0.00001	36.7	0.0059	0.00054	0.00126	0.046	<0.0002	0.0762	34.8	0.0035	<0.0000019	0.0161	0.0102	
RSEM-R6W-EOP	12/22/2020 11:40	ZC0504	M	C094296	3.81	3.92	0.0906	0.00254	0.0016	0.0248	<0.0001	<0.001	0.155	<0.00001	32.8	0.0053	0.00046	0.00124	0.054	<0.0002	0.0811	32.7	0.0033	<0.0000019	0.0147	0.0085	
RSEM-R6W-EOP	12/23/2020 13:10	ZC1951	M	C094642	4.04	4.39	0.119	0.00257	0.00162	0.0245	<0.0001	<0.001	0.153	<0.00001	32.7	0.005	0.00041	0.00119	0.05	<0.0002	0.08	32.3	0.0032	<0.0000019	0.0138	0.0076	
RSEM-R6W-EOP	12/24/2020 9:50	ZC3452	M	C094856	4.04	3.84	0.122	0.00247	0.00149	0.0236	<0.0001	<0.001	0.147	<0.00001	30.7	0.0047	0.00037	0.00113	0.049	<0.0002	0.0777	30.7	0.0029	<0.0000019	0.0132	0.0071	
RSEM-R6W-EOP	12/25/2020 15:10	ZC3694	M	C094909	4.18	4.31	0.104	0.00237	0.00139	0.0217	<0.0001	<0.001	0.143	<0.00001	28.9	0.0041	0.00032	0.00107	0.046	<0.0002	0.0724	29.9	0.0028	<0.0000019	0.0125	0.006	
RSEM-R6W-EOP	12/26/2020 16:10	ZC3700	M	C094911	3.92	3.82	0.107	0.00215	0.00139	0.0199	<0.0001	<0.001	0.142	<0.00001	27.5	0.0036	0.0003	0.00105	0.05	<0.0002	0.068	28.5	0.0029	<0.0000019	0.0116	0.0054	
RSEM-R6W-EOP	12/27/2020 16:30	ZC4644	M	C095191	3.64	3.56	0.0753	0.00203	0.00125	0.019	<0.0001	<0.001	0.128	<0.00001	28.0	0.0036	0.00032	0.00098	0.052	<0.0002	0.0683	28.6	0.0033	<0.0000019	0.0116	0.006	
RSEM-R6W-EOP	12/28/2020 9:40	ZC4619	M	C095179	3.71	3.45	0.0713	0.00196	0.00132	0.019	<0.0001	<0.001	0.125	<0.00001	28.7	0.0035	0.00037	0.00101	0.052	<0.0002	0.0699	30.0	0.0038	<0.0000019	0.012	0.0068	
RSEM-R6W-EOP	12/29/2020 13:45	ZC5603	M	C095537	3.73	3.41	0.0713	0.00183	0.00119	0.0173	<0.0001	<0.001	0.138	<0.00001	28.2	0.0029	0.00038	0.00091	0.049	<0.0002	0.0684	30.2	0.004	<0.0000019	0.0115	0.0064	
RSEM-R6W-EOP	12/30/2020 14:45	ZC6412	M	C100028	3.90	3.67	0.0707	0.0018	0.00112	0.0166	<0.0001	<0.001	0.124	<0.00001	28.1	0.0028	0.00037	0.00091	0.053	<0.0002	0.0697	30.3	0.0044	<0.0000019	0.0108	0.0063	
RSEM-R6W-EOP	12/31/2020 14:35	ZC6409	M	C100027	3.91	3.75	0.0647	0.00167	0.00107	0.0159	<0.0001	<0.001	0.13	<0.00001	28.9	0.0029	0.00041	0.00089	0.053	<0.0002	0.0692	31.4	0.0048	<0.0000019	0.011	0.0069	
RSEM-R6W-SP	4/22/2020 15:05	XR6358	M	C027799	1.41	1.35	0.535	0.0009	0.00123	0.0816	<0.0001	<0.001	0.126	0.000015	25.0	0.0028	0.00063	0.0036	0.891	0.00125	0.0166	7.49	0.0273	0.0000052	0.0131	0.0021	
RSEM-R6W-SP	4/26/2020 13:05	XR8993	M	C028429	1.64	1.53	0.399	0.00163	0.00173	0.0916	<0.0001	<0.001	0.151	0.00002	29.5	0.0022	0.00055	0.00276	0.361	0.00035	0.0247	8.13	0.0217	0.0000033	0.017	0.002	
West-Buffer-Creek	4/28/2020 17:35	XS1883	M	C029097	2.27	1.84	1.95	<0.0005	0.00021	0.0253	0.00051	<0.001	0.161	0.000356	164	<0.001	0.037	0.00196	7.09	<0.0002	0.029	55.9	2.15	<0.0000019	<0.001	0.101	

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: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-WP	8/22/2020 16:15	YI0135	M	C060262																									
AC_E_HAIRPIN_DITCH	5/18/2020 10:45	XU2634	M	C033728	3.43	0.00154	4.54	<0.00002	53.0	0.403	68.7	0.00002	<0.005	<0.005	0.00199	<0.005	0.0185	0.00019	0.0473	<0.0005	0.00026	0.053	<0.0001	<0.001	0.136	0.000074	114	<0.001	0.00208
AC-E-GW-Sump	5/18/2020 15:30	XU2641	M	C033728	2.45	0.0158	2.92	<0.00002	560	0.272	273	0.000051	<0.005	0.0065	0.00696	<0.005	0.023	0.00026	0.0341	0.0034	0.00128	0.032	<0.0001	<0.001	0.394	0.00006	24.2	<0.001	0.00385
AC-E-GW-Sump	6/8/2020 11:20	XX1070	M	C039370	1.85	0.00814	3.81	<0.00004	397	0.12	175	0.000025	<0.01	0.014	0.00351	<0.01	<0.01	0.00066	0.0137	0.002	0.00124	0.02	<0.0002	<0.002	0.335	<0.00002	8.00	<0.002	0.00073
AC-E-Sump	5/18/2020 11:05	XU2635	M	C033728	3.96	0.00323	4.63	<0.00002	289	0.846	363	0.0001	<0.005	<0.005	0.00416	<0.005	0.578	0.00017	0.118	<0.0005	<0.0001	0.027	<0.0001	<0.001	0.29	0.00217	162	<0.001	0.0817
AC-E-Sump	11/2/2020	YU2811	M	C081296	5.41	0.00329	8.54	0.000071	30.2	0.495	91.6	0.000105	<0.005	0.0609	0.00421	0.0091	0.313	0.00092	0.0452	<0.0005	0.00015	0.057	<0.0001	<0.001	0.062	0.000943	127	<0.001	0.0163
AC-W-Sump	5/19/2020 16:35	XU3589	M	C033944	5.01	0.00371	3.07	<0.00002	100	0.795	124	0.000023	<0.005	<0.005	0.00349	<0.005	0.0381	<0.0001	0.111	<0.0005	0.00017	0.022	<0.0001	<0.001	0.211	0.000012	93.4	<0.001	0.00319
AC-W-Sump	11/4/2020 12:45	YU7150	M	C082156	4.58	0.00597	4.92	<0.00002	57.2	0.572	92.4	0.000017	<0.005	<0.005	0.00418	<0.005	0.0363	<0.0001	0.0662	<0.0005	0.00023	0.024	<0.0001	<0.001	0.075	<0.00001	114	<0.001	0.00276
AC-W-Sump	11/13/2020 10:50	YV9731	M	C084016	4.59	0.00561	4.79	<0.00002	52.0	0.557	78.8	0.000019	<0.005	<0.005	0.00398	<0.005	0.0192	<0.0001	0.0315	<0.001	0.00021	0.024	<0.0002	<0.002	<0.1	<0.00002	115	<0.002	0.00167
Area_21_Sump	7/16/2020 16:50	YC4667	M	C049952	2.29	0.00071	5.32	<0.00002	117	0.218	18.7	0.00002	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	0.0061	<0.0005	0.00024	0.233	<0.0001	<0.001	0.087	0.000016	72.9	<0.001	<0.0002
Area_30_SP	8/22/2020 22:45	YI0134	M	C060262																									
Area_A_N_Ditch	1/8/2020 11:15	XF3038	M	C001783	1.27	0.00028	5.12	<0.00002	4.59	0.176	10.1	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00036	0.292	<0.0001	<0.001	<0.05	<0.00001	103	<0.001	0.00024
Area_A_N_Ditch	2/6/2020 14:40	XI8762	M	C008772	1.19	0.00018	4.71	<0.00002	5.50	0.199	11.5	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00031	0.285	<0.0001	<0.001	<0.05	<0.00001	102	<0.001	<0.0002
Area_A_N_Ditch	3/11/2020 11:30	XN7889	M	C018851	2.43	0.00031	4.43	<0.00002	5.78	0.159	6.4	0.00002	<0.005	0.0275	0.00105	<0.005	0.0101	0.00077	0.0067	<0.0005	0.00032	0.132	<0.0001	<0.001	<0.05	0.000029	50.4	<0.001	0.00025
Area_A_N_Ditch	4/3/2020 12:15	XP9114	M	C023756	2.17	0.00022	4.2	<0.00002	6.92	0.202	10.8	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00045	0.246	<0.0001	<0.001	<0.05	0.000017	81.1	<0.001	0.0005
Area_A_N_Ditch	5/7/2020 13:45	XT2579	M	C031444	1.57	0.00024	3.88	<0.00002	6.38	0.229	20.6	<0.00001	<0.005	<0.005	0.00153	<0.005	<0.005	0.00035	0.0047	<0.0005	0.00042	0.363	<0.0001	<0.001	<0.05	<0.00001	120	<0.001	<0.0002
Area_A_N_Ditch	5/29/2020 12:00	XV5616	M	C036525	2.25	0.00023	1.06	<0.00002	14.3	0.272	25.0	<0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00037	0.121	<0.0001	<0.001	<0.05	<0.00001	62.8	<0.001	<0.0002
Area_A_N_Ditch	6/5/2020 13:55	XW9906	M	C039108	1.29	0.00028	3.63	<0.00002	5.64	0.219	13.6	<0.00001	<0.005	<0.005	0.00129	<0.005	0.0053	<0.0001	<0.003	<0.0005	0.00029	0.323	<0.0001	<0.001	<0.05	<0.00001	100	<0.001	<0.0002
Area_A_N_Ditch	7/9/2020 14:45	YB4140	M	C047920	1.12	0.00032	3.48	<0.00002	3.96	0.169	10.4	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	0.0001	<0.003	<0.0005	0.00021	0.246	<0.0001	<0.001	<0.05	<0.00001	81.1	<0.001	<0.0002
Crusher-FeedPitPond2	3/13/2020 13:45	XN9533	M	C019176	3.97	0.00049	3.2	<0.00002	25.1	0.464	45.5	0.000016	<0.005	0.0056	0.00431	<0.005	<0.005	0.00021	<0.003	<0.0005	0.00066	0.188	<0.0001	<0.001	0.053	0.000028	127	<0.001	0.00048
DIC_Sump	5/2/2020 10:10	XS7458	M	C030328	1.15	0.00112	2.38	<0.00002	6.93	0.109	28.3	0.00002	<0.005	0.0195	0.00083	<0.005	0.0125	0.00015	0.012	<0.0005	0.00015	0.09	<0.0001	<0.001	<0.05	0.000014	33.0	<0.001	<0.0002
DIC_Sump	5/13/2020 14:10	XT8156	M	C032775	1.35	0.00041	3.54	<0.00002	18.8	0.256	87.6	0.00002	<0.005	0.0072	0.00183	<0.005	0.0127	0.00049	0.0074	<0.0005	0.00031	0.057	<0.0001	<0.001	<0.05	0.000074	109	<0.001	0.00042
DIC_Sump	7/11/2020	YB7198	M	C048486																									
DIC-DIP	8/19/2020 12:45	YH3196	M	C059023	0.744	0.0005	2.78	<0.00002	4.90	0.177	8.4	<0.00001	<0.005	0.009	0.00056	<0.005	<0.005	0.00021	0.0109	<0.0005	0.00023	0.048	<0.0001	<0.001	<0.05	<0.00001	28.3	<0.001	<0.0002
DIC-DIP	9/5/2020 10:35	YK1343	M	C064288	0.916	0.00067	2.95	<0.00002	6.47	0.192	15.7	0.000011	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	0.0329	0.00058	0.00069	0.054	<0.0001	<0.001	<0.05	0.000012	35.5	<0.001	<0.0002
DIC-DIP	9/10/2020 14:45	YK8217	M	C065709	1.66	0.00093	4.79	<0.00002	9.50	0.201	25.2	0.000028	<0.005	0.0138	0.00146	<0.005	0.0087	0.00022	0.0506	0.0019	0.00153	0.037	<0.0001	<0.001	<0.05	<0.00001	39.6	<0.001	<0.0002
DIC-DIP	9/21/2020 16:50	YM6398	M	C068837	0.482	0.00033	2.17	<0.00002	1.52	0.119	5.3	<0.00001	<0.005	<0.005	0.00047	<0.005	0.0054	<0.0001	0.0088	<0.0005	0.0002	0.038	<0.0001	<0.001	<0.05	<0.00001	28.7	<0.001	<0.0002
DIC-DIP	9/23/2020 16:30	YN0389	M	C069533	0.476	0.00028	2.4	<0.00002	1.55	0.114	5.2	<0.00001	<0.005	0.0053	0.00048	<0.005	0.0057	0.00013	0.0093	<0.0005	0.0002	0.039	<0.0001	<0.001	<0.05	0.000012	28.2	<0.001	<0.0002
DIC-DIP	9/27/2020 11:30	YN7523	M	C070629	0.464	0.00031	2.3	<0.00002	1.53	0.117	6.1	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00014	0.037	<0.0001	<0.001	<0.05	<0.00001	29.8	<0.001	<0.0002
DIC-DIP	10/2/2020 12:30	YO6601	M	C072223	0.508	0.00037	2.47	<0.00002	1.68	0.126	5.9	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	0.0064	<0.0005	0.00017	0.041	<0.0001	<0.001	<0.05	<0.00001	29.6	<0.001	<0.0002
DIC-DIP	10/9/2020 11:30	YQ0193	M	C074387	0.466	0.00027	2.13	<0.00002	1.48	0.101	4.5	<0.00001	<0.005	<0.005	0.00044	<0.005	<0.005	<0.0001	0.0062	<0.0005	0.00019	0.037	<0.0001	<0.001	<0.05	0.000011	26.6	<0.001	<0.0002
DIP-Seep	8/12/2020 13:30	YG4639	M	C057419	20.5	0.00177	9.06	<0.0001	1580	2.09	1500	<0.00005	<0.025	<0.025	0.00573	<0.025	0.034	0.0009	<0.015	0.0068	0.00171	0.023	<0.0005	<0.005	0.86	<0.00005	250	<0.005	0.0061
DOC_S_Sump	1/8/2020 15:15	XF3044	M	C001783	1.50	0.00225	2.78	<0.00002	156	0.433	99.9	0.00001	<0.005	<0.005	0.00085	<0.005	0.0068	<0.0001	0.0173	<0.0005	0.00012	0.019	<0.0001	<0.001	0.222	0.00001	58.0	<0.001	0.00065
DOC_S_Sump	2/6/2020 13:30	XI8761	M	C008772	1.30	0.00161	2.75	<0.00002	148	0.437	75.2	0.00001	<0.005	<0.005	0.00082	<0.005	0.0055	<0.0001	0.0191	<0.0005	<0.0001	0.019	<0.0001	<0.001	0.221	<0.00001	47.9	<0.001	0.00031
DOC_S_Sump	6/6/2020 12:30	XX0128	M	C039138	62.8	0.00456	28.1	0.000042	617	0.448	321	0.000053	<0.01	0.14	0.00047	0.033	0.025	0.00325	0.117	0.0054	0.00125	0.06	<0.0002	<0.002	0.288	<0.00002	23.6	0.081	0.00085
DOC-DOP	8/19/2020 12:15	YH3195	M	C059023	0.908	0.0004	3.27	<0.00002	8.39	0.132	9.6	0.000018	<0.005	0.0196	0.00056	<0.005	0.0062	0.00035	0.0112	<0.0005	0.00025	0.041	<0.0001	<0.001	<0.05	<0.00001	27.5	<0.001	<0.0002
DOC-DOP	9/5/2020 10:10	YK1342	M	C064288	0.804	0.00037	2.68	<0.00002	7.02	0.137	9.1	0.000012	<0.005	<0.005	0.00061	<0.005	0.0061	0.00015	0.0161	<0.0005	0.00025	0.047	<0.0001	<0.001	<0.05	<0.00001	26.4	<0.001	<0.0002
DOC-DOP	9/11/2020 9:00	YK8184	M	C065706	1.38	0.00056	4.89	0.000026	6.05	0.154	8.9	0.000064	<0.005	0.0267	0.00083	0.0055	0.018	0.00028	0.0208	<0.0005	0.00036	0.055	<0.0001	<0.001	<0.05	<0.00001	29.8	<0.001	<0.0002
DOC-DOP	9/11/2020 9:10	YK8185	D	C065706	1.38	0.00053	4.67	0.000026	5.66	0.147	8.4	0.000061	<0.005	0.0235	0.00079	0.0052	0.0301	0.00032	0.0194	<0.0005	0.00035	0.055	<0.0001	<0.001	<0.05	<0.00001	29.0	<0.001	<0.0002
DOC-DOP	9/21/2020 16:20	YM6396	M	C068837	0.706	0.00032	3.32	<0.00002	1.66	0.123	5.4	0.000016	<0.005	0.021	0.00051	<0.005	0.0062	0.00097	0.0114	<0.0005	0.00021	0.043	<0.0001	<0.001	<0.05	0.000017	28.6	<0.001	<0.0002
DOC-DOP	9/23/2020 15:55	YN0388	M	C069533	0.784	0.00033	3.64	0.00002	1.78	0.123	5.4	0.000037	<0.005	0.0219	0.00059	<0.005	0.0117	0.00028	0.0164	<0.0005	0.00022	0.05	<0.0001	<0.001	<0.05	0.000011	28.7	<0.001	<0.0002
DOC-DOP	9/27/2020 12:55	YN7526	M	C070629	0.599	0.00031	3.07	<0.00002	1.64	0.127	6.4	0.000017	<0.005	0.0152	0.00051	<0.005	0.0068	0.00026	0.0098	<0.0005	0.00017	0.041	<0.0001	<0.001	<0.05	<0.00001	30.2	<0.001	<0.0002
DOC-DOP	10/2/2020 12:10	YO6600	M	C072223	0.514	0.00037	2.31	<0.00002	1.72	0.125	6.0	0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	0.0071	<0.0005	0.0002	0.041	<0.0001	<0.001	<0.05	0.000011	30.0	<0.001	<0.0002
DOC-DOP	10/9/2020 11:00	YQ0194	M	C074387	0.455	0.0003	2.16	<0.00002	1.44	0.104	4.6	<0.00001	<0.005	<0.005	0.00044	<0.005	0.0055	<0.0001	0.0063	<0.0005	0.00018	0.036	<0.0001	<0.001	<0.05	0.000011	26.8	<0.001	<0.0002
DOP_BT_East	1/8/2020 15:40	XF3045	M	C001783	6.20	0.00271	9.8	<0.00004	653	1.58	665	0.00003	<0.01	0.043	0.00361	<0.01	0.034	0.00105	0.0149	0.0015	0.0005	0.018	<0.0002	<0.002	0.536	0.000058	207	<0.002	0.0054
DOP-Seep	8/12/2020 13:00	YG4638	M	C057419	29.0	0.00218	14.2	<0.0001	1800	0.766	1290	0.00005	<0.025	0.062	0.00212	0.033	0.066	0.00217	0.041	0.006	0.00341	0.024	<0.0005	<0.005	1.09	<0.00005	40.4	0.0174	0.003
East-Buffer-Creek	4/28/2020 17:15	XS1882	M	C029097	3.11	0.00044	1.36	<0.00002	151	0.667	338	0.000022	<0.005	0.0053	0.00041	<0.005	0.23	0.00029	2.34	<0.0005	<0.0001	0.026	0.00055	<0.001	0.178	0.000564	190	<0.001	0.0403
GC-Debris-US	5/7/2020 15:00	XT2582	M	C031444																									
GC-Debris-US	5/28/2020 17:15	XV7333	M	C036873																									
GC-Debris-US	6/2/2020 14:00	XW3136	M	C037913																									
GC-Debris-US	6/18/2020 12:30	XY6291	M	C042383																									
GC-Debris-US	7/11/2020 18:00	YB7197	M	C048486																									
GC-Debris-US	8/1/2020 13:15	YE6671	M	C054219																									
GC-Debris-US	8/22/2020 14:45	YI0133	M	C060262																									
GC-Debris-US	9/13/2020 16:30	YL1417	M	C066239																									
GC-Debris-US	10/4/2020 13:20	YP0011	M	C072767																									
GC-Debris-US	11/1/2020 14:50	YU1491	M	C081010																									
L3-DC-DS	4/19/2020 17:35	XR2522	M	C026927																									
L3-DC-DS	6/18/2020 17:30	XY6289	M	C042383																									
L3-DC-US	4/19/2020 17:30	XR2521	M	C026927																									
L3-DC-US	6/18/2020 18:00	XY6292	M	C042383																									
LBCD_Trench	4/20/2020 15:20	XR3419	M	C027096	13.6	0.0124	7.25	<0.00002	690	0.462	399	0.000015	<0.005	0.022	0.00235	0.0081	0.0094	0.00086	0.0198	0.0051	0.00487	0.031	<0.0001	<0.001	0.214	<0.00001	18.3	0.0041	0.00022
LBCD-Sump-BT	1/4/2020 13:00	XE9882	M	C000877	1.21	0.00098	2.79	<0.00002	48.4	0.396	93.6	<0.00001	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00046	0.047	<0.0001	<0.001	<0.05	0.000012	119	<0.001	0.00056
LBCD-Sump-BT	1/7/2020 15:40	XF1935	M	C001464	1.05	0.00078	3.03	<0.00002	42.2	0.414	87.4	<0.00001	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00028	0.04	<0.0001	<0.001	<0.05	<0.00001	120	<0.001	0.00042
LBCD-Sump-BT	1/14/2020 13:35	XF8103	M	C002891	1.09	0.00075	2.45	<0.00002	43.3	0.329	72.3	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00031	0.038	<0.0001	<0.001	<0.05	0.000014	114	<0.001	0.00045
LBCD-Sump-BT	1/22/2020 14:00	XG7455	M	C004860	1.05	0.00063	2.6	<0.00002	44.4	0.323	63.8	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00031	0.038	<0.0001	<0.001	<0.05	0.00001	99.4	<0.001	0.00043
LBCD-Sump-BT	1/28/2020 14:40	XH5363	M	C006197	0.968	0.00073	2.41	<0.00002	42.7	0.306	57.8	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00029	0.038	<0.0001	<0.001	<0.05	0.000012	94.9	<0.001	0.00033
LBCD-Sump-BT	2/5/2020 14:45	XI6890	M	C008469	1.12	0.00078	2.3	<0.00002	47.3	0.314	62.0	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.0003	0.039	<0.0001	<0.001	<0.05	<0.00001	97.9	<0.001	0.00026
LBCD-Sump-BT	2/11/2020 12:30	XJ6275	M	C010122	1.09	0.00098	3.1	<0.00002	43.7	0.302	54.5	<0.00001	<0.005	0.0069	0.00239	<0.005	<0.005	0.00016	<0.003	<0.0005	0.00031	0.043	<0.0001	<0.001	<0.05	<0.00001	90.1	<0.001	0.00022

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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
LBCD-Sump-BT	2/14/2020 9:50	XJ9481	M	C010793	4.78	0.00241	7.11	<0.00002	224	0.742	235	<0.00001	<0.005	<0.005	0.00317	<0.005	<0.005	0.00028	0.0031	0.00103	0.00095	0.048	<0.0001	<0.001	0.121	0.000011	150	0.0022	0.00069
LBCD-Sump-BT	2/18/2020 14:20	XK4686	M	C011881	1.61	0.00126	3.89	<0.00002	80.2	0.391	88.2	<0.00001	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00041	0.063	<0.0001	<0.001	<0.05	0.000011	109	<0.001	0.0005
LBCD-Sump-BT	2/25/2020 13:40	XL5027	M	C014003	1.56	0.00169	3.24	<0.00002	61.8	0.372	75.6	<0.00001	0.0242	<0.005	0.00186	<0.005	<0.005	<0.0001	0.0045	<0.0005	0.00042	0.053	<0.0001	<0.001	<0.05	<0.00001	106	<0.001	0.0004
LBCD-Sump-BT	3/5/2020 16:20	XN0423	M	C017276	1.95	0.00371	4.94	<0.00002	68.7	0.32	75.5	0.000012	<0.005	0.0188	0.00185	<0.005	<0.005	0.00079	0.0046	0.00067	0.0005	0.053	<0.0001	<0.001	<0.05	<0.00001	80.4	<0.001	0.00033
LBCD-Sump-BT	3/11/2020 14:55	XN7894	M	C018851	2.01	0.00265	5.06	<0.00002	61.0	0.359	69.9	0.000019	0.0066	0.0218	0.0022	<0.005	0.0134	0.0008	0.0057	0.0007	0.00054	0.066	<0.0001	<0.001	<0.05	<0.00001	87.7	<0.001	0.00045
LBCD-Sump-BT	3/17/2020 13:45	XO3911	M	C020169	1.36	0.00219	3.48	<0.00002	76.0	0.344	74.7	<0.00001	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00044	0.057	<0.0001	<0.001	<0.05	0.000014	101	<0.001	0.0006
LBCD-Sump-BT	3/27/2020 13:00	XP2506	M	C022160	1.26	0.00296	2.66	<0.00002	46.3	0.296	46.3	<0.00001	0.006	<0.005	0.00278	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00031	0.047	<0.0001	<0.001	<0.05	<0.00001	82.2	<0.001	0.00026
LBCD-Sump-BT	3/31/2020 13:15	XP6327	M	C023153	1.49	0.00325	2.14	<0.00002	59.8	0.303	56.6	<0.00001	0.0146	0.0062	0.0025	<0.005	0.0128	0.0003	0.0055	0.00058	0.0003	0.049	<0.0001	<0.001	<0.05	0.000018	72.9	<0.001	0.00033
LBCD-Sump-BT	4/10/2020 13:05	XQ5871	M	C025257	10.1	0.00588	7.2	<0.00002	166	0.201	105	0.000012	<0.005	0.0089	0.00167	0.0064	0.0333	0.00064	0.0267	0.00239	0.00255	0.046	<0.0001	<0.001	0.104	<0.00001	13.3	0.0061	<0.0002
LBCD-Sump-BT	4/15/2020 14:55	XQ9342	M	C026226	8.52	0.00525	6.4	0.00003	136	0.157	73.7	0.000017	<0.005	0.0247	0.00106	0.007	0.012	0.00052	0.0347	0.00225	0.00305	0.044	<0.0001	<0.001	0.095	<0.00001	9.32	0.0056	<0.0002
LBCD-Sump-BT	4/29/2020 13:05	XS3521	M	C029452	6.47	0.00926	4.39	<0.00002	443	0.359	231	<0.00001	0.0077	<0.005	0.00325	<0.005	<0.005	0.00044	0.0346	0.00464	0.00444	0.029	<0.0001	<0.001	0.205	<0.00001	27.3	0.0022	0.00027
LBCD-Sump-BT	5/7/2020 14:00	XT2578	M	C031444	6.39	0.00558	15.7	0.000039	482	0.481	249	<0.00001	0.0063	0.141	0.00346	0.0213	0.0145	0.00654	0.0238	0.00489	0.00402	0.037	<0.0001	<0.001	0.368	<0.00001	37.7	0.002	<0.0002
LBCD-Sump-BT	5/19/2020 14:35	XU3586	M	C033944	6.33	0.0113	4.57	0.000024	855	0.697	440	0.000026	0.0125	0.0092	0.00448	0.0057	0.0084	0.00113	0.0305	0.00563	0.00776	0.029	<0.0001	<0.001	0.399	<0.00001	22.3	0.002	<0.0002
LBCD-Sump-BT	5/30/2020 17:30	XV8358	M	C037043	7.30	0.0034	4.59	<0.00002	221	0.251	75.2	0.000012	<0.005	0.006	0.00215	0.0063	0.0106	0.00023	0.0427	0.00192	0.00268	0.078	<0.0001	<0.001	0.316	<0.00001	41.5	0.0011	<0.0002
LBCD-Sump-BT	6/13/2020 15:30	XX9602	M	C040986	3.42	0.00899	5.24	<0.00002	367	0.575	253	0.000019	<0.005	0.0219	0.00282	<0.005	<0.005	0.00116	0.0036	0.00208	0.00241	0.043	<0.0001	<0.001	0.276	0.000016	92.9	<0.001	0.00043
LBCD-Sump-BT	6/20/2020 13:00	XY9025	M	C042884	7.19	0.0249	3.97	<0.00002	274	0.584	249	0.000019	<0.005	0.0131	0.00407	<0.005	0.0094	0.00024	0.021	0.00232	0.00132	0.042	<0.0001	<0.001	0.229	0.000093	85.7	<0.001	0.00296
LBCD-Sump-BT	6/27/2020 19:45	XZ9073	M	C044897	2.59	0.00991	3.17	<0.00002	88.0	0.499	128	0.000016	<0.005	0.0058	0.00382	<0.005	<0.005	0.00022	0.0085	0.00081	0.00049	0.053	<0.0001	<0.001	0.116	<0.00001	120	<0.001	<0.0002
LBCD-Sump-BT	6/30/2020 15:45	YA2742	M	C045692	9.51	0.0316	12.4	<0.0001	860	1.2	731	0.000122	<0.025	0.089	0.00963	<0.025	0.782	0.0026	0.06	<0.0025	0.00067	0.021	<0.0005	<0.005	0.595	0.00376	124	<0.005	0.1
LBCD-Sump-BT	8/1/2020 13:00	YE6669	M	C054219	5.80	0.00904	1.24	<0.00002	306	0.716	336	0.000023	<0.005	<0.005	0.00621	<0.005	0.0535	<0.0001	0.19	0.0011	0.0007	0.039	<0.0001	<0.001	0.251	0.000212	115	<0.001	0.00572
LBCD-Sump-BT	11/4/2020 11:30	YU7149	M	C082156	5.23	0.00908	5.1	<0.00002	274	0.423	202	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	0.00029	0.0112	0.00259	0.00253	0.025	<0.0001	<0.001	0.154	<0.00001	42.6	0.0067	<0.0002
LBCD-Sump-BT	11/10/2020 10:40	YV4534	M	C083245	4.26	0.00559	5.95	0.000022	273	0.77	253	0.000032	<0.005	0.0166	0.00499	<0.005	0.0186	0.00061	0.0068	0.00141	0.00103	0.029	<0.0001	<0.001	0.12	<0.00001	132	0.0032	0.00106
LBCD-Sump-BT	11/25/2020 11:30	YY0220	M	C087472	2.24	0.00326	4.29	<0.00002	94.3	0.633	154	0.000011	<0.005	<0.005	0.00475	<0.005	0.0272	0.00014	<0.003	<0.0005	0.00028	0.034	<0.0001	<0.001	0.067	<0.00001	167	<0.001	0.00041
LBEX_B1	2/23/2020 14:00	XL1346	M	C013192	4.25	0.00336	3.19	<0.00002	39.4	0.355	83.4	0.000013	<0.005	0.0267	0.00571	<0.005	0.0086	0.00069	0.003	0.00091	0.00119	0.059	<0.0001	<0.001	0.06	0.000013	87.6	<0.001	0.00031
LBEX_B1	4/8/2020 15:40	XQ4593	M	C024938	6.26	0.00814	4.12	0.000547	22.9	0.961	111	0.000388	<0.005	0.0287	0.0129	0.0232	0.128	0.00986	0.0321	0.00083	0.0005	0.037	<0.0001	<0.001	<0.05	0.000085	101	<0.001	0.00058
LBEX_B1	5/14/2020 14:10	XU0102	M	C033161	5.52	0.00452	4.47	<0.00002	116	0.523	137	0.000019	<0.005	0.0095	0.00711	<0.005	0.0085	0.00031	0.0031	<0.0005	0.00036	0.025	<0.0001	<0.001	0.177	<0.00001	96.6	<0.001	0.00027
LBEX_B1	6/8/2020 16:45	XX1071	M	C039370	20.7	0.0311	113	0.00465	38.3	2.35	301	0.00258	<0.05	0.381	0.0512	0.415	2.85	0.005	0.0092	<0.001	0.00042	0.059	<0.0002	<0.002	<0.1	0.00246	282	<0.002	0.0454
LBEX_B1	7/1/2020 16:10	YA2711	M	C045689	6.70	0.00515	22.2	0.000254	27.9	0.598	117	0.000329	<0.01	0.138	0.00552	0.043	0.14	0.00437	0.0041	0.00067	0.00037	0.037	<0.0001	<0.001	0.058	0.000057	112	<0.001	0.00035
LBEX_B1	10/22/2020 14:15	YS3858	M	C078323	5.44	0.0053	5.48	<0.00002	117	0.733	129	0.000026	<0.005	0.0078	0.00899	<0.005	<0.005	0.00045	<0.003	<0.0005	0.00031	0.028	<0.0001	<0.001	0.173	0.000017	157	<0.001	<0.0002
LBEX_Bench_0	5/19/2020 16:30	XU3832	M	C034012	5.34	0.00233	3.56	<0.00002	277	1.55	397	0.000012	<0.005	<0.005	0.032	<0.005	0.0097	0.0001	0.0121	0.00061	0.00054	0.02	<0.0001	<0.001	0.429	0.000158	249	<0.001	0.00274
LBGC-OUT	3/2/2020 20:20	XM6323	M	C016408																									
LBGC-OUT	3/3/2020 13:00	XM6550	M	C016468																									
LBGC-OUT	3/4/2020 17:30	XM7999	M	C016826																									
LBGC-OUT	3/5/2020 16:40	XN0422	M	C017276																									
LBGC-OUT	3/26/2020 18:00	XP2435	M	C022151																									
LBGC-OUT	3/27/2020 0:45	XP2507	M	C022160																									
LBGC-OUT	4/19/2020 17:00	XR2520	M	C026927																									
LBGC-OUT	5/4/2020 15:20	XS8358	M	C030506																									
LBGC-OUT	5/5/2020 13:45	XT0144	M	C030949																									
LBGC-OUT	5/6/2020 17:00	XT1607	M	C031246																									
LBGC-OUT	5/7/2020 14:30	XT2581	M	C031444																									
LBGC-OUT	5/8/2020 12:30	XT2573	M	C031442																									
LBGC-OUT	5/9/2020 15:00	XT4492	M	C031859																									
LBGC-OUT	5/10/2020 16:10	XT4531	M	C031867																									
LBGC-OUT	5/11/2020 13:30	XT5202	M	C032074																									
LBGC-OUT	5/18/2020 14:15	XU2595	M	C033718																									
LBGC-OUT	5/28/2020 16:45	XV7332	M	C036873																									
LBGC-OUT	6/2/2020 13:50	XW3135	M	C037913																									
LBGC-OUT	6/18/2020 12:10	XY6290	M	C042383																									
LBGC-OUT	7/11/2020 17:45	YB7196	M	C048486																									
LBGC-OUT	8/1/2020 13:05	YE6670	M	C054219																									
LBGC-OUT	8/22/2020 14:30	YI0132	M	C060262																									
LBGC-OUT	9/13/2020 16:20	YL1416	M	C066239																									
LBGC-OUT	10/4/2020 13:30	YP0010	M	C072767																									
LBGC-OUT	11/1/2020 15:10	YU1492	M	C081010																									
LBL3C-1.65	3/26/2020 18:30	XP2436	M	C022151																									
Mustard-Creek	8/10/2020 13:35	YG0107	M	C056587	5.33	0.0004	3.28	<0.00002	65.2	0.323	122	<0.00001	<0.005	<0.005	0.00033	<0.005	0.0604	<0.0001	0.0159	<0.0005	0.00038	0.063	<0.0001	<0.001	0.073	<0.00001	79.7	<0.001	0.00443
PR_DIC	8/13/2020 19:50	YG7226	M	C057822	0.516	0.00032	2.38	<0.00002	1.61	0.111	5.2	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	0.0077	<0.0005	0.00022	0.036	<0.0001	<0.001	<0.05	<0.00001	27.0	<0.001	<0.0002
PR_DIC	8/14/2020 9:50	YG7191	M	C057817	0.494	0.00029	2.33	<0.00002	1.38	0.11	5.2	<0.00001	<0.005	<0.005	0.00044	<0.005	<0.005	<0.0001	0.0078	<0.0005	0.00021	0.036	<0.0001	<0.001	<0.05	<0.00001	26.9	<0.001	<0.0002
PR_DIC	8/15/2020 10:15	YH0056	M	C058356	0.478	0.00027	2.27	<0.00002	1.36	0.1	4.2	<0.00001	<0.005	0.0054	0.00043	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00023	0.036	<0.0001	<0.001	<0.05	0.000012	26.9	<0.001	<0.0002
PR_DIC	8/28/2020 15:40	YI9495	M	C062013	0.515	0.00033	2.52	<0.00002	1.49	0.113	4.7	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	0.0101	<0.0005	0.00019	0.033	<0.0001	<0.001	<0.05	0.00001	28.8	<0.001	<0.0002
PR_DIC	8/29/2020 12:50	YJ1741	M	C062465	0.487	0.00032	2.12	<0.00002	1.50	0.103	5.1	<0.00001	<0.005	<0.005	0.00043	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00019	0.036	<0.0001	<0.001	<0.05	<0.00001	27.6	<0.001	<0.0002
PR_DIC_DS	9/21/2020 18:15	YM6400	M	C068837	0.532	0.00033	2.35	<0.00002	1.53	0.12	5.1	0.000011	<0.005	0.01	0.00048	<0.005	<0.005	0.00015	0.0078	<0.0005	0.00018	0.039	<0.0001	<0.001	<0.05	<0.00001	28.1	<0.001	<0.0002
PR_DIC_DS	9/27/2020 12:05	YN7524	M	C070629	0.500	0.0003	2.48	<0.00002	1.55	0.12	5.4	<0.00001	<0.005	0.0062	0.00048	<0.005	<0.005	0.00035	0.0081	<0.0005	0.00016	0.037	<0.0001	<0.001	<0.05	0.00001	29.8	<0.001	<0.0002
PR_DIC_DS	10/2/2020 9:40	YO6598	M	C072223	0.499	0.00038	2.26	<0.00002	1.73	0.125	5.9	<0.00001	<0.005	<0.005	0.0005	<0.005	<0.005	<0.0001	0.0061	<0.0005	0.00019	0.044	<0.0001	<0.001	<0.05	0.000011	30.2	<0.001	<0.0002
PR_DIC_US	9/21/2020 17:45	YM6399	M	C068837	0.852	0.00036	3.95	<0.00002	1.54	0.122	5.3	0.000035	<0.005	0.0393	0.00055	<0.005	0.0092	0.00047	0.0081	<0.0005	0.0002	0.045	<0.0001	<0.001	<0.05	0.000015	28.8	<0.001	<0.0002
PR_DIC_US	9/27/2020 11:10	YN7522	M	C070629	0.477	0.00031	2.49	<0.00002	1.59	0.122	5.6	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	0.0085	<0.0005	0.00014	0.037	<0.0001	<0.001	<0.05	<0.00001	30.1	<0.001	<0.0002
PR_DIC_US	10/2/2020 9:50	YO6599	M	C072223	0.488	0.00036	2.2	<0.00002	1.70	0.126	6.1	<0.00001	<0.005	<0.005	0.00049	<0.005	<0.005	<0.0001	0.0092	<0.0005	0.00018	0.042	<0.0001	<0.001	<0.05	0.000011	30.0	<0.001	<0.0002
PR_DOC	8/14/2020 16:45	YG8152	M	C057967	0.673	0.00033	3.17	<0.00002	1.33	0.114	5.0	0.000025	<0.005	0.0111	0.00048	<0.005	0.007	0.00019	0.0079	<0.0005	0.00022	0.037	<0.0001	<0.001	<0.05	0.00001	26.4	<0.001	<0.0002
PR_DOC	8/15/2020 10:55	YH0057	M	C058356	0.613	0.00031	2.65	<0.00002	1.36	0.104	4.5	0.00002	<0.005	0.0094	0.00049	<0.005	0.0074	0.00011	0.0072	<0.0005	0.00024	0.038	<0.0001	<0.001	<0.05	<0.00001	26.5	<0.001	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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
PR_DOC	8/16/2020 12:15	YH0174	M	C058389	0.540	0.00029	2.39	<0.00002	1.68	0.11	4.9	0.000013	<0.005	0.0053	0.00044	<0.005	<0.005	<0.0001	0.0073	<0.0005	0.00024	0.037	<0.0001	<0.001	<0.05	<0.00001	27.0	<0.001	<0.0002
PR_DOC	8/31/2020 16:10	YJ3637	M	C062857	0.530	0.00029	2.9	<0.00002	1.53	0.113	4.8	0.00001	<0.005	0.0059	0.00047	<0.005	<0.005	0.00025	0.0089	<0.0005	0.00019	0.036	<0.0001	<0.001	<0.05	<0.00001	26.7	<0.001	<0.0002
PR_DOC	9/1/2020 14:30	YJ6692	M	C063433	0.449	0.00028	2.22	<0.00002	1.74	0.109	5.3	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	0.0078	<0.0005	0.0002	0.034	<0.0001	<0.001	<0.05	<0.00001	26.7	<0.001	<0.0002
PR_DOC	9/5/2020 9:40	YK1341	M	C064288	0.461	0.00031	2.23	<0.00002	1.59	0.115	5.1	<0.00001	<0.005	<0.005	0.00048	<0.005	<0.005	<0.0001	0.0099	<0.0005	0.00021	0.039	<0.0001	<0.001	<0.05	<0.00001	26.4	<0.001	<0.0002
PR_DOC	9/7/2020 9:10	YK2583	M	C064592	0.456	0.0003	2.22	<0.00002	1.49	0.115	5.2	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	0.0118	<0.0005	0.00019	0.039	<0.0001	<0.001	<0.05	0.00001	28.8	<0.001	<0.0002
PR_DOC_DS	9/21/2020 16:05	YM6395	M	C068837	0.595	0.00032	2.76	<0.00002	1.57	0.124	5.2	0.000014	<0.005	0.0133	0.0005	<0.005	<0.005	0.00026	0.0109	<0.0005	0.00019	0.042	<0.0001	<0.001	<0.05	0.000011	28.7	<0.001	<0.0002
PR_DOC_DS	9/27/2020 13:15	YN7527	M	C070629	0.608	0.00032	3.22	<0.00002	1.54	0.121	5.9	0.000016	<0.005	0.0147	0.00051	<0.005	0.0115	0.00013	0.0094	<0.0005	0.00016	0.04	<0.0001	<0.001	<0.05	<0.00001	29.7	<0.001	<0.0002
PR_DOC_DS	10/2/2020 9:20	YO6596	M	C072223	0.498	0.00037	2.27	<0.00002	1.67	0.123	5.8	<0.00001	<0.005	<0.005	0.0005	<0.005	<0.005	<0.0001	0.0071	<0.0005	0.00016	0.042	<0.0001	<0.001	<0.05	0.000011	30.1	<0.001	<0.0002
PR_DOC_US	9/21/2020 16:50	YM6397	M	C068837	0.630	0.00034	3.34	<0.00002	1.53	0.124	5.2	0.000018	<0.005	0.0165	0.00054	<0.005	0.0064	0.0003	0.0128	<0.0005	0.0002	0.047	<0.0001	<0.001	<0.05	<0.00001	29.1	<0.001	<0.0002
PR_DOC_US	9/27/2020 12:30	YN7525	M	C070629	0.544	0.00033	2.71	<0.00002	1.54	0.126	5.7	0.000012	<0.005	0.0085	0.00049	<0.005	<0.005	0.00013	0.0093	<0.0005	0.00014	0.039	<0.0001	<0.001	<0.05	0.000011	29.3	<0.001	<0.0002
PR_DOC_US	10/2/2020 9:30	YO6597	M	C072223	0.529	0.00037	2.37	<0.00002	1.78	0.126	6.1	0.00001	<0.005	0.0062	0.00052	<0.005	<0.005	<0.0001	0.0061	<0.0005	0.00019	0.044	<0.0001	<0.001	<0.05	<0.00001	29.7	<0.001	<0.0002
QAQC_Curing_Tanks	1/10/2020 11:10	XF5146	M	C002216	446	0.0127	11.3	<0.00004	722	0.0269	176	<0.00002	<0.01	<0.01	0.0086	0.051	0.118	0.00142	0.0249	0.0313	0.0185	0.024	<0.0002	<0.002	2.08	<0.00002	3.37	0.0106	<0.0004
QAQC_Curing_Tanks	2/17/2020 14:00	XK3292	M	C011572	496	0.0155	9.45	<0.0001	821	0.0256	185	<0.00005	<0.025	<0.025	0.00943	0.048	0.238	0.00154	0.025	0.0294	0.0166	0.019	<0.0005	<0.005	2.37	<0.00005	3.73	<0.005	<0.001
QAQC_Curing_Tanks	3/28/2020 12:30	XP3715	M	C022531	144	0.00341	7.42	<0.00002	217	0.0314	58.2	0.000012	<0.005	<0.005	0.00116	0.0115	0.276	0.00024	0.0252	0.00673	0.00374	0.019	<0.0001	<0.001	0.7	<0.00001	5.71	0.0082	<0.0002
QAQC_Curing_Tanks	5/10/2020 15:20	XT4530	M	C031867	252	0.00416	7.22	<0.00002	380	0.0385	92.2	<0.00001	<0.005	<0.005	0.00187	0.0156	0.215	0.00048	0.0317	0.0101	0.00564	0.023	<0.0001	<0.001	1.08	0.000011	5.60	0.0035	<0.0002
QAQC_Sink	1/10/2020 11:00	XF5145	M	C002216	0.780	0.00023	3.05	<0.00002	4.71	0.175	13.5	<0.00001	<0.005	<0.005	0.00068	<0.005	0.0483	0.00027	0.0059	<0.0005	0.00016	0.097	<0.0001	<0.001	<0.05	<0.00001	64.8	<0.001	0.00034
QAQC_Sink	2/17/2020 13:40	XK3291	M	C011572	0.873	0.00028	2.83	<0.00002	5.27	0.187	16.2	<0.00001	<0.005	<0.005	0.00078	<0.005	0.0662	0.00027	0.0041	<0.0005	0.00014	0.087	<0.0001	<0.001	<0.05	<0.00001	59.1	<0.001	0.00028
QAQC_Sink	3/28/2020 12:20	XP3714	M	C022531	0.721	0.0003	2.68	<0.00002	4.67	0.172	13.0	<0.00001	<0.005	<0.005	0.0007	<0.005	0.0117	<0.0001	<0.003	<0.0005	0.00011	0.088	<0.0001	<0.001	<0.05	<0.00001	55.7	<0.001	<0.0002
QAQC_Sink	5/10/2020 15:10	XT4529	M	C031867	0.856	0.00021	2.77	<0.00002	6.74	0.19	19.3	<0.00001	<0.005	<0.005	0.00089	<0.005	0.012	<0.0001	0.0053	<0.0005	<0.0001	0.101	<0.0001	<0.001	<0.05	<0.00001	64.8	<0.001	<0.0002
RBAC-SUMP	5/11/2020 10:30	XT5199	M	C032074	4.75	0.00278	6.74	0.000033	376	0.814	417	<0.00001	0.0104	0.0326	0.00418	0.0055	0.464	0.00051	0.212	<0.0005	0.00043	0.046	<0.0001	<0.001	0.376	0.00172	187	<0.001	0.0808
RBAC-SUMP	11/24/2020 14:30	YX7836	M	C087146	2.88	0.00154	4.54	<0.00002	186	0.268	55.0	0.00001	<0.005	<0.005	0.00192	<0.005	0.0089	0.00016	0.0088	0.00066	0.00082	0.127	<0.0001	<0.001	0.191	0.000024	59.5	<0.001	0.00137
RB-Core-Trench-Sump	6/13/2020 13:15	XX9597	M	C040986	12.8	0.0176	31.1	0.000313	363	0.225	156	0.000277	0.012	0.17	0.00465	0.058	0.187	0.00688	0.0326	0.00815	0.0155	0.056	<0.0001	<0.001	0.468	<0.00001	9.51	0.0175	0.00028
RB-Core-Trench-Sump	6/20/2020 15:10	XY9031	M	C042884	8.42	0.0187	26.5	0.000216	482	0.27	184	0.000191	0.014	0.147	0.00432	0.037	0.141	0.00394	0.0487	0.0077	0.0131	0.075	<0.0002	<0.002	0.643	<0.00002	8.23	<0.002	<0.0004
RB-R5B-ACDC	1/8/2020 12:15	XF3039	M	C001783	4.98	0.00405	5.55	<0.00002	27.8	0.345	46.2	<0.00001	<0.005	<0.005	0.00361	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.0002	0.066	<0.0001	<0.001	<0.05	<0.00001	122	<0.001	<0.0002
RB-R5B-ACDC	2/5/2020 12:00	XI6884	M	C008469	4.60	0.00395	4.79	<0.00002	28.9	0.357	39.8	<0.00001	<0.005	<0.005	0.00369	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00018	0.068	<0.0001	<0.001	<0.05	<0.00001	104	<0.001	<0.0002
RB-R5B-ACDC	3/9/2020 13:15	XN3893	M	C018020	4.41	0.0039	5.39	<0.00002	27.2	0.357	40.0	<0.00001	<0.005	0.0071	0.00378	<0.005	0.0059	0.00021	<0.003	<0.0005	0.00012	0.064	<0.0001	<0.001	<0.05	<0.00001	96.6	<0.001	0.00035
RB-R5B-ACDC	4/2/2020 11:40	XP7674	M	C023465	5.90	0.0031	5.35	<0.00002	32.6	0.426	55.0	<0.00001	<0.005	<0.005	0.00349	<0.005	<0.005	<0.0001	0.0036	<0.0005	<0.0001	0.069	<0.0001	<0.001	<0.05	<0.00001	89.9	<0.001	<0.0002
RB-R5B-ACDC	5/9/2020 12:00	XT4487	M	C031859	4.51	0.00272	4.5	<0.00002	34.1	0.354	59.3	<0.00001	<0.005	<0.005	0.00343	<0.005	<0.005	<0.0001	0.0037	<0.0005	<0.0001	0.077	<0.0001	<0.001	0.074	<0.00001	120	<0.001	<0.0002
RB-R5B-ACDC	6/5/2020 14:40	XW9907	M	C039108	4.93	0.00274	5.31	<0.00002	22.6	0.349	49.9	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00014	0.058	<0.0001	<0.001	0.056	<0.00001	95.4	<0.001	<0.0002
RB-R5B-ACDC	7/2/2020 15:40	YA4187	M	C045984	5.78	0.00236	19.4	0.000196	17.9	0.34	60.5	0.000319	<0.01	0.181	0.00258	0.028	0.122	0.00524	0.0036	<0.0005	0.00023	0.086	<0.0001	<0.001	0.076	0.000151	98.8	<0.001	0.00208
RB-R5B-ACDC	7/10/2020 11:00	YB4120	M	C047917	4.06	0.00165	5.22	<0.00002	17.1	0.324	37.6	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	0.0122	<0.0005	0.0002	0.088	<0.0001	<0.001	0.056	<0.00001	99.1	<0.001	<0.0002
RB-R5B-ACDC	7/15/2020 10:50	YC2135	M	C049614	4.01	0.00156	5.42	<0.00002	20.4	0.336	37.2	0.000013	<0.005	<0.005	0.00198	<0.005	0.0069	<0.0001	0.0143	<0.0005	0.00018	0.093	<0.0001	<0.001	0.06	0.000031	102	<0.001	0.00029
RB-R5B-ACDC	7/21/2020 14:55	YD0799	M	C051251	6.46	0.00196	29.3	0.000192	19.5	0.461	37.7	0.000367	<0.01	0.174	0.00353	0.055	0.214	0.00152	0.018	<0.0005	0.00032	0.114	<0.0001	<0.001	0.07	0.000025	102	<0.001	0.00039
RB-R5B-ACDC	9/2/2020 14:45	YJ7832	M	C063666	4.42	0.00202	4.78	<0.00002	18.9	0.354	37.3	<0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	0.0074	<0.0005	0.00017	0.076	<0.0001	<0.001	0.085	0.000016	96.6	<0.001	<0.0002
RCC-NE-Sump-BT	1/4/2020 15:15	XE9886	M	C000877	9.41	0.0025	6.34	<0.00002	254	0.305	72.8	0.000016	<0.005	0.0102	0.00201	0.0071	0.0135	0.00041	0.0537	0.00206	0.00232	0.097	<0.0001	<0.001	0.324	0.000015	58.0	<0.001	0.00025
RCC-NE-Sump-BT	1/7/2020 14:15	XF1933	M	C001464	9.42	0.00157	13.3	<0.00002	143	0.229	43.1	0.000016	0.0065	0.0194	0.00098	0.0071	0.0141	0.00082	0.105	0.00168	0.00208	0.083	<0.0001	<0.001	0.213	<0.00001	26.1	0.0087	<0.0002
RCC-NE-Sump-BT	1/14/2020 12:20	XF8101	M	C002891	4.66	0.00149	4.57	<0.00002	170	0.217	47.5	<0.00001	<0.005	<0.005	0.00165	<0.005	0.0074	0.00024	0.331	0.00134	0.0019	0.132	<0.0001	<0.001	0.263	<0.00001	45.1	<0.001	<0.0002
RCC-NE-Sump-BT	1/24/2020 10:30	XG9571	M	C005174	6.11	0.00163	4.79	<0.00002	175	0.235	52.3	<0.00001	<0.005	<0.005	0.00172	<0.005	0.0102	0.0002	0.444	0.00197	0.00209	0.101	<0.0001	<0.001	0.263	<0.00001	42.2	<0.001	<0.0002
RCC-NE-Sump-BT	1/28/2020 13:30	XH5361	M	C006197	6.27	0.00174	5.28	<0.00002	203	0.261	60.3	<0.00001	<0.005	<0.005	0.00186	<0.005	0.0116	0.00033	0.0463	0.00301	0.0022	0.107	<0.0001	<0.001	0.287	0.000011	52.2	<0.001	0.00022
RCC-NE-Sump-BT	2/5/2020 13:35	XI6888	M	C008469	8.07	0.00199	5.5	<0.00002	241	0.24	68.1	0.000011	<0.005	0.0083	0.00198	0.005	0.0096	0.00038	0.0828	0.00176	0.00212	0.08	<0.0001	<0.001	0.296	<0.00001	45.9	<0.001	<0.0002
RCC-NE-Sump-BT	2/11/2020 14:00	XJ6274	M	C010122	7.37	0.00195	15.2	0.000037	197	0.262	56.7	0.000064	<0.005	0.0922	0.00206	0.014	0.0407	0.00278	0.0073	0.00184	0.00293	0.127	<0.0001	<0.001	0.272	<0.00001	46.8	<0.001	0.00026
RCC-NE-Sump-BT	2/18/2020 13:15	XK4685	M	C011881	10.6	0.00162	10.7	<0.00002	187	0.236	48.0	0.000021	0.0066	0.0378	0.00137	0.009	0.0259	0.00147	0.315	0.00198	0.00249	0.117	<0.0001	<0.001	0.276	0.000012	42.0	0.0059	0.00054
RCC-NE-Sump-BT	2/25/2020 12:15	XL5025	M	C014003	6.00	0.00262	6.26	<0.00002	206	0.282	63.9	<0.00001	<0.005	0.0069	0.00177	0.0051	0.01	0.00033	0.0606	0.00152	0.00193	0.114	<0.0001	<0.001	0.288	0.000014	58.3	<0.001	0.00023
RCC-NE-Sump-BT	3/4/2020 14:30	XM8006	M	C016829	10.7	0.00264	11.6	<0.00002	184	0.227	52.4	0.000021	<0.005	0.0362	0.00145	0.0108	0.0244	0.00169	0.0427	0.00242	0.00299	0.098	<0.0001	<0.001	0.267	0.000018	38.5	0.0055	0.00028
RCC-NE-Sump-BT	3/10/2020 11:50	XN6092	M	C018396	7.62	0.00168	9.18	<0.00002	164	0.249	45.7	0.000024	<0.005	0.0356	0.00146	0.008	0.0252	0.00138	0.394	0.00166	0.00222	0.127	<0.0001	<0.001	0.202	<0.00001	49.9	0.004	0.00027
RCC-NE-Sump-BT	3/17/2020 12:35	XO3909	M	C020169	8.99	0.00203	6.95	<0.00002	203	0.21	56.1	0.000012	<0.005	0.0099	0.0016	0.0069	0.0189	0.00045	0.201	0.00178	0.00249	0.097	<0.0001	<0.001	0.275	0.00001	41.8	0.0023	<0.0002
RCC-NE-Sump-BT	3/27/2020 0:20	XP2505	M	C022160	1.64	0.00121	5.26	<0.00002	56.0	0.248	17.4	0.000027	<0.005	0.0358	0.00117	<0.005	0.0181	0.00041	0.006	0.00054	0.00077	0.2	<0.0001	<0.001	0.101	0.000014	57.4	<0.001	<0.0002
RCC-NE-Sump-BT	3/31/2020 12:30	XP6326	M	C023153	1.22	0.00097	3.72	<0.00002	61.9	0.259	19.3	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	0.00017	0.0056	<0.0005	0.00015	0.232	<0.0001	<0.001	0.115	0.000011	66.2	<0.001	<0.0002
RCC-NE-Sump-BT	4/7/2020 12:30	XQ3416	M	C024753	1.19	0.00107	3.43	<0.00002	62.5	0.24	19.5	<0.00001	<0.005	<0.005	0.00101	<0.005	0.0058	<0.0001	0.0079	<0.0005	0.00022	0.226	<0.0001	<0.001	0.116	<0.00001	64.7	<0.001	<0.0002
RCC-NE-Sump-BT	4/15/2020 13:40	XQ9340	M	C026226	6.62	0.00375	14.4	0.00013	142	0.263	49.6	0.000151	<0.005	0.0782	0.00226	0.0253	0.0969	0.00164	0.123	0.00162	0.00166	0.087	<0.0001	<0.001	0.254	0.00002	41.7	0.0034	0.00027
RCC-NE-Sump-BT	4/24/2020 11:55	XR7270	M	C028014	5.91	0.00412	6.01	0.00003	198	0.231	82.7	0.00002	<0.005	0.0169	0.00207	0.0073	0.024	0.00045	0.129	0.00138	0.00226	0.079	<0.0001	<0.001	0.235	<0.00001	50.0	0.0012	0.00049
RCC-NE-Sump-BT	4/28/2020 13:15	XS2089	M	C029151	5.94	0.00433	4.83	<0.00002	197	0.209	76.4	<0.00001	<0.005	<0.005	0.00206	0.0051	0.0067	0.0002	0.0661	0.00163	0.00208	0.076	<0.0001	<0.001	0.255	0.000011	39.4	0.0016	0.00036
RCC-NE-Sump-BT	5/6/2020 16:50	XT1605	M	C031246	6.72	0.00343	7.57	<0.00002	235	0.277	89.4	0.00002	<0.005	0.0227	0.00278	0.01	0.0107	0.00082	0.0451	0.00196	0.00231	0.096	<0.0001	<0.001	0.335	0.000012	41.8	0.0014	0.00028
RCC-NE-Sump-BT	5/13/2020 12:40	XT8152	M	C032775	5.99	0.00275	4.78	<0.00002	189	0.227	68.5	0.000019	<0.005	<0.005	0.00221	<0.005	0.0141	0.00013	0.435	0.00167	0.00207	0.075	<0.0001	<0.001	0.289	0.00001	32.9	<0.001	<0.0002
RCC-NE-Sump-BT	5/19/2020 13:15	XU3583	M	C033944	8.94	0.00445	5.51	<0.00002	247	0.264	84.1	<0.00001	<0.005	<0.005	0.00268	0.0083	0.0068	0.00065	0.119	0.00261	0.00294	0.084	<0.0001	<0.001	0.347	<0.00001	38.3	0.0016	0.00022
RCC-NE-Sump-BT	5/30/2020 14:30	XV8355	M	C037043	3.17	0.00398	3.53	<0.00004	422	0.547	221	<0.00002	<0.01	<0.01	0.00211	<0.01	<0.01	0.00035	0.0065	0.0016	0.00242	0.038	<0.0002	<0.002	0.291	<0.00002	62.1	<0.002	<0.0004
RCC-NE-Sump-BT	6/10/2020 13:50	XX4756	M	C040036	12.3	0.00615	11.2	0.000035	250	0.214	95.2	0.000052	0.0059	0.0727	0.00241	0.0175	0.0266	0.00306	0.332	0.0074	0.00412	0.059	<0.0001	<0.001	0.423	0.00001	21.5	0.0033	<0.0002
RCC-NE-Sump-BT	6/20/2020 14:45	XY9029	M	C042884	2.44	0.00212	3.48	<0.00002	93.6	0.458	67.8	0.000014	<0.005	<0.005	0.00167	<0.005	0.0052	<0.0001	0.0155	0.00057	0.00049	0.143	<0.0001	<0.001	0.278	0.000026	76.8	<0.001	0.00049
RCC-NE-Sump-BT	6/25/2020 16:00	XZ5985	M	C044346	2.13	0.00088	4.63	<0.00002	26.9	0.199	12.2	0.000031	<0.005	0.0267	0.00083	<0.005	0.0122	0.00069	0.055	0.00054	0.00071	0.118	<0.0001	<0.001	0.073	<0.00001	39.3	<0.001	<0.0002
RCC-NE-Sump-BT	6/30/2020 13:10	YA2737	M	C045692	3.11	0.00155	5.35	<0.00002	75.2	0.372	36.6	0.000033	<0.005	0.038	0.00144	<0.005	0.0153	0.00053	0.0099	0.00085	0.00063	0.158	<0.0001	<0.001	0.23	0.000038	60.4	<0.001	0.00043
RCC-NE-Sump-BT	7/9/2020 15:10	YB4141	M	C047920	2.30	0.00201	3.69	<0.00002	73.3	0.494	64.4	0.000013	<0.005	<0.005	0.00173	<0.005	0.008	0.00012	0.0146	<0.0005	0.00044	0.15	<0.0001	<0.001	0.223	0.000033	78.1	<0.001	0.00026
RCC-NE-Sump-BT	7/14/2020 13:00	YC1071	M	C049344	8.05	0.00172	14	0.000208	145	0.375	86.6	0.000106	<0.005	0.134	0.002	0.0189	0.0731	0.00318	0.012	0.00259	0.00252	0.123	<0.0001	<0.001	0.297	0.000039	57.9	0.0026	0.00051
RCC-NE-Sump-BT	7/23/2020 14:50	YD4257	M	C051864	2.63	0.00183	3.77	<0.00002	78.9	0.635	56.6	0.000018	<0.005	<0.005	0.00155	<0.005	0.0108	<0.0001	0.016	0.00059	0.00037	0.109	<0.0001	<0.001	0.324	0.000033	72.3	<0.001	0.00033
RCC-NE-Sump-BT	8/1/2020 12:00	YE6668	M	C054219	2.74	0.00161	3.21	<0.00002	83.6	0.544	51.0	0.000018	<0.005	<0.005	0.00155	<0.005	0.0077	0.00026	0.0317	0.00064	0.00054	0.099	<0.0001	<0.001	0.32	<0.00001	64.2	<0.001	<0.0002
RCC-NE-Sump-BT	8/13/2020 12:25	YG7259	M	C057823	2.78	0.00186	3.54	<0.00002	85.1	0.562	50.4	0.000015	0.0051	<0.005	0.00147	<0.005	0.0059	<0.0001	0.0211	0.00058	0.00051	0.094	<0.0001	<0.001	0.301	<0.00001	52.4	<0.001	<0.0002
RCC-NE-Sump-BT	8/22/2020 12:00	YI0131	M	C060262	10.8	0.00243	19.1	0.00104	112	0.414	71.5	0.000161	<0.01	0.194	0.00211	0.029	0.154	0.00273	0.0264	0.00295	0.00234	0.081	<0.0001	<0.001	0.307	<0.00001	35.9	0.0078	<0.0002
RCC-Zula-Ditch	4/7/2020 12:20	XQ3415	M	C024753	8.38	0.0035	6.8	0.000022	221	0.246	75.2	0.000016	<0.005	0.0123	0.00204	0.0081	0.0124	0.00046	0.428	0.00178	0.00263	0.04	<0.0001	<0.001	0.25	<0.00001	32.9	0.0018	0.00037
RCC-Zula-Ditch	4/23/2020 14:30	XR7183	M	C027994	8.01	0.00485	7.25	0.000027	229	0.227	99.5	0.000029	<0.005	0.0237	0.00225	0.0104	0.0314	0.00092	0.273	0.00194	0.00287	0.054	<0.0001	<0.001	0.289	<0.00001	53.6	0.0017	0.00041
RCC-Zula-Ditch	4/28/2020 12:55	XS2088	M	C029151	7.76	0.00488	6.26	0.000021	193	0.226	104	<0.00001	<0.005	0.0074	0.00243	0.0079	0.0154	0.00043	0.486	0.00221	0.0034	0.046	<0.0001	<0.001	0.319	<0.00001	32.5	0.0023	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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
RCC-Zula-Ditch	5/6/2020 16:10	XT1604	M	C031246	13.0	0.004	7.49	0.000048	460	0.42	167	<0.00001	<0.005	0.0214	0.00306	0.0172	0.0279	0.00056	0.4	0.00214	0.00359	0.038	<0.0001	<0.001	0.327	0.000011	28.0	0.0022	<0.0002
RCC-Zula-Ditch	5/13/2020 12:25	XT8151	M	C032775	7.43	0.00342	5.54	0.000024	234	0.209	89.7	0.000021	<0.005	<0.005	0.00247	0.0065	0.0117	0.00039	0.633	0.00213	0.00316	0.041	<0.0001	<0.001	0.339	<0.00001	26.2	0.0013	<0.0002
RCC-Zula-Ditch	5/19/2020 12:55	XU3582	M	C033944	11.3	0.00465	6.54	<0.00002	307	0.287	111	0.000018	<0.005	<0.005	0.00318	0.0095	0.0085	0.0003	0.714	0.00326	0.00451	0.04	<0.0001	<0.001	0.398	<0.00001	24.3	0.0021	<0.0002
RSEM-L5E-EOP	4/13/2020 10:30	XQ5693	M	C025217	4.63	0.00646	3.29	<0.00002	33.8	0.302	77.9	0.000022	<0.005	0.0098	0.00353	<0.005	0.0077	0.0002	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002
RSEM-L5E-EOP	4/14/2020 10:45	XQ8324	M	C025913	3.87	0.0046	2.54	<0.00002	24.1	0.252	56.5	0.000024	<0.005	0.0151	0.00335	<0.005	0.008	0.00036	0.0062	<0.0005	0.00043	0.039	<0.0001	<0.001	<0.05	0.000037	64.3	<0.001	0.00062
RSEM-L5E-EOP	4/14/2020 10:55	XQ8325	D	C025913	3.91	0.00461	2.22	<0.00002	24.5	0.249	59.6	0.000026	<0.005	0.0136	0.0034	<0.005	0.0066	0.00046	0.0052	<0.0005	0.00046	0.038	<0.0001	<0.001	<0.05	0.000045	61.2	<0.001	0.00061
RSEM-L5E-EOP	4/15/2020 18:00	XQ9343	M	C026226	3.47	0.00379	2.31	<0.00002	22.2	0.237	49.4	0.000037	<0.005	0.0119	0.00269	<0.005	0.0144	0.00025	0.0091	<0.0005	0.00027	0.046	<0.0001	<0.001	<0.05	0.000085	58.5	<0.001	0.00067
RSEM-L5E-EOP	4/16/2020 14:35	XR0410	M	C026516	3.76	0.00345	4.46	0.000034	21.1	0.231	49.8	0.000047	<0.005	0.0378	0.00242	0.0072	0.0144	0.00048	0.0094	<0.0005	0.0002	0.049	<0.0001	<0.001	<0.05	0.000077	58.5	<0.001	0.00048
RSEM-L5E-EOP	4/17/2020 12:50	XR0399	M	C026514	3.85	0.00346	5.58	0.000032	19.4	0.241	49.1	0.000057	<0.005	0.0452	0.00281	0.0082	0.019	0.00053	0.0108	<0.0005	0.00058	0.046	<0.0001	<0.001	<0.05	0.000025	53.7	<0.001	0.00042
RSEM-L5E-EOP	4/18/2020 13:10	XR2303	M	C026869	2.96	0.00253	2.88	<0.00002	16.0	0.199	37.0	0.000034	<0.005	0.0149	0.0023	<0.005	0.0053	0.00037	0.0103	<0.0005	0.00044	0.046	<0.0001	<0.001	<0.05	0.000044	48.5	<0.001	0.00036
RSEM-L5E-EOP	4/19/2020 16:30	XR2518	M	C026927	3.22	0.00308	3.49	<0.00002	17.4	0.218	41.8	0.000028	<0.005	0.0294	0.00259	<0.005	0.0092	0.00034	0.0104	<0.0005	0.00029	0.056	<0.0001	<0.001	<0.05	0.000052	46.6	<0.001	0.00034
RSEM-L5E-EOP	4/20/2020 14:20	XR3422	M	C027099	2.95	0.00295	2.02	<0.00002	17.7	0.207	42.9	0.000017	<0.005	0.0166	0.00251	<0.005	0.0073	0.00012	0.0914	<0.0005	0.00037	0.064	<0.0001	<0.001	<0.05	0.000046	46.5	<0.001	0.00066
RSEM-L5E-EOP	4/20/2020 14:30	XR3423	D	C027099	3.10	0.00288	2.16	<0.00002	17.9	0.226	44.1	0.000017	<0.005	0.0384	0.00287	<0.005	0.0106	<0.0001	0.0983	<0.0005	0.0002	0.068	<0.0001	<0.001	<0.05	0.000065	48.9	<0.001	0.00072
RSEM-L5E-EOP	4/21/2020 13:10	XR4954	M	C027465	3.39	0.00303	1.72	<0.00002	22.5	0.215	44.9	<0.00001	<0.005	0.0071	0.00283	<0.005	<0.005	0.0001	0.0047	<0.0005	0.00029	0.057	<0.0001	<0.001	<0.05	0.000022	45.8	<0.001	0.00044
RSEM-L5E-EOP	4/22/2020 13:50	XR6357	M	C027799	3.91	0.00343	2.2	<0.00002	26.7	0.25	56.7	<0.00001	<0.005	0.0074	0.00349	<0.005	0.0156	<0.0001	0.0066	<0.0005	0.00017	0.065	<0.0001	<0.001	<0.05	0.000039	51.6	<0.001	0.00055
RSEM-L5E-EOP	4/23/2020 11:40	XR7179	M	C027994	2.86	0.003	2.03	<0.00002	19.8	0.203	43.0	0.000022	<0.005	<0.005	0.00268	<0.005	<0.005	0.00018	0.0113	<0.0005	0.00031	0.061	<0.0001	<0.001	<0.05	<0.00001	49.8	<0.001	0.00043
RSEM-L5E-EOP	4/23/2020 11:50	XR7180	D	C027994	3.38	0.00283	1.88	<0.00002	23.5	0.246	49.2	0.000022	<0.005	<0.005	0.00297	<0.005	<0.005	0.00026	0.0122	<0.0005	<0.0001	0.07	<0.0001	<0.001	<0.05	<0.00001	55.6	<0.001	0.00048
RSEM-L5E-EOP	4/24/2020 13:30	XR7271	M	C028014	3.14	0.00228	1.51	<0.00002	21.8	0.227	48.6	0.000014	<0.005	<0.005	0.00292	<0.005	<0.005	0.00018	0.0035	<0.0005	0.00024	0.059	<0.0001	<0.001	<0.05	0.00002	46.2	<0.001	0.00036
RSEM-L5E-EOP	4/25/2020 13:30	XR8897	M	C028412	3.18	0.00297	1.47	<0.00002	22.0	0.25	44.4	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	0.0394	<0.0005	0.00024	0.059	<0.0001	<0.001	<0.05	0.000024	51.7	<0.001	0.00034
RSEM-L5E-EOP	4/26/2020 14:15	XR8995	M	C028429	3.00	0.00277	1.42	<0.00002	21.2	0.241	42.5	<0.00001	<0.005	<0.005	0.00276	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00032	0.058	<0.0001	<0.001	<0.05	0.000037	50.5	<0.001	0.00038
RSEM-L5E-EOP	4/27/2020 9:55	XS0056	M	C028666	3.67	0.00285	1.72	<0.00002	27.5	0.272	10.6	<0.00001	<0.005	<0.005	0.0032	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	0.012	<0.0001	<0.001	<0.05	<0.00001	56.1	<0.001	<0.0002
RSEM-L5E-EOP	4/27/2020 10:05	XS0057	D	C028666	3.45	0.00293	1.62	<0.00002	25.8	0.254	67.2	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	0.012	<0.0001	<0.001	<0.05	<0.00001	58.1	<0.001	<0.0002
RSEM-L5E-EOP	4/28/2020 15:05	XS2091	M	C029151	3.44	0.003	1.7	<0.00002	26.8	0.251	52.7	<0.00001	<0.005	<0.005	0.00306	<0.005	0.0057	<0.0001	0.0075	<0.0005	0.00032	0.056	<0.0001	<0.001	<0.05	0.000027	51.3	<0.001	0.00037
RSEM-L5E-EOP	4/29/2020 13:50	XS3522	M	C029452	3.31	0.00285	1.58	<0.00002	27.2	0.254	54.0	<0.00001	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	0.0214	<0.0005	0.00042	0.061	<0.0001	<0.001	<0.05	<0.00001	61.9	<0.001	0.00039
RSEM-L5E-EOP	4/30/2020 14:10	XS4885	M	C029734	3.48	0.003	1.52	<0.00002	30.7	0.273	60.4	0.000025	<0.005	<0.005	0.0031	<0.005	0.006	<0.0001	0.0042	<0.0005	0.00055	0.052	<0.0001	<0.001	<0.05	0.000038	53.6	<0.001	<0.0002
RSEM-L5E-EOP	5/1/2020 13:20	XS5999	M	C029956	3.63	0.00362	1.61	<0.00002	30.8	0.29	58.0	0.000012	<0.005	<0.005	0.00356	<0.005	<0.005	<0.0001	0.0061	0.00055	0.0004	0.064	<0.0001	<0.001	<0.05	0.000044	61.1	<0.001	0.00047
RSEM-L5E-EOP	5/3/2020 9:15	XS7393	M	C030307	3.44	0.00261	1.4	<0.00002	31.3	0.277	59.3	0.000013	<0.005	<0.005	0.00319	<0.005	0.0053	0.00024	0.0076	0.00051	0.00046	0.057	<0.0001	<0.001	<0.05	0.000043	57.3	<0.001	0.00036
RSEM-L5E-EOP	5/4/2020 15:30	XS8357	M	C030506	3.85	0.00251	1.93	<0.00002	33.2	0.314	65.9	0.000017	0.005	0.006	0.0035	<0.005	0.0061	<0.0001	0.0135	<0.0005	0.00038	0.064	<0.0001	<0.001	0.052	0.00002	66.3	<0.001	0.00028
RSEM-L5E-EOP	5/5/2020 13:15	XT0142	M	C030949	3.68	0.00249	1.67	<0.00002	33.0	0.308	69.9	<0.00001	<0.005	<0.005	0.00336	<0.005	0.0146	0.00029	0.0127	<0.0005	0.00027	0.071	<0.0001	<0.001	<0.05	0.000023	70.8	<0.001	0.00034
RSEM-L5E-EOP	5/6/2020 17:15	XT1606	M	C031246	3.22	0.00241	1.8	<0.00002	30.6	0.321	76.5	<0.00001	<0.005	<0.005	0.00381	<0.005	0.0096	0.00011	0.0072	<0.0005	0.00033	0.078	<0.0001	<0.001	<0.05	0.000033	75.4	<0.001	0.00021
RSEM-L5E-EOP	5/7/2020 14:35	XT2580	M	C031444	3.38	0.00183	2.37	<0.00002	41.5	0.388	103	<0.00001	<0.005	<0.005	0.00367	<0.005	<0.005	<0.0001	0.0103	<0.0005	0.00036	0.078	<0.0001	<0.001	<0.05	0.000032	97.9	<0.001	<0.0002
RSEM-L5E-EOP	5/8/2020 12:20	XT2571	M	C031442	2.87	0.00171	2.03	<0.00002	29.6	0.343	83.5	0.000018	<0.005	<0.005	0.00346	<0.005	<0.005	<0.0001	0.0052	<0.0005	0.00033	0.083	<0.0001	<0.001	<0.05	0.000035	92.1	<0.001	0.00021
RSEM-L5E-EOP	5/9/2020 14:10	XT4491	M	C031859	2.15	0.0013	1.88	<0.00002	29.5	0.28	88.8	<0.00001	<0.005	0.0071	0.00296	<0.005	<0.005	<0.0001	0.0613	<0.0005	0.00054	0.071	<0.0001	<0.001	<0.05	0.000043	99.6	<0.001	<0.0002
RSEM-L5E-EOP	5/10/2020 12:00	XT4526	M	C031867	2.27	0.00131	2.21	<0.00002	33.0	0.324	107	<0.00001	<0.005	<0.005	0.00321	<0.005	0.0053	<0.0001	0.0254	<0.0005	0.00051	0.075	<0.0001	<0.001	<0.05	0.000037	114	<0.001	<0.0002
RSEM-L5E-EOP	5/11/2020 11:45	XT5201	M	C032074	2.07	0.00074	2.51	<0.00002	30.2	0.32	112	<0.00001	<0.005	<0.005	0.00284	<0.005	<0.005	0.00023	0.0195	<0.0005	0.0002	0.082	<0.0001	<0.001	<0.05	0.000036	138	<0.001	0.00022
RSEM-L5E-EOP	5/12/2020 14:45	XT7073	M	C032509	2.19	0.00076	3.05	0.000021	33.4	0.374	122	<0.00001	<0.005	0.0088	0.00292	<0.005	<0.005	<0.0001	0.0223	<0.0005	0.00027	0.082	<0.0001	<0.001	<0.05	0.000049	151	<0.001	0.00031
RSEM-L5E-EOP	5/13/2020 14:45	XT8157	M	C032775	1.79	0.0005	3.91	<0.00002	24.6	0.339	114	0.000031	<0.005	0.0119	0.00257	<0.005	<0.005	0.00023	0.016	<0.0005	0.00027	0.071	<0.0001	<0.001	<0.05	0.000072	142	<0.001	0.00053
RSEM-L5E-EOP	5/14/2020 13:40	XU0101	M	C033161	1.62	0.00029	3.48	<0.00002	22.9	0.334	113	0.000015	<0.005	0.0134	0.00229	<0.005	<0.005	0.00022	0.0068	<0.0005	0.00021	0.072	<0.0001	<0.001	<0.05	0.000065	144	<0.001	0.00057
RSEM-L5E-EOP	5/15/2020 10:15	XU0133	M	C033173	1.49	0.00036	3.16	<0.00002	21.9	0.331	109	0.000027	<0.005	<0.005	0.00225	<0.005	<0.005	0.00057	0.0166	<0.0005	0.00029	0.069	<0.0001	<0.001	<0.05	0.000062	145	<0.001	0.00069
RSEM-L5E-EOP	5/16/2020 14:40	XU2653	M	C033733	1.49	0.00033	3.15	<0.00002	24.5	0.361	114	0.000014	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	0.022	<0.0005	0.00028	0.065	<0.0001	<0.001	<0.05	0.000057	147	<0.001	0.00055
RSEM-L5E-EOP	5/17/2020 13:10	XU2519	M	C033704	1.47	0.00033	2.87	<0.00002	25.0	0.368	114	<0.00001	<0.005	<0.005	0.00235	<0.005	<0.005	0.00015	0.0213	<0.0005	0.0002	0.064	<0.0001	<0.001	<0.05	0.00004	145	<0.001	0.00053
RSEM-L5E-EOP	5/18/2020 14:35	XU2640	M	C033728	1.51	0.00029	2.84	<0.00002	25.2	0.368	115	0.000011	<0.005	<0.005	0.00236	<0.005	0.0067	0.00014	0.0204	<0.0005	0.00032	0.062	<0.0001	<0.001	<0.05	0.000024	141	<0.001	0.00055
RSEM-L5E-EOP	5/19/2020 15:30	XU3588	M	C033944	1.64	0.00051	3.07	<0.00002	25.6	0.394	118	<0.00001	<0.005	<0.005	0.00251	<0.005	0.0056	0.00025	0.0218	<0.0005	0.00032	0.068	<0.0001	<0.001	<0.05	<0.00001	155	<0.001	0.0005
RSEM-L5E-EOP	5/20/2020 14:05	XU5561	M	C034306	1.36	0.0004	2.36	<0.00002	24.3	0.293	110	<0.00001	<0.005	0.0064	0.00201	<0.005	0.0065	0.00026	0.0196	<0.0005	0.00025	0.057	<0.0001	<0.001	<0.05	<0.00001	127	<0.001	0.00039
RSEM-L5E-EOP	5/21/2020 16:00	XU7001	M	C034623	1.33	0.00038	2.26	<0.00002	21.5	0.3	106	0.000018	<0.005	<0.005	0.00197	<0.005	<0.005	0.00026	0.0199	<0.0005	0.00023	0.044	<0.0001	<0.001	<0.05	<0.00001	123	<0.001	0.00034
RSEM-L5E-EOP	5/22/2020 17:05	XU8404	M	C034984	1.36	0.0005	2.18	<0.00002	21.1	0.288	102	0.000031	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0133	<0.0005	0.00023	0.051	<0.0001	<0.001	<0.05	<0.00001	116	<0.001	0.00031
RSEM-L5E-EOP	5/23/2020 15:40	XU8589	M	C034993	1.63	0.00066	2.51	<0.00002	21.3	0.326	97.9	0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0096	<0.0005	0.00029	0.054	<0.0001	<0.001	<0.05	<0.00001	118	<0.001	0.0002
RSEM-L5E-EOP	5/24/2020 13:45	XU8649	M	C035010	1.63	0.0007	2.26	<0.00002	22.0	0.318	99.1	0.00001	<0.005	<0.005	0.002	<0.005	<0.005	<0.0001	0.0088	<0.0005	0.0003	0.054	<0.0001	<0.001	<0.05	<0.00001	115	<0.001	<0.0002
RSEM-L5E-EOP	6/9/2020 12:30	XX3622	M	C039793	5.21	0.00529	4.35	0.000028	33.3	0.455	135	0.000054	<0.005	0.043	0.00409	0.0057	0.0129	0.00174	0.009	<0.0005	0.00051	0.046	<0.0001	<0.001	<0.05	0.000094	124	<0.001	0.00173
RSEM-L5E-EOP	6/10/2020 11:55	XX4750	M	C040036	5.36	0.00563	2.61	<0.00002	34.1	0.485	140	0.000023	<0.005	0.024	0.00429	<0.005	<0.005	0.00041	0.0106	<0.0005	0.00046	0.047	<0.0001	<0.001	<0.05	0.000104	123	<0.001	0.00187
RSEM-L5E-EOP	6/10/2020 12:05	XX4751	D	C040036	5.47	0.00567	2.5	<0.00002	35.1	0.512	143	0.000023	<0.005	0.016	0.00448	<0.005	<0.005	0.00041	0.0108	<0.0005	0.00043	0.047	<0.0001	<0.001	<0.05	0.000107	123	<0.001	0.00194
RSEM-L5E-EOP	6/11/2020 14:35	XX7043	M	C040416	5.22	0.00535	1.62	<0.00002	33.6	0.475	135	0.000017	<0.005	<0.005	0.00441	<0.005	<0.005	0.00013	0.0116	<0.0005	0.00047	0.051	<0.0001	<0.001	<0.05	0.000094	128	<0.001	0.00183
RSEM-L5E-EOP	6/12/2020 14:55	XX9584	M	C040980	5.33	0.00526	1.51	<0.00002	32.9	0.482	134	0.000015	<0.005	<0.005	0.00441	<0.005	<0.005	<0.0001	0.0118	<0.0005	0.00047	0.049	<0.0001	<0.001	<0.05	0.00008	128	<0.001	0.00169
RSEM-L5E-EOP	6/13/2020 16:15	XX9603	M	C040986	5.33	0.00504	1.63	<0.00002	33.5	0.474	136	0.000017	<0.005	<0.005	0.00445	<0.005	<0.005	0.00026	0.0104	<0.0005	0.00048	0.047	<0.0001	<0.001	<0.05	0.000056	123	<0.001	0.00126
RSEM-L5E-EOP	6/14/2020 13:00	XX9643	M	C040993	5.88	0.0052	2.51	<0.00002	34.7	0.482	133	0.000031	<0.005	0.025	0.00444	<0.005	0.0053	0.00052	0.0117	<0.0005	0.0005	0.05	<0.0001	<0.001	0.051	0.000045	125	<0.001	0.00118
RSEM-L5E-EOP	6/14/2020 13:10	XX9644	D	C040993	5.85	0.00516	2.01	<0.00002	34.7	0.482	132	0.000028	<0.005	0.0135	0.00436	<0.005	0.0051	0.00037	0.0116	<0.0005	0.00052	0.049	<0.0001	<0.001	<0.05	0.000044	126	<0.001	0.00121
RSEM-L5E-EOP	6/15/2020 19:45	XY1608	M	C041415	5.22	0.0115	2.17	<0.00002	31.7	0.634	189	0.000028	<0.005	0.0099	0.00485	<0.005	0.0711	0.00022	0.0079	<0.0005	0.0003	0.067	<0.0001	<0.001	0.057	0.00115	180	<0.001	0.0196
RSEM-L5E-EOP	6/16/2020 12:40	XY1512	M	C041388	5.45	0.0147	2.03	<0.00002	36.8	0.75	234	0.000026	<0.005	<0.005	0.00542	<0.005	0.0567	0.00015	0.0072	<0.0005	0.00036	0.078	<0.0001	<0.001	0.059	0.00152	219	<0.001	0.0305
RSEM-L5E-EOP	6/17/2020 17:30	XY6281	M	C042380	5.45	0.0157	1.76	<0.00004	51.1	0.705	233	0.000023	<0.01	<0.01	0.00487	<0.01	0.05	<0.0002	0.0096	<0.0005	0.00039	0.076	<0.0001	<0.001	0.067	0.00111	204	<0.001	0.0219
RSEM-L5E-EOP	6/18/2020 16:50	XY6288	M	C042383	6.18	0.0191	1.92	<0.00004	77.6	0.782	273	0.000023	<0.01	<0.01	0.00559	<0.01	0.036	<0.0002	0.0092	0.00053	0.00039	0.071	<0.0001	<0.001	0.074	0.000864	200	<0.001	0.0179
RSEM-L5E-EOP	6/19/2020 10:45	XY6267	M	C042375	7.27	0.0146	3.52	<0.00002	90.4	0.691	232	0.000036	<0.005	0.0226	0.00533	<0.005	0.0162	0.00073	0.0059	0.00072	0.00051	0.071	<0.0001	<0.001	0.09	0.00047	181	0.001	0.0103
RSEM-L5E-EOP	6/20/2020 12:45	XY9024	M	C042884	6.46	0.00891	5.02	0.000025	58.1	0.459	140	0.000045	<0.005	0.0418	0.00396	<0.005	0.0088	0.00239	0.0048	0.00054	0.00049	0.058	<0.0001	<0.001	0.069	0.000147	122	<0.001	0.00336
RSEM-L5E-EOP	6/21/2020 11:00	XY9117	M	C042904	5.79	0.00518	5.47	0.000031	39.2	0.346	93.8	0.000045	<0.005	0.038	0.00323	<0.005	0.0106	0.00165	0.0058	<0.0005	0.00049	0.059	<0.0001	<0.001	0.063	0.00009	97.2	<0.001	0.00152
RSEM-L5E-EOP	6/22/2020 17:10	XZ0409	M	C043197	5.84	0.00504	3.39	0.000024	39.5	0.372	95.8	0.000034	<0.005	0.0203	0.00331	<0.005	0.0058	0.00122	0.0062	<0.0005	0.00046	0.055	<0.0001	<0.001	0.055	0.000047	99.2	<0.001	0.00104
RSEM-L5E-EOP	6/23/2020 17:30	XZ2253	M	C043604	5.49	0.00475	3.03	<0.00002	38.6	0.376	97.6	0.00003	<0.005	0.0169	0.00339	<0.005	<0.005	0.00055	0.0062	<0.0005	0.00047	0.057	<0.0001	<0.001	0.056	0.000049	104	<0.001	0.00104
RSEM-L5E-EOP	6/24/2020 11:40	XZ5346	M	C044267	5.67	0.00533	3.17	<0.00002	43.9	0.383	109	0.000029	<0.005	0.0112	0.00371	<0.005	<0.005	0.0005	0.0062	<0.0005	0.00054	0.057	<0.0001	<0.001	0.063	0.00006	106	<0.001	0.00115
RSEM-L5E-EOP	6/24/2020 11:50	XZ5347	D	C044267	5.63	0.00529	3.11	<0.00002	44.7	0.377	106	0.00003	<0.005	0.0131	0.00361	<0.005	<0.005	0.00039	0.0058	<0.0005	0.00052	0.057	<0.0001	<0.001	0.063	0.000061	109	<0.001	0.00115
RSEM-L5E-EOP	6/25/2020 18:10	XZ5988	M	C044346	6.32	0.00779	3.08	<0.00002	60.7	0.467	145	0.00003	<0.005	0.0122	0.00412	<0.005	<0.005	0.00041	0.0055	0.00054	0.00055	0.059	<0.0001	<0.001	0.078	0.00009	129	<0.001	0.00206
RSEM-L5E-EOP	7/2/2020 16:30	YA4192	M	C045985	4.99	0.006	1.59	<0.00002	45.1	0.503	147	0.000019	<0.005	<0.005	0.00462	<0.005	<0.005	0.00021	0.0485	<0.0005	0.00047	0.058	<0.0001	<0.001	0.072	0.000192	139	<0.001	0.00367

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-L5E-EOP	7/3/2020 11:00	YA5151	M	C046179	4.27	0.00595	4.43	0.000031	25.1	0.486	122	0.000047	<0.005	0.0367	0.00451	0.0056	0.0159	0.00065	0.0032	<0.0005	0.00038	0.064	<0.0001	<0.001	0.054	0.000064	120	<0.001	0.0008
RSEM-L5E-EOP	7/3/2020 11:10	YA5152	D	C046179	4.12	0.00587	4.22	0.000032	24.3	0.473	117	0.000052	<0.005	0.0361	0.00441	0.0056	0.0157	0.00064	0.0032	<0.0005	0.00037	0.063	<0.0001	<0.001	0.054	0.000071	119	<0.001	0.00077
RSEM-L5E-EOP	7/4/2020 16:05	YA6737	M	C046470	4.38	0.009	5.29	0.000024	35.3	0.431	133	0.000054	<0.005	0.0647	0.00508	0.0067	0.0152	0.0017	0.0042	<0.0005	0.00039	0.057	<0.0001	<0.001	0.064	0.000196	131	<0.001	0.00467
RSEM-L5E-EOP	7/5/2020 13:10	YA6922	M	C046500	5.87	0.0146	5.47	<0.00002	138	0.569	248	0.00006	<0.005	0.0638	0.00521	0.0066	0.0235	0.00168	0.0073	0.00078	0.00042	0.076	<0.0001	<0.001	0.116	0.000541	173	<0.001	0.0127
RSEM-L5E-EOP	7/6/2020 13:25	YA8351	M	C046846	5.13	0.0144	3.25	<0.00002	124	0.631	228	0.000026	<0.005	0.0126	0.00529	<0.005	0.0097	0.00034	0.007	0.00075	0.00053	0.066	<0.0001	<0.001	0.11	0.000338	151	<0.001	0.00797
RSEM-L5E-EOP	7/7/2020 16:20	YB0053	M	C047206	5.50	0.0172	2.55	<0.00002	143	0.609	256	0.000033	<0.005	<0.005	0.0056	<0.005	0.0105	0.00023	0.0076	0.00077	0.00043	0.064	<0.0001	<0.001	0.118	0.00035	160	<0.001	0.00827
RSEM-L5E-EOP	7/22/2020 12:30	YD2615	M	C051641	6.59	0.0279	1	<0.00004	210	1.03	367	0.000024	<0.01	<0.01	0.00076	<0.01	<0.01	<0.0002	0.0481	<0.001	0.00045	0.029	<0.0002	<0.002	0.128	<0.00002	250	<0.002	<0.0004
RSEM-L5E-EOP	7/22/2020 12:40	YD2616	D	C051641	7.13	0.0296	1.07	<0.00004	226	1.09	397	0.000024	<0.01	<0.01	0.00082	<0.01	<0.01	<0.0002	0.0483	<0.001	0.00044	0.027	<0.0002	<0.002	0.125	<0.00002	240	<0.002	<0.0004
RSEM-L5E-EOP	7/23/2020 11:05	YD4252	M	C051864	6.89	0.0296	0.868	<0.00004	228	1.11	392	<0.00002	<0.01	<0.01	<0.0002	<0.01	<0.01	<0.0002	0.0312	<0.001	0.00035	0.028	<0.0002	<0.002	0.134	<0.00002	269	<0.002	<0.0004
RSEM-L5E-EOP	7/23/2020 11:15	YD4253	D	C051864	6.42	0.0281	0.8	<0.00004	215	1.04	364	<0.00002	<0.01	<0.01	<0.0002	<0.01	<0.01	<0.0002	0.0315	<0.001	0.00036	0.027	<0.0002	<0.002	0.133	<0.00002	272	<0.002	<0.0004
RSEM-L5E-EOP	7/24/2020 11:35	YD5907	M	C052038	6.87	0.0267	0.865	<0.00002	240	1.12	382	0.000023	<0.005	<0.005	0.00023	<0.005	<0.005	0.00014	0.016	<0.001	0.00035	0.022	<0.0002	<0.002	0.136	<0.00002	274	<0.002	<0.0004
RSEM-L5E-EOP	7/25/2020 10:30	YD7672	M	C052402	7.05	0.0281	0.926	<0.00004	242	1.13	407	0.000021	<0.01	<0.01	0.00031	<0.01	<0.01	<0.0002	0.017	<0.0025	<0.0005	0.016	<0.0005	<0.005	<0.25	<0.00005	266	<0.005	<0.001
RSEM-L5E-EOP	7/25/2020 10:40	YD7673	D	C052402	7.03	0.0277	0.848	<0.00004	239	1.1	405	<0.00002	<0.01	<0.01	0.0003	<0.01	<0.01	<0.0002	0.016	<0.0025	<0.0005	0.016	<0.0005	<0.005	<0.25	<0.00005	269	<0.005	<0.001
RSEM-L5E-EOP	7/26/2020 11:05	YD7710	M	C052420	8.60	0.0332	1.05	<0.00004	296	1.37	495	0.000021	<0.01	<0.01	0.00038	<0.01	<0.01	<0.0002	0.0192	<0.001	0.00042	0.01	<0.0002	<0.002	0.126	<0.00002	269	<0.002	<0.0004
RSEM-L5E-EOP	7/27/2020 11:00	YD7770	M	C052432	7.49	0.0292	0.886	<0.00004	255	1.18	428	<0.00002	<0.01	<0.01	0.00036	<0.01	<0.01	<0.0002	0.019	<0.0025	<0.0005	0.007	<0.0005	<0.005	<0.25	<0.00005	264	<0.005	<0.001
RSEM-L5E-EOP	7/29/2020 13:00	YE4005	M	C053695	6.60	0.028	1.02	<0.00004	220	1.12	389	<0.00002	<0.01	<0.01	0.00049	<0.01	<0.01	<0.0002	0.0119	<0.001	0.00051	0.008	<0.0002	<0.002	0.121	<0.00002	267	<0.002	<0.0004
RSEM-L5E-EOP	7/30/2020 17:00	YE5559	M	C054021	7.09	0.0229	1.2	<0.00004	235	1.03	372	0.000028	<0.01	<0.01	0.00141	<0.01	<0.01	<0.0002	0.0204	<0.001	0.00061	0.021	<0.0002	<0.002	0.146	<0.00002	253	<0.002	<0.0004
RSEM-L5E-EOP	8/29/2020 13:25	YJ1742	M	C062465	6.65	0.0172	1.23	<0.00004	78.5	0.835	280	<0.00002	<0.01	<0.01	0.00645	<0.01	<0.01	<0.0002	0.0052	0.00053	0.00046	0.051	<0.0001	<0.001	0.081	0.000024	217	<0.001	0.00024
RSEM-L5E-EOP	8/30/2020 10:45	YJ1568	M	C062426	6.37	0.0163	1.06	<0.00002	78.9	0.85	267	0.000017	0.0091	<0.005	0.00627	<0.005	<0.005	<0.0001	0.0052	0.00052	0.00043	0.05	<0.0001	<0.001	0.086	0.000017	217	<0.001	0.00024
RSEM-L5E-EOP	8/31/2020 11:45	YJ3636	M	C062857	6.67	0.0149	1.6	<0.00002	88.0	0.914	296	0.000022	0.0088	0.0113	0.00685	<0.005	<0.005	0.00024	0.0057	<0.0005	0.00052	0.049	<0.0001	<0.001	0.103	<0.00001	218	<0.001	<0.0002
RSEM-L5E-EOP	9/1/2020 10:25	YJ6688	M	C063433	6.59	0.0133	1.47	<0.00002	95.6	0.962	303	0.000021	0.0079	0.0074	0.00714	<0.005	<0.005	0.00027	0.0052	<0.0005	0.00056	0.047	<0.0001	<0.001	0.11	<0.00001	215	<0.001	0.00023
RSEM-L5E-EOP	9/2/2020 12:10	YJ7828	M	C063666	6.72	0.013	1.03	<0.00004	97.8	0.973	306	0.000021	<0.01	<0.01	0.00714	<0.01	<0.01	<0.0002	0.0047	0.0005	0.00057	0.047	<0.0001	<0.001	0.096	<0.00001	214	<0.001	<0.0002
RSEM-L5E-EOP	9/2/2020 12:20	YJ7829	D	C063666	6.65	0.0132	1.02	<0.00004	97.8	0.961	308	<0.00002	<0.01	<0.01	0.0072	<0.01	<0.01	0.00025	0.0048	<0.0005	0.00055	0.047	<0.0001	<0.001	0.098	<0.00001	214	<0.001	<0.0002
RSEM-L5E-EOP	9/3/2020 13:35	YK0029	M	C064047	6.61	0.0124	0.929	<0.00002	97.7	0.925	295	0.00002	0.0073	<0.005	0.00718	<0.005	<0.005	0.0003	0.0056	0.00053	0.00062	0.045	<0.0001	<0.001	0.111	<0.00001	215	<0.001	<0.0002
RSEM-L5E-SP	2/29/2020 14:30	XM2365	M	C015500	4.35	0.00606	1.96	<0.00002	19.4	0.269	94.2	<0.00001	<0.005	0.0221	0.00372	<0.005	0.0091	0.00013	0.0107	<0.0005	0.00056	0.043	<0.0001	<0.001	<0.05	0.000032	84.4	<0.001	0.00056
RSEM-L5E-SP	5/2/2020 10:45	XS7459	M	C030328	3.56	0.00296	1.47	<0.00002	29.1	0.298	58.3	0.000015	<0.005	0.0083	0.00331	<0.005	<0.005	0.0003	0.0065	<0.0005	0.00048	0.059	<0.0001	<0.001	<0.05	0.000042	55.0	<0.001	0.00033
RSEM-L5E-SP	5/25/2020 10:30	XU8667	M	C035018	1.38	0.00063	1.71	<0.00002	20.8	0.268	86.0	<0.00001	<0.005	<0.005	0.00179	<0.005	<0.005	<0.0001	0.0112	<0.0005	0.00028	0.053	<0.0001	<0.001	<0.05	<0.00001	116	<0.001	0.00022
RSEM-L5E-SP	5/26/2020 16:30	XV2884	M	C035941	1.65	0.00079	2.07	<0.00002	23.1	0.323	102	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	0.0094	<0.0005	0.00027	0.054	<0.0001	<0.001	<0.05	<0.00001	114	<0.001	<0.0002
RSEM-L5E-SP	5/27/2020 14:30	XV4566	M	C036323	1.68	0.00082	1.86	<0.00002	23.5	0.324	102	<0.00001	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	0.0093	<0.0005	0.00028	0.054	<0.0001	<0.001	<0.05	<0.00001	116	<0.001	0.0002
RSEM-L5E-SP	5/30/2020 17:45	XV8357	M	C037043	1.80	0.00097	1.67	<0.00002	25.0	0.335	104	0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	0.00016	0.0075	<0.0005	0.00033	0.051	<0.0001	<0.001	<0.05	<0.00001	114	<0.001	<0.0002
RSEM-L5E-SP	7/21/2020 11:47	YC8397	M	C050753	6.72	0.0207	1.39	<0.00002	190	0.91	350	0.000024	0.0086	<0.005	0.00217	<0.005	<0.005	0.00018	0.0144	<0.001	0.00056	0.029	<0.0002	<0.002	0.127	<0.00002	220	<0.002	<0.0004
RSEM-L5E-SP	8/28/2020 16:20	YI9496	M	C062013	6.57	0.0175	1.33	<0.00002	77.2	0.925	285	0.000023	0.0089	<0.005	0.00639	<0.005	<0.005	0.00011	0.0051	<0.0005	0.00041	0.051	<0.0001	<0.001	0.097	0.00003	223	<0.001	0.00027
RSEM-L5W-EOP	4/19/2020 16:45	XR2519	M	C026927	6.38	0.00717	4.39	0.000047	147	0.216	116	0.000016	<0.005	0.0125	0.00241	<0.005	0.0061	0.00021	0.0145	0.00134	0.00133	0.044	<0.0001	<0.001	0.064	<0.00001	37.3	0.003	<0.0002
RSEM-L5W-EOP	4/19/2020 19:30	XR3421	M	C027098	6.45	0.0066	4.56	<0.00002	154	0.223	120	0.000017	<0.005	0.0121	0.00238	<0.005	0.0096	0.00054	0.0097	0.00157	0.00105	0.049	<0.0001	<0.001	0.083	0.000034	40.5	0.0031	0.00026
RSEM-L5W-EOP	7/4/2020 16:15	YA6738	M	C046470	3.97	0.00944	2.17	<0.00002	76.8	0.338	141	0.00002	<0.005	0.0165	0.00348	<0.005	<0.005	0.0006	0.0032	<0.0005	0.00026	0.079	<0.0001	<0.001	0.07	0.000032	107	<0.001	<0.0002
RSEM-L5W-EOP	7/5/2020 13:20	YA6923	M	C046500	3.96	0.00951	1.54	<0.00002	77.6	0.341	148	0.000013	<0.005	<0.005	0.00364	<0.005	<0.005	<0.0001	0.0036	<0.0005	0.00025	0.08	<0.0001	<0.001	0.069	0.000033	113	<0.001	<0.0002
RSEM-L5W-EOP	7/7/2020 16:30	YB0054	M	C047206	3.95	0.0101	2.1	<0.00002	75.4	0.373	157	0.000024	<0.005	0.0083	0.00381	<0.005	<0.005	0.00021	0.005	<0.0005	0.00029	0.072	<0.0001	<0.001	0.067	0.000013	111	<0.001	<0.0002
RSEM-L5W-EOP	7/8/2020 16:00	YB2463	M	C047619	4.10	0.00974	2.78	<0.00002	74.0	0.386	159	0.000023	<0.005	0.0159	0.00407	<0.005	<0.005	0.00078	0.0053	<0.0005	0.00033	0.071	<0.0001	<0.001	0.066	<0.00001	117	<0.001	<0.0002
RSEM-L5W-SP	7/3/2020 11:20	YA5153	M	C046179	4.05	0.0125	2.36	<0.00002	92.9	0.418	170	0.000026	<0.005	0.0113	0.00369	<0.005	0.0056	0.00028	0.0033	<0.0005	0.0003	0.128	<0.0001	<0.001	0.076	0.000029	119	<0.001	<0.0002
RSEM-L6-EOP	6/17/2020 17:45	XY6278	M	C042380	4.21	0.00301	1.42	<0.00002	50.2	0.388	93.4	0.000012	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	0.0116	<0.0005	0.00044	0.087	<0.0001	<0.001	0.058	0.000048	85.5	<0.001	0.00025
RSEM-L6-EOP	6/18/2020 13:00	XY6287	M	C042383	4.12	0.0036	1.3	<0.00002	53.6	0.384	96.4	0.000012	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.0124	0.00051	0.00044	0.085	<0.0001	<0.001	0.062	0.000054	86.4	<0.001	0.0004
RSEM-L6-EOP	6/19/2020 11:00	XY6268	M	C042375	4.33	0.00402	1.41	<0.00002	58.8	0.399	101	0.000013	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	0.0166	0.00053	0.00048	0.087	<0.0001	<0.001	0.064	0.000054	87.0	<0.001	0.00047
RSEM-L6-EOP	6/20/2020 13:40	XY9026	M	C042884	4.38	0.0046	1.46	<0.00002	64.2	0.379	104	0.000013	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	0.0129	0.00054	0.00045	0.08	<0.0001	<0.001	0.071	0.000053	87.4	<0.001	0.00048
RSEM-L6-EOP	6/21/2020 11:45	XY9121	M	C042904	4.48	0.00535	1.63	<0.00002	71.6	0.402	111	0.000014	<0.005	<0.005	0.00256	<0.005	<0.005	0.00011	0.0126	0.00065	0.00049	0.089	<0.0001	<0.001	0.077	0.000055	90.6	<0.001	0.00057
RSEM-L6-EOP	6/22/2020 16:30	XZ0406	M	C043197	4.84	0.00705	1.53	<0.00002	88.7	0.466	128	0.000016	<0.005	<0.005	0.00284	<0.005	0.0075	<0.0001	0.0116	0.00073	0.00049	0.087	<0.0001	<0.001	0.086	0.000057	95.0	<0.001	0.00065
RSEM-L6-EOP	6/23/2020 14:00	XZ2252	M	C043604	4.91	0.00669	1.45	<0.00002	87.6	0.468	132	0.000016	<0.005	<0.005	0.00296	<0.005	0.0139	<0.0001	0.0119	0.00078	0.00047	0.087	<0.0001	<0.001	0.086	0.000065	100	<0.001	0.00058
RSEM-L6-EOP	6/27/2020 19:15	XZ9070	M	C044897	4.86	0.00718	1.23	<0.00002	94.0	0.425	129	0.000016	<0.005	<0.005	0.00285	<0.005	<0.005	0.00013	0.012	0.0008	0.00051	0.088	<0.0001	<0.001	0.097	0.000042	97.1	<0.001	<0.0002
RSEM-L6-EOP	6/27/2020 19:25	XZ9071	D	C044897	4.93	0.00715	1.2	<0.00002	96.0	0.432	130	0.000017	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	0.0119	0.00081	0.00051	0.087	<0.0001	<0.001	0.096	0.000048	96.4	<0.001	<0.0002
RSEM-L6-SP	5/29/2020 12:15	XV5617	M	C036525	3.89	0.00216	0.283	<0.00002	46.1	0.369	92.5	0.000013	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	0.0142	<0.0005	0.00042	0.065	<0.0001	<0.001	<0.05	0.000042	82.3	<0.001	<0.0002
RSEM-L6-SP	6/16/2020 10:25	XY1503	M	C041388	4.01	0.00248	1.31	<0.00002	44.1	0.379	88.6	0.000014	<0.005	<0.005	0.00242	<0.005	<0.005	0.00014	0.0111	<0.0005	0.00043	0.08	<0.0001	<0.001	0.058	0.000044	87.5	<0.001	<0.0002
RSEM-L6-SP	6/25/2020 17:30	XZ5987	M	C044346	4.64	0.00639	1.26	<0.00002	84.2	0.414	123	0.000015	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	0.0126	0.00076	0.00049	0.088	<0.0001	<0.001	0.09	0.000048	92.2	<0.001	0.00048
RSEM-L6-SP	7/5/2020 9:25	YA6828	M	C046487	5.21	0.00453	2.73	<0.00002	128	0.456	162	0.000019	<0.005	<0.005	0.00308	<0.005	<0.005	0.00011	0.0102	0.00141	0.00046	0.103	<0.0001	<0.001	0.144	0.000057	93.0	<0.001	0.00107
RSEM-R5a-A-EOP	6/30/2020 11:55	YA2735	M	C045692	3.64	0.00516	2.34	<0.00002	166	0.309	126	0.000021	<0.005	0.011	0.00253	<0.005	<0.005	0.00037	0.0072	0.00055	0.00068	0.084	<0.0001	<0.001	0.169	<0.00001	52.6	<0.001	<0.0002
RSEM-R5a-A-EOP	7/4/2020 13:35	YA6734	M	C046470	3.78	0.00547	7.46	0.000033	153	0.24	117	0.000073	<0.005	0.0968	0.00216	0.0104	0.0132	0.00255	0.0042	<0.0005	0.0005	0.115	<0.0001	<0.001	0.133	<0.00001	51.2	<0.001	0.00022
RSEM-R5a-A-EOP	7/5/2020 11:45	YA6921	M	C046500	4.06	0.00604	6.16	0.000021	252	0.322	175	0.000054	<0.005	0.0791	0.00279	0.0086	0.0113	0.00211	0.005	0.00057	0.00054	0.115	<0.0001	<0.001	0.218	0.000021	54.2	<0.001	0.00067
RSEM-R5A-A-SP	3/29/2020 13:50	XP3927	M	C022584	2.91	0.00169	4.73	0.000034	19.9	0.108	14.7	0.000054	<0.005	0.0375	0.00141	0.0078	0.0215	0.00103	0.0053	<0.0005	0.00037	0.122	<0.0001	<0.001	<0.05	0.000026	28.6	<0.001	0.00023
RSEM-R5A-A-SP	4/12/2020 11:25	XQ6089	M	C025305	2.10	0.00156	5.16	0.000057	13.2	0.0986	14.2	0.0001	<0.005	0.0366	0.0012	0.01	0.0455	0.00024	0.0175	<0.0005	0.00036	0.098	<0.0001	<0.001	<0.05	0.000018	32.5	<0.001	<0.0002
RSEM-R5A-A-SP	6/16/2020 11:35	XY1508	M	C041388	4.30	0.00368	14.9	<0.00004	67.0	0.189	61.6	0.000084	<0.01	0.144	0.00175	0.016	0.013	0.00473	0.0042	<0.0005	0.00043	0.082	<0.0001	<0.001	0.083	0.00002	42.6	<0.001	<0.0002
RSEM-R5A-B-SP	3/29/2020 14:00	XP3928	M	C022584	2.83	0.00248	4.01	0.000032	23.9	0.0908	16.4	0.000061	<0.005	0.0217	0.0014	0.0069	0.018	0.00045	0.0087	0.0005	0.00039	0.082	<0.0001	<0.001	<0.05	0.000015	21.3	<0.001	<0.0002
RSEM-R5A-B-SP	4/12/2020 11:35	XQ6090	M	C025305	5.28	0.00421	21	0.000177	33.1	0.135	24.4	0.000295	<0.005	0.149	0.00247	0.0393	0.118	0.00214	0.0724	0.00052	0.00045	0.097	<0.0001	<0.001	<0.05	0.000011	21.8	<0.001	<0.0002
RSEM-R5A-B-SP	6/16/2020 11:45	XY1509	M	C041388	3.44	0.00515	9.39	<0.00002	64.1	0.166	64.0	0.000052	<0.005	0.137	0.0016	0.0101	0.0071	0.00447	0.0055	<0.0005	0.00047	0.075	<0.0001	<0.001	0.083	0.000017	43.2	<0.001	<0.0002
RSEM-R5A-B-SP	7/3/2020 14:20	YA5154	M	C046179	2.70	0.0037	5.13	0.000048	71.0	0.148	56.4	0.000083	<0.005	0.0274	0.00139	0.0083	0.0225	0.00041	0.0085	<0.0005	0.00042	0.084	<0.0001	<0.001	0.081	0.000011	32.4	<0.001	<0.0002
RSEM-R5A-C-SP	3/29/2020 14:30	XP3929	M	C022584	2.08	0.00276	1.66	<0.00002	45.2	0.0929	40.8	0.00002	<0.005	0.0096	0.00127	<0.005	0.006	0.00026	0.0069	<0.0005	0.0003	0.088	<0.0001	<0.001	<0.05	0.000021	30.5	<0.001	<0.0002
RSEM-R5A-C-SP	4/12/2020 12:15	XQ6091	M	C025305	4.48	0.00536	13.1	0.000109	43.9	0.134	32.8	0.000231	<0.005	0.0495	0.00234	0.027	0.0806	0.00119	0.0784	0.00072	0.00059	0.083	<0.0001	<0.001	0.05	0.000016	23.7	<0.001	<0.0002
RSEM-R5A-C-SP	6/16/2020 12:00	XY1510	M	C041388	4.77	0.00684	11.1	<0.0001	532	0.618	355	0.000066	<0.025	0.091	0.00452	<0.025	<0.025	0.00283	<0.015	<0.0025	<0.0005	0.085	<0.0005	<0.005	0.387	<0.00005	82.7	<0.005	0.0026
RSEM-R5A-D-SP	3/29/2020 14:40	XP3930	M	C022584	2.19	0.0019	2.7	0.000023	26.4	0.074	21.6	0.000042	<0.005	0.0178	0.001	<0.005	0.0126	0.00589	0.572	<0.0005	0.00039	0.079	<0.0001	<0.001	<0.05	0.000025	24.3	0.0012	0.00026
RSEM-R5A-D-SP	4/12/2020 12:25	XQ6092	M	C025305	4.67	0.0063	14.6	0.000161	46.1	0.135	34.9	0.000226	<0.005	0.0512	0.00234	0.0288	0.0815	0.00121	0.0421	0.0006	0.00044	0.08	<0.0001	<0.001	<0.05	<0.00001	23.8	<0.001	<0.0002
RSEM-R5A-D-SP	6/16/2020 12:10	XY1511	M	C041388	3.33	0.00678	4.79	<0.0001	347	0.409	253	<0.00005	<0.025	0.03	0.00353	<0.025	<0.025	0.00076	<0.015	<0.0025	0.00051	0.112	<0.0005	<0.005	<0.25	<0.00005	73.5	<0.005	<0.001
RSEM-R5B-EOP	1/1/2020 13:10	XE7142	M	C000229	4.53	0.00275	5.41	<0.00002	170	0.284	120	0.000012	<0.005	<0.005	0.00329	<0.005	<0.005	<0.0001	0.0088	0.00082	0.00071	0.04	<0.0001	<0.001	0.137	0.000017	69.6	0.0012	0.00034

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R5B-EOP	1/1/2020 13:20	XE7143	D	C000229	4.55	0.00276	5.13	<0.00002	172	0.288	120	0.000011	<0.005	<0.005	0.00331	<0.005	<0.005	<0.0001	0.0087	0.00084	0.00074	0.039	<0.0001	<0.001	0.138	0.000018	72.2	0.0012	0.00035
RSEM-R5B-EOP	1/2/2020 11:20	XE7177	M	C000238	4.53	0.00283	5.16	<0.00002	165	0.292	116	0.000011	<0.005	<0.005	0.00328	<0.005	<0.005	<0.0001	0.008	0.0008	0.00073	0.04	<0.0001	<0.001	0.137	0.000019	73.5	0.0012	0.00033
RSEM-R5B-EOP	1/2/2020 11:30	XE7178	D	C000238	4.52	0.00283	5.23	<0.00002	165	0.289	116	0.000011	<0.005	<0.005	0.00331	<0.005	<0.005	<0.0001	0.0079	0.0008	0.00071	0.04	<0.0001	<0.001	0.138	0.000019	71.7	0.0012	0.00034
RSEM-R5B-EOP	1/3/2020 12:40	XE8695	M	C000625	4.66	0.00284	4.91	<0.00002	163	0.298	111	0.00001	<0.005	<0.005	0.00332	<0.005	<0.005	<0.0001	0.0074	0.00077	0.00067	0.041	<0.0001	<0.001	0.126	0.000016	78.9	0.0012	0.00032
RSEM-R5B-EOP	1/3/2020 12:50	XE8696	D	C000625	4.58	0.00278	4.8	<0.00002	159	0.289	113	0.000011	<0.005	<0.005	0.00325	<0.005	<0.005	0.00014	0.0086	0.00075	0.00068	0.041	<0.0001	<0.001	0.13	0.000019	77.1	0.0012	0.00031
RSEM-R5B-EOP	1/4/2020 14:20	XE9883	M	C000877	4.74	0.0034	4.89	<0.00002	143	0.318	99.2	<0.00001	<0.005	<0.005	0.00323	<0.005	<0.005	<0.0001	0.0061	0.00065	0.00061	0.044	<0.0001	<0.001	0.122	0.000017	80.2	0.0011	0.00026
RSEM-R5B-EOP	1/4/2020 14:30	XE9884	D	C000877	5.00	0.00357	5.2	<0.00002	151	0.336	107	0.00001	<0.005	<0.005	0.0034	<0.005	<0.005	<0.0001	0.0061	0.00065	0.00061	0.043	<0.0001	<0.001	0.123	0.000017	79.7	0.001	0.00025
RSEM-R5B-EOP	1/5/2020 13:10	XE9854	M	C000870	4.99	0.00338	4.89	<0.00002	145	0.32	96.7	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	0.0056	0.00066	0.00056	0.043	<0.0001	<0.001	0.115	0.000015	77.8	0.001	0.00021
RSEM-R5B-EOP	1/5/2020 13:20	XE9855	D	C000870	4.70	0.00332	4.7	<0.00002	137	0.312	92.6	0.00001	<0.005	<0.005	0.00293	<0.005	<0.005	<0.0001	0.0056	0.00063	0.00056	0.042	<0.0001	<0.001	0.117	0.000015	77.1	<0.001	0.0002
RSEM-R5B-EOP	1/6/2020 12:50	XF0705	M	C001127	4.52	0.00316	4.91	<0.00002	129	0.31	91.6	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	0.0057	0.00066	0.00057	0.037	<0.0001	<0.001	0.114	0.000016	74.3	<0.001	<0.0002
RSEM-R5B-EOP	1/6/2020 13:00	XF0706	D	C001127	4.49	0.00309	4.94	<0.00002	130	0.31	91.4	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	0.006	0.00073	0.00056	0.039	<0.0001	<0.001	0.139	0.000014	75.4	<0.001	<0.0002
RSEM-R5B-EOP	1/7/2020 13:40	XF1930	M	C001464	4.47	0.00266	5.47	<0.00002	138	0.302	96.2	0.00001	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	0.0078	0.0008	0.0006	0.039	<0.0001	<0.001	0.126	0.000016	71.2	<0.001	<0.0002
RSEM-R5B-EOP	1/7/2020 13:50	XF1931	D	C001464	4.41	0.00258	5.4	<0.00002	134	0.299	93.0	<0.00001	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	0.0082	0.00079	0.00061	0.039	<0.0001	<0.001	0.126	0.000015	72.5	<0.001	<0.0002
RSEM-R5B-EOP	1/8/2020 13:30	XF3040	M	C001783	4.67	0.00261	5.01	<0.00002	155	0.242	104	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	0.0089	0.00083	0.00067	0.038	<0.0001	<0.001	0.136	0.00002	69.4	<0.001	0.0002
RSEM-R5B-EOP	1/8/2020 13:40	XF3041	D	C001783	5.16	0.00282	5.7	<0.00002	167	0.255	110	0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	0.0089	0.0008	0.00071	0.037	<0.0001	<0.001	0.134	0.000017	67.3	<0.001	0.0002
RSEM-R5B-EOP	1/9/2020 11:50	XF4215	M	C002074	4.38	0.00256	5.05	<0.00002	154	0.262	96.6	0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	0.0104	0.00088	0.00074	0.036	<0.0001	<0.001	0.14	0.000012	61.2	<0.001	0.00021
RSEM-R5B-EOP	1/9/2020 12:00	XF4216	D	C002074	4.41	0.0027	5.21	<0.00002	157	0.272	96.0	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.0104	0.00089	0.0007	0.036	<0.0001	<0.001	0.144	0.000014	61.3	<0.001	0.00021
RSEM-R5B-EOP	1/10/2020 14:00	XF5143	M	C002216	4.34	0.00245	5.19	<0.00002	165	0.248	102	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	0.0133	0.00096	0.00082	0.036	<0.0001	<0.001	0.158	0.000018	60.7	<0.001	0.00021
RSEM-R5B-EOP	1/10/2020 14:10	XF5144	D	C002216	4.28	0.0026	5.17	<0.00002	164	0.249	99.2	<0.00001	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	0.0131	0.00092	0.00079	0.035	<0.0001	<0.001	0.153	0.000018	61.2	<0.001	0.00021
RSEM-R5B-EOP	1/11/2020 11:40	XF5746	M	C002384	4.25	0.00287	5.07	<0.00002	172	0.241	99.1	<0.00001	<0.005	<0.005	0.00289	<0.005	<0.005	<0.0001	0.0152	0.001	0.00085	0.033	<0.0001	<0.001	0.152	0.000022	55.8	<0.001	0.00021
RSEM-R5B-EOP	1/11/2020 11:50	XF5747	D	C002384	4.20	0.00257	5.1	<0.00002	169	0.242	97.3	0.00001	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	0.0145	0.00096	0.00082	0.033	<0.0001	<0.001	0.149	<0.00001	55.7	<0.001	0.00021
RSEM-R5B-EOP	1/12/2020 12:40	XF5773	M	C002394	4.22	0.00247	5.15	<0.00002	173	0.237	98.6	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0154	0.00101	0.00085	0.032	<0.0001	<0.001	0.154	0.00001	53.3	<0.001	0.00022
RSEM-R5B-EOP	1/12/2020 12:50	XF5774	D	C002394	4.18	0.00242	5.05	<0.00002	170	0.237	98.6	<0.00001	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	0.0146	0.00099	0.00088	0.032	<0.0001	<0.001	0.151	<0.00001	53.4	<0.001	0.00022
RSEM-R5B-EOP	1/13/2020 11:25	XF7158	M	C002657	4.26	0.0026	5.14	<0.00002	177	0.239	100	0.00002	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	0.0146	0.00104	0.00089	0.032	<0.0001	<0.001	0.152	0.000013	53.4	<0.001	0.00022
RSEM-R5B-EOP	1/13/2020 11:35	XF7159	D	C002657	4.29	0.00252	5.25	<0.00002	175	0.237	99.8	0.000014	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	0.0154	0.00101	0.00091	0.033	<0.0001	<0.001	0.158	0.000012	52.6	<0.001	0.00021
RSEM-R5B-EOP	1/14/2020 11:40	XF8098	M	C002891	4.22	0.00251	4.71	<0.00002	172	0.218	95.8	0.00001	<0.005	<0.005	0.00322	<0.005	<0.005	<0.0001	0.0137	0.00103	0.00099	0.033	<0.0001	<0.001	0.155	0.000011	53.3	<0.001	0.00022
RSEM-R5B-EOP	1/14/2020 11:50	XF8099	D	C002891	4.17	0.00243	4.6	<0.00002	169	0.21	92.8	<0.00001	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	0.0142	0.00106	0.00095	0.034	<0.0001	<0.001	0.159	0.000012	52.9	<0.001	0.00022
RSEM-R5B-EOP	1/15/2020 12:35	XF9569	M	C003144	4.48	0.0027	5.34	<0.00002	176	0.252	107	<0.00001	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	0.0125	0.00106	0.00099	0.033	<0.0001	<0.001	0.146	0.000012	50.0	0.0011	0.00024
RSEM-R5B-EOP	1/15/2020 12:45	XF9570	D	C003144	4.56	0.00275	5.43	<0.00002	177	0.254	105	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0123	0.00106	0.00097	0.033	<0.0001	<0.001	0.15	0.000012	50.4	0.0011	0.00023
RSEM-R5B-EOP	1/16/2020 13:00	XG0615	M	C003413	4.14	0.00262	4.5	<0.00002	165	0.225	91.5	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	0.0125	0.00103	0.00112	0.032	<0.0001	<0.001	0.147	0.000011	50.1	0.0012	0.00022
RSEM-R5B-EOP	1/16/2020 13:10	XG0616	D	C003413	4.15	0.00265	4.63	<0.00002	167	0.225	92.9	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	0.0121	0.00101	0.00113	0.032	<0.0001	<0.001	0.148	<0.00001	50.6	0.0012	0.00022
RSEM-R5B-EOP	1/17/2020 12:25	XG0614	M	C003412	4.38	0.00283	4.65	<0.00002	175	0.233	95.8	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.0132	0.00106	0.00124	0.033	<0.0001	<0.001	0.15	0.000011	50.3	0.0017	0.00025
RSEM-R5B-EOP	1/18/2020 11:40	XG2772	M	C003851	4.73	0.00289	5.11	<0.00002	186	0.246	101	0.00001	<0.005	<0.005	0.00297	<0.005	<0.005	0.00012	0.0159	0.00121	0.00157	0.034	<0.0001	<0.001	0.176	<0.00001	53.2	0.0023	0.00027
RSEM-R5B-EOP	1/19/2020 14:45	XG2756	M	C003847	5.00	0.00308	5.13	<0.00002	205	0.245	111	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	0.0002	0.0165	0.00127	0.00174	0.036	<0.0001	<0.001	0.172	0.00001	53.1	0.0029	0.00029
RSEM-R5B-EOP	1/20/2020 11:50	XG2705	M	C003843	5.31	0.00335	5.39	<0.00002	224	0.256	116	0.000011	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	0.0177	0.00143	0.00192	0.035	<0.0001	<0.001	0.182	0.000011	53.5	0.0033	0.00031
RSEM-R5B-EOP	1/21/2020 14:10	XG5825	M	C004470	5.48	0.00304	4.59	<0.00002	244	0.251	121	<0.00001	<0.005	<0.005	0.00313	<0.005	<0.005	<0.0001	0.0178	0.00147	0.00201	0.037	<0.0001	<0.001	0.181	0.000013	52.0	0.0037	0.00036
RSEM-R5B-EOP	1/21/2020 14:20	XG5826	D	C004470	5.59	0.00321	4.62	<0.00002	245	0.255	124	<0.00001	<0.005	<0.005	0.00316	<0.005	<0.005	<0.0001	0.0175	0.00146	0.00203	0.037	<0.0001	<0.001	0.184	0.000013	51.6	0.0035	0.00036
RSEM-R5B-EOP	1/22/2020 15:50	XG7452	M	C004860	5.38	0.00295	5.15	<0.00002	232	0.256	121	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	0.0164	0.00141	0.00186	0.037	<0.0001	<0.001	0.176	<0.00001	51.7	0.0035	0.00035
RSEM-R5B-EOP	1/22/2020 16:00	XG7453	D	C004860	5.40	0.00304	5.03	<0.00002	230	0.253	121	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	0.0162	0.00141	0.00197	0.037	<0.0001	<0.001	0.176	<0.00001	51.0	0.0035	0.00036
RSEM-R5B-EOP	1/23/2020 15:20	XG9563	M	C005172	5.48	0.00355	4.87	<0.00002	229	0.262	117	<0.00001	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	0.0177	0.00154	0.00205	0.038	<0.0001	<0.001	0.192	<0.00001	56.2	0.0036	0.00035
RSEM-R5B-EOP	1/23/2020 15:30	XG9564	D	C005172	5.43	0.00332	4.66	<0.00002	229	0.246	117	<0.00001	<0.005	<0.005	0.00303	<0.005	<0.005	<0.0001	0.0177	0.00159	0.00213	0.038	<0.0001	<0.001	0.192	0.000011	55.6	0.0035	0.00036
RSEM-R5B-EOP	1/24/2020 11:10	XG9569	M	C005174	5.48	0.00351	4.64	<0.00002	231	0.256	115	<0.00001	<0.005	<0.005	0.00311	<0.005	<0.005	<0.0001	0.0173	0.0015	0.00211	0.038	<0.0001	<0.001	0.189	<0.00001	55.1	0.0035	0.00037
RSEM-R5B-EOP	1/24/2020 11:20	XG9570	D	C005174	5.43	0.00333	4.54	<0.00002	233	0.251	115	<0.00001	<0.005	<0.005	0.00304	<0.005	<0.005	<0.0001	0.0168	0.00154	0.00206	0.038	<0.0001	<0.001	0.183	<0.00001	53.7	0.0035	0.00036
RSEM-R5B-EOP	1/25/2020 12:00	XH2064	M	C005631	5.42	0.00334	5.28	<0.00002	224	0.254	120	<0.00001	<0.005	<0.005	0.00311	<0.005	<0.005	<0.0001	0.0162	0.00155	0.00206	0.041	<0.0001	<0.001	0.186	0.000011	54.0	0.0037	0.00036
RSEM-R5B-EOP	1/25/2020 12:10	XH2062	D	C005631	5.59	0.00342	5.39	<0.00002	228	0.256	124	0.00001	<0.005	<0.005	0.00314	<0.005	<0.005	<0.0001	0.0162	0.00155	0.00205	0.041	<0.0001	<0.001	0.185	<0.00001	53.8	0.0036	0.00034
RSEM-R5B-EOP	1/26/2020 13:40	XH2025	M	C005623	5.49	0.00316	5.34	<0.00002	223	0.256	120	0.000011	<0.005	<0.005	0.00315	<0.005	<0.005	<0.0001	0.0164	0.00156	0.0021	0.043	<0.0001	<0.001	0.181	0.000012	55.5	0.0037	0.00036
RSEM-R5B-EOP	1/26/2020 13:50	XH2026	D	C005623	5.41	0.00344	5.35	<0.00002	222	0.252	121	0.000011	<0.005	<0.005	0.00307	<0.005	<0.005	<0.0001	0.0148	0.00159	0.00206	0.043	<0.0001	<0.001	0.187	0.000014	55.6	0.0037	0.00037
RSEM-R5B-EOP	1/27/2020 14:10	XH3887	M	C005941	5.39	0.00277	5.33	<0.00002	221	0.263	115	<0.00001	<0.005	<0.005	0.00304	<0.005	<0.005	<0.0001	0.0154	0.00138	0.00181	0.04	<0.0001	<0.001	0.196	0.00001	55.9	0.0033	0.00033
RSEM-R5B-EOP	1/27/2020 14:20	XH3888	D	C005941	5.29	0.00244	5.09	<0.00002	218	0.261	106	<0.00001	<0.005	<0.005	0.00303	<0.005	0.0069	<0.0001	0.0157	0.00135	0.00186	0.04	<0.0001	<0.001	0.192	0.000018	57.6	0.0033	0.00032
RSEM-R5B-EOP	1/28/2020 12:45	XH5358	M	C006197	5.28	0.00351	4.89	<0.00002	186	0.276	103	<0.00001	<0.005	<0.005	0.00317	<0.005	<0.005	<0.0001	0.014	0.00118	0.00165	0.043	<0.0001	<0.001	0.148	0.000015	65.4	0.003	0.00031
RSEM-R5B-EOP	1/28/2020 12:55	XH5359	D	C006197	5.17	0.00366	4.77	<0.00002	179	0.275	99.6	<0.00001	<0.005	<0.005	0.0031	<0.005	<0.005	<0.0001	0.0147	0.00122	0.00172	0.044	<0.0001	<0.001	0.145	0.000015	64.3	0.003	0.00031
RSEM-R5B-EOP	1/29/2020 11:40	XH6910	M	C006592	5.50	0.00345	5.16	<0.00002	161	0.282	92.4	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	0.0124	0.00099	0.00135	0.05	<0.0001	<0.001	0.135	0.000015	73.3	0.0023	0.00028
RSEM-R5B-EOP	1/29/2020 11:50	XH6911	D	C006592	5.35	0.00398	5.43	<0.00002	154	0.27	94.2	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0124	0.00103	0.00146	0.05	<0.0001	<0.001	0.134	0.000013	76.6	0.0024	0.00027
RSEM-R5B-EOP	1/30/2020 13:15	XH8746	M	C006955	4.98	0.00346	5.1	<0.00002	141	0.316	77.8	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	0.0188	0.001	0.00132	0.057	<0.0001	<0.001	0.117	0.000018	79.4	0.002	0.0003
RSEM-R5B-EOP	1/30/2020 13:25	XH8747	D	C006955	4.99	0.00346	5.11	<0.00002	143	0.308	77.0	<0.00001	<0.005	<0.005	0.00311	<0.005	<0.005	<0.0001	0.0189	0.00098	0.00127	0.056	<0.0001	<0.001	0.126	0.000014	77.9	0.002	0.0003
RSEM-R5B-EOP	1/31/2020 13:05	XH9849	M	C007079	5.10	0.00355	5.37	<0.00002	154	0.299	86.6	<0.00001	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	0.0206	0.00106	0.00138	0.059	<0.0001	<0.001	0.14	0.000014	73.7	0.002	0.00031
RSEM-R5B-EOP	1/31/2020 13:15	XH9850	D	C007079	5.19	0.00344	5.29	<0.00002	156	0.315	84.2	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0194	0.00109	0.00144	0.06	<0.0001	<0.001	0.142	0.000012	75.9	0.002	0.00032
RSEM-R5B-EOP	2/1/2020 11:30	XI1802	M	C007448	4.95	0.00328	5.22	<0.00002	167	0.29	85.8	<0.00001	<0.005	<0.005	0.00296	<0.005	0.005	<0.0001	0.0202	0.00112	0.00128	0.056	<0.0001	<0.001	0.15	0.000014	68.1	0.0019	0.00031
RSEM-R5B-EOP	2/1/2020 11:45	XI1803	D	C007448	5.01	0.00342	5.27	<0.00002	171	0.291	89.7	0.000011	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	0.0199	0.00114	0.00124	0.054	<0.0001	<0.001	0.146	0.000015	68.3	0.0018	0.00031
RSEM-R5B-EOP	2/2/2020 13:50	XI1832	M	C007454	5.13	0.00327	5.33	<0.00002	185	0.277	95.6	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	0.0222	0.00127	0.00124	0.05	<0.0001	<0.001	0.161	0.000014	63.8	0.0017	0.00032
RSEM-R5B-EOP	2/2/2020 14:00	XI1833	D	C007454	5.02	0.00331	5.31	<0.00002	185	0.268	93.4	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	0.0218	0.00126	0.00132	0.051	<0.0001	<0.001	0.161	0.000014	63.1	0.0017	0.00032
RSEM-R5B-EOP	2/3/2020 12:20	XI3479	M	C007820	5.11	0.00323	5.02	<0.00002	197	0.26	98.2	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	0.009	0.00146	0.00165	0.05	<0.0001	<0.001	0.17	<0.00001	60.1	0.0017	0.00032
RSEM-R5B-EOP	2/3/2020 12:30	XI3480	D	C007820	5.08	0.00332	5.07	<0.00002	190	0.256	96.8	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	0.0094	0.0015	0.0013	0.051	<0.0001	<0.001	0.17	<0.00001	63.4	0.0018	0.00032
RSEM-R5B-EOP	2/4/2020 11:50	XI3460	M	C007815	4.78	0.00298	5.03	<0.00002	189	0.25	95.6	<0.00001	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	0.0085	0.00154	0.00152	0.048	<0.0001	<0.001	0.18	<0.00001	56.5	0.0017	0.00033
RSEM-R5B-EOP	2/4/2020 12:00	XI3461	D	C007815	4.99	0.00312	5.07	<0.00002	201	0.259	100	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.0096	0.00147	0.0016	0.047	<0.0001	<0.001	0.184	<0.00001	59.4	0.0017	0.00034
RSEM-R5B-EOP	2/5/2020 12:55	XI6885	M	C008469	5.32	0.00303	4.55	<0.00002	223	0.242	111	0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0218	0.00141	0.00131	0.044	<0.0001	<0.001	0.182	0.000014	52.1	0.0015	0.00041
RSEM-R5B-EOP	2/5/2020 13:05	XI6886	D	C008469	5.30	0.00315	4.71	<0.00002	225	0.239	111	<0.00001	<0.005	<0.005	0.00289	<0.005	<0.005	<0.0001	0.0213	0.0014	0.00127	0.044	<0.0001	<0.001	0.169	0.000011	53.6	0.0014	0.0004
RSEM-R5B-EOP	2/6/2020 12:00	XI8757	M	C008772	4.97	0.00293	5.02	<0.00002	220	0.232	112	0.000012	<0.005	<0.005	0.00291	<0.005	0.0051	<0.0001	0.0593	0.00163	0.00123	0.045	<0.0001	<0.001	0.201	<0.00001	54.1	0.0016	0.00032
RSEM-R5B-EOP	2/6/2020 12:10	XI8758	D	C008772	4.93	0.00293	5.01	<0.00002	213	0.23	110	0.000011	<0.005	<0.005	0.00288	<0.005	0.0053	<0.0001	0.0273	0.00138	0.00135	0.041	<0.0001	<0.001	0.192	0.000012	53.6	0.0015	0.00044

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R5B-EOP	2/7/2020 12:10	XI8782	M	C008775	5.08	0.00289	5.09	<0.00002	225	0.245	116	0.000012	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	0.0231	0.00142	0.00121	0.042	<0.0001	<0.001	0.194	0.000014	54.7	0.0014	0.00035
RSEM-R5B-EOP	2/8/2020 11:50	XJ1670	M	C009232	4.97	0.00293	5.27	<0.00002	217	0.236	117	0.000011	<0.005	<0.005	0.0029	<0.005	<0.005	<0.0001	0.0213	0.0014	0.00114	0.048	<0.0001	<0.001	0.172	<0.00001	56.4	0.0012	0.00039
RSEM-R5B-EOP	2/8/2020 12:00	XJ1671	D	C009232	5.09	0.00292	5.4	<0.00002	219	0.244	119	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0217	0.00135	0.00108	0.048	<0.0001	<0.001	0.184	0.000011	56.3	0.0012	0.00038
RSEM-R5B-EOP	2/9/2020 13:10	XJ1690	M	C009242	4.86	0.00272	5.41	<0.00002	207	0.241	114	0.00001	<0.005	<0.005	0.0029	<0.005	0.0059	<0.0001	0.0209	0.00131	0.00101	0.057	<0.0001	<0.001	0.173	0.000012	57.0	0.001	0.00052
RSEM-R5B-EOP	2/9/2020 13:20	XJ1691	D	C009242	4.67	0.00261	5.02	<0.00002	199	0.231	108	0.00001	<0.005	<0.005	0.0028	<0.005	0.0052	<0.0001	0.0204	0.00132	0.00106	0.057	<0.0001	<0.001	0.172	0.000014	56.6	0.001	0.00052
RSEM-R5B-EOP	2/10/2020 11:10	XJ1714	M	C009249	4.92	0.00269	5.44	<0.00002	210	0.248	114	0.000011	<0.005	<0.005	0.003	<0.005	0.0054	0.00019	0.0203	0.0012	0.00095	0.058	<0.0001	<0.001	0.178	0.000017	56.3	<0.001	0.00052
RSEM-R5B-EOP	2/10/2020 11:20	XJ1715	D	C009249	4.68	0.00263	5.25	<0.00002	200	0.235	109	0.00001	<0.005	<0.005	0.00284	<0.005	0.0051	<0.0001	0.0216	0.00127	0.00098	0.06	<0.0001	<0.001	0.171	0.000013	56.5	<0.001	0.00056
RSEM-R5B-EOP	2/11/2020 15:30	XJ6272	M	C010122	4.71	0.00266	5.19	<0.00002	207	0.244	108	<0.00001	<0.005	<0.005	0.00294	<0.005	0.005	0.00012	0.0054	0.00135	0.00126	0.063	<0.0001	<0.001	0.179	<0.00001	53.7	<0.001	0.00036
RSEM-R5B-EOP	2/11/2020 15:40	XJ6273	D	C010122	4.71	0.00266	5.22	<0.00002	205	0.245	107	0.000019	<0.005	<0.005	0.00289	<0.005	0.0052	<0.0001	0.0055	0.00133	0.00137	0.063	<0.0001	<0.001	0.18	<0.00001	55.0	<0.001	0.00034
RSEM-R5B-EOP	2/12/2020 15:20	XJ8072	M	C010503	4.69	0.00274	5.11	<0.00002	205	0.246	106	0.000012	<0.005	<0.005	0.00278	<0.005	<0.005	0.00011	0.026	0.00122	0.00098	0.06	<0.0001	<0.001	0.18	0.000011	51.3	<0.001	<0.0002
RSEM-R5B-EOP	2/12/2020 15:30	XJ8073	D	C010503	4.83	0.0027	5.16	<0.00002	211	0.248	109	0.000012	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.0259	0.00124	0.00099	0.06	<0.0001	<0.001	0.18	0.000014	52.4	<0.001	<0.0002
RSEM-R5B-EOP	2/13/2020 14:20	XJ9468	M	C010790	4.79	0.00265	5.18	<0.00002	204	0.249	107	<0.00001	<0.005	<0.005	0.00291	<0.005	0.0051	<0.0001	0.0275	0.00121	0.001	0.057	<0.0001	<0.001	0.171	0.000013	51.1	<0.001	0.00044
RSEM-R5B-EOP	2/13/2020 14:30	XJ9469	D	C010790	4.86	0.0028	5.33	<0.00002	207	0.252	108	<0.00001	<0.005	<0.005	0.00291	<0.005	0.0055	0.00011	0.0282	0.00124	0.00102	0.057	<0.0001	<0.001	0.173	0.000014	51.7	<0.001	0.00042
RSEM-R5B-EOP	2/14/2020 11:30	XJ9493	M	C010796	4.97	0.00279	5.36	<0.00002	209	0.255	109	<0.00001	<0.005	<0.005	0.00293	<0.005	0.0055	0.00013	0.0295	0.00121	0.00102	0.056	<0.0001	<0.001	0.174	0.000015	51.0	<0.001	0.00046
RSEM-R5B-EOP	2/14/2020 11:40	XJ9494	D	C010796	4.81	0.00263	5.23	<0.00002	206	0.243	107	<0.00001	<0.005	<0.005	0.00284	<0.005	0.0056	0.0001	0.0297	0.00121	0.00102	0.056	<0.0001	<0.001	0.176	0.000015	50.9	<0.001	0.00043
RSEM-R5B-EOP	2/15/2020 12:10	XK0372	M	C011012	4.84	0.00269	5.25	<0.00002	200	0.244	109	0.000012	<0.005	<0.005	0.00284	<0.005	0.0057	0.00016	0.0347	0.00122	0.00108	0.055	<0.0001	<0.001	0.184	0.000013	49.0	<0.001	0.00052
RSEM-R5B-EOP	2/15/2020 12:20	XK0373	D	C011012	4.67	0.0026	5.09	<0.00002	199	0.239	104	0.000012	<0.005	<0.005	0.00281	<0.005	0.0055	0.0001	0.0334	0.00117	0.00098	0.053	<0.0001	<0.001	0.176	0.000017	49.6	<0.001	0.0005
RSEM-R5B-EOP	2/16/2020 14:00	XK3308	M	C011578	5.21	0.00273	5.68	<0.00002	205	0.261	107	0.000011	<0.005	<0.005	0.00291	<0.005	0.0059	0.00012	0.0384	0.00117	0.00099	0.057	<0.0001	<0.001	0.19	0.000012	54.9	0.0011	0.00043
RSEM-R5B-EOP	2/16/2020 14:10	XK3307	D	C011578	5.26	0.00261	5.45	<0.00002	204	0.257	105	0.000011	<0.005	<0.005	0.00287	<0.005	0.006	0.00015	0.0396	0.00118	0.00103	0.058	<0.0001	<0.001	0.194	0.000015	52.4	0.0011	0.00042
RSEM-R5B-EOP	2/17/2020 16:20	XK3289	M	C011572	5.46	0.00273	5.93	<0.00002	204	0.246	107	0.000013	<0.005	<0.005	0.00276	<0.005	0.0056	0.00013	0.0407	0.00126	0.00113	0.058	<0.0001	<0.001	0.186	0.000012	51.2	0.0016	0.00038
RSEM-R5B-EOP	2/17/2020 16:30	XK3290	D	C011572	5.56	0.00268	5.91	<0.00002	206	0.251	111	0.000011	<0.005	<0.005	0.00277	<0.005	0.0059	0.00015	0.0393	0.00127	0.00112	0.058	<0.0001	<0.001	0.188	0.000013	51.3	0.0017	0.00039
RSEM-R5B-EOP	2/18/2020 12:40	XK4682	M	C011881	5.90	0.00257	6.31	<0.00002	212	0.236	111	0.00001	<0.005	<0.005	0.00256	<0.005	0.013	0.00013	0.0425	0.00136	0.00112	0.057	<0.0001	<0.001	0.191	0.000014	48.6	0.0024	0.00037
RSEM-R5B-EOP	2/18/2020 12:50	XK4683	D	C011881	6.00	0.00271	6.47	<0.00002	214	0.236	110	0.00001	<0.005	<0.005	0.00258	<0.005	0.01	0.00016	0.0414	0.00129	0.00117	0.055	<0.0001	<0.001	0.186	0.000013	48.9	0.0023	0.00035
RSEM-R5B-EOP	2/19/2020 11:35	XK5999	M	C012192	5.68	0.00248	5.96	<0.00002	209	0.216	106	<0.00001	<0.005	<0.005	0.00249	<0.005	0.0063	0.00013	0.0425	0.00144	0.00128	0.054	<0.0001	<0.001	0.186	0.000015	46.3	0.0028	0.00026
RSEM-R5B-EOP	2/19/2020 11:45	XK6000	D	C012192	5.88	0.00267	6.26	<0.00002	218	0.225	109	<0.00001	<0.005	<0.005	0.00257	<0.005	0.0067	0.00014	0.0432	0.00146	0.0013	0.055	<0.0001	<0.001	0.184	0.000013	49.3	0.0028	0.00029
RSEM-R5B-EOP	2/20/2020 12:30	XK7909	M	C012680	6.17	0.00271	6.92	<0.00002	227	0.238	117	0.000011	<0.005	<0.005	0.00285	<0.005	0.0054	0.00013	0.0371	0.0014	0.00127	0.049	<0.0001	<0.001	0.186	0.000012	46.1	0.0028	0.00037
RSEM-R5B-EOP	2/20/2020 12:40	XK7910	D	C012680	6.31	0.00274	6.7	<0.00002	231	0.24	120	0.000011	<0.005	<0.005	0.00285	<0.005	0.0051	0.00013	0.0353	0.00139	0.00127	0.048	<0.0001	<0.001	0.18	0.000017	44.9	0.0027	0.00037
RSEM-R5B-EOP	2/21/2020 11:40	XK7931	M	C012683	6.04	0.00281	6.57	0.00015	224	0.243	117	0.000012	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	0.0299	0.0014	0.00127	0.042	<0.0001	<0.001	0.18	0.000018	46.5	0.0026	0.00038
RSEM-R5B-EOP	2/21/2020 11:50	XK7932	D	C012683	6.19	0.00281	6.41	0.000194	230	0.244	123	0.000012	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	0.031	0.00135	0.00125	0.041	<0.0001	<0.001	0.179	0.000015	46.5	0.0026	0.00038
RSEM-R5B-EOP	2/23/2020 11:40	XL1342	M	C013192	5.71	0.00253	5.94	<0.00002	210	0.245	110	<0.00001	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	0.0215	0.0013	0.00117	0.034	<0.0001	<0.001	0.177	0.000016	46.7	0.0022	0.00044
RSEM-R5B-EOP	2/23/2020 11:50	XL1343	D	C013192	5.82	0.00268	5.93	<0.00002	215	0.246	113	<0.00001	<0.005	<0.005	0.00304	<0.005	<0.005	<0.0001	0.0236	0.00125	0.00117	0.035	<0.0001	<0.001	0.173	0.000019	47.9	0.0023	0.00043
RSEM-R5B-EOP	2/24/2020 11:35	XL1317	M	C013183	5.38	0.00271	5.86	<0.00002	199	0.243	111	<0.00001	<0.005	<0.005	0.0029	<0.005	<0.005	<0.0001	0.0213	0.00124	0.00108	0.033	<0.0001	<0.001	0.163	0.000013	46.0	0.0022	0.00043
RSEM-R5B-EOP	2/25/2020 11:00	XL5022	M	C014003	5.87	0.00276	5.9	<0.00002	210	0.257	120	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	0.0214	0.00119	0.00123	0.031	<0.0001	<0.001	0.198	0.000016	46.4	0.0026	0.00038
RSEM-R5B-EOP	2/25/2020 11:10	XL5023	D	C014003	5.73	0.00278	5.86	<0.00002	206	0.255	117	<0.00001	<0.005	<0.005	0.00289	<0.005	<0.005	<0.0001	0.023	0.00126	0.00127	0.031	<0.0001	<0.001	0.195	0.000019	46.7	0.0027	0.0004
RSEM-R5B-EOP	2/26/2020 10:50	XL6611	M	C014425	5.76	0.00271	5.61	0.000043	200	0.264	115	0.000011	<0.005	<0.005	0.00314	<0.005	<0.005	<0.0001	0.0299	0.00123	0.0012	0.036	<0.0001	<0.001	0.183	0.000015	45.2	0.0026	<0.0002
RSEM-R5B-EOP	2/26/2020 11:00	XL6612	D	C014425	5.83	0.00295	5.67	0.000097	201	0.257	113	0.00001	<0.005	<0.005	0.00311	<0.005	0.0051	<0.0001	0.0307	0.00127	0.00126	0.036	<0.0001	<0.001	0.191	0.000012	44.4	0.0026	<0.0002
RSEM-R5B-EOP	2/27/2020 11:35	XL6657	M	C014448	5.57	0.00285	5.1	<0.00002	183	0.265	108	0.00001	<0.005	<0.005	0.00307	<0.005	<0.005	<0.0001	0.0305	0.00113	0.00116	0.041	<0.0001	<0.001	0.179	0.000011	49.5	0.0023	<0.0002
RSEM-R5B-EOP	2/28/2020 12:00	XL8820	M	C014870	5.90	0.00281	5.85	<0.00002	194	0.221	128	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	0.00033	0.0301	0.00118	0.00127	0.04	<0.0001	<0.001	0.181	0.000015	49.1	0.0025	0.00048
RSEM-R5B-EOP	2/29/2020 12:25	XM2598	M	C015563	5.73	0.00277	5.41	<0.00002	179	0.269	108	0.000011	<0.005	<0.005	0.003	<0.005	0.005	0.00011	0.0337	0.00119	0.00118	0.046	<0.0001	<0.001	0.165	0.000028	49.8	0.0024	0.00064
RSEM-R5B-EOP	3/1/2020 10:55	XM2630	M	C015569	6.17	0.00289	5.46	<0.00002	191	0.277	121	0.000012	<0.005	<0.005	0.00315	<0.005	0.0058	0.0004	0.0433	0.00129	0.00121	0.043	<0.0001	<0.001	0.163	0.000032	49.3	0.0022	0.00064
RSEM-R5B-EOP	3/2/2020 19:30	XM6322	M	C016408	6.25	0.0026	4.99	<0.00002	182	0.244	121	0.000011	<0.005	<0.005	0.00307	<0.005	0.0086	<0.0001	0.0486	0.00132	0.00126	0.041	<0.0001	<0.001	0.168	0.000028	49.5	0.0022	<0.0002
RSEM-R5B-EOP	3/3/2020 11:50	XM6548	M	C016468	6.02	0.00295	4.87	<0.00002	181	0.259	114	<0.00001	<0.005	<0.005	0.00292	<0.005	0.0051	0.00029	0.0497	0.00139	0.00123	0.043	<0.0001	<0.001	0.171	0.000026	49.4	0.0023	<0.0002
RSEM-R5B-EOP	3/3/2020 12:00	XM6549	D	C016468	6.37	0.00305	4.94	<0.00002	190	0.275	121	0.00001	<0.005	<0.005	0.003	<0.005	0.0068	0.00011	0.0519	0.00144	0.00124	0.043	<0.0001	<0.001	0.174	0.000028	50.7	0.0023	<0.0002
RSEM-R5B-EOP	3/4/2020 16:20	XM8004	M	C016829	6.41	0.00289	5.22	<0.00002	196	0.269	119	<0.00001	<0.005	<0.005	0.00289	<0.005	0.0061	0.00014	0.0537	0.00148	0.0013	0.045	<0.0001	<0.001	0.171	0.000024	50.2	0.0025	<0.0002
RSEM-R5B-EOP	3/4/2020 16:30	XM8005	D	C016829	6.34	0.00297	5.28	<0.00002	195	0.271	118	<0.00001	<0.005	<0.005	0.00286	<0.005	0.0059	0.00014	0.0538	0.00147	0.0013	0.045	<0.0001	<0.001	0.172	0.000024	49.2	0.0025	<0.0002
RSEM-R5B-EOP	3/5/2020 15:20	XN0420	M	C017276	6.09	0.00295	4.89	<0.00002	188	0.258	112	<0.00001	<0.005	<0.005	0.00273	<0.005	0.0056	0.00016	0.0471	0.00143	0.00122	0.045	<0.0001	<0.001	0.169	0.000031	48.1	0.0023	0.00031
RSEM-R5B-EOP	3/5/2020 15:30	XN0421	D	C017276	6.19	0.00297	4.77	<0.00002	192	0.257	112	<0.00001	<0.005	<0.005	0.00273	<0.005	0.0055	0.00015	0.0477	0.00146	0.00125	0.045	<0.0001	<0.001	0.173	0.000025	46.8	0.0024	0.00036
RSEM-R5B-EOP	3/6/2020 11:20	XN0417	M	C017275	6.51	0.00301	5.27	<0.00002	193	0.266	114	<0.00001	<0.005	<0.005	0.00278	<0.005	0.0056	0.00014	0.0503	0.00147	0.00137	0.045	<0.0001	<0.001	0.165	0.000031	47.2	0.0028	0.00049
RSEM-R5B-EOP	3/6/2020 11:30	XN0416	D	C017275	6.57	0.00292	5.33	<0.00002	195	0.264	115	<0.00001	<0.005	<0.005	0.00279	<0.005	0.0056	0.00013	0.0515	0.00148	0.00142	0.045	<0.0001	<0.001	0.163	0.00003	46.5	0.0028	0.00041
RSEM-R5B-EOP	3/7/2020 11:20	XN3072	M	C017820	6.51	0.00291	5.08	<0.00002	194	0.264	112	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	0.00013	0.0506	0.00148	0.00127	0.046	<0.0001	<0.001	0.169	0.000023	45.0	0.0031	0.00037
RSEM-R5B-EOP	3/7/2020 11:30	XN3073	D	C017820	6.68	0.00297	5.09	<0.00002	201	0.265	117	<0.00001	<0.005	<0.005	0.00276	<0.005	<0.005	0.00011	0.0494	0.00151	0.00131	0.045	<0.0001	<0.001	0.17	0.000018	45.2	0.0031	0.0003
RSEM-R5B-EOP	3/8/2020 11:30	XN2025	M	C017627	6.82	0.00316	5.87	<0.00002	191	0.262	113	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	0.00015	0.0689	0.00151	0.00134	0.045	<0.0001	<0.001	0.17	0.000022	43.7	0.0036	0.00028
RSEM-R5B-EOP	3/8/2020 11:40	XN2026	D	C017627	6.82	0.0031	5.88	<0.00002	187	0.262	111	<0.00001	<0.005	<0.005	0.0027	<0.005	<0.005	0.00016	0.069	0.0015	0.00136	0.045	<0.0001	<0.001	0.173	0.00002	44.0	0.0035	0.0003
RSEM-R5B-EOP	3/9/2020 14:40	XN3894	M	C018020	7.14	0.00327	6.28	<0.00002	186	0.26	109	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	0.00018	0.0944	0.00153	0.00141	0.048	<0.0001	<0.001	0.175	0.000017	47.6	0.0041	0.00032
RSEM-R5B-EOP	3/9/2020 14:50	XN3895	D	C018020	7.04	0.00336	6.13	<0.00002	181	0.263	106	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	0.00026	0.0922	0.00146	0.00135	0.046	<0.0001	<0.001	0.17	0.000016	45.6	0.004	0.00032
RSEM-R5B-EOP	3/10/2020 11:05	XN6088	M	C018396	6.74	0.00316	5.91	<0.00002	180	0.272	102	0.000011	<0.005	<0.005	0.00258	<0.005	<0.005	0.00012	0.0788	0.00143	0.00129	0.053	<0.0001	<0.001	0.134	0.000018	48.9	0.0036	0.00027
RSEM-R5B-EOP	3/11/2020 13:10	XN7890	M	C018851	5.88	0.00276	5.87	<0.00002	142	0.25	87.3	<0.00001	<0.005	<0.005	0.00241	<0.005	0.0052	0.00016	0.0537	0.00114	0.00112	0.057	<0.0001	<0.001	0.143	0.000023	49.5	0.0025	<0.0002
RSEM-R5B-EOP	3/12/2020 10:55	XN8893	M	C019027	5.14	0.00251	4.87	<0.00002	131	0.219	77.3	<0.00001	<0.005	<0.005	0.0023	<0.005	0.0064	0.00014	0.0429	0.00104	0.001	0.056	<0.0001	<0.001	0.124	0.000026	46.7	0.002	0.0003
RSEM-R5B-EOP	3/13/2020 12:30	XN9532	M	C019176	5.00	0.00259	5.04	<0.00002	123	0.226	76.7	<0.00001	<0.005	<0.005	0.00233	<0.005	0.0059	0.00017	0.0418	0.00098	0.00102	0.051	<0.0001	<0.001	0.124	0.000034	45.1	0.0019	0.00071
RSEM-R5B-EOP	3/14/2020 12:25	XO0536	M	C019410	5.82	0.00319	4.99	<0.00002	152	0.247	89.2	0.000011	<0.005	<0.005	0.00257	<0.005	0.0061	<0.0001	0.0381	0.00105	0.00105	0.045	<0.0001	<0.001	0.125	0.000035	44.8	0.0021	0.00053
RSEM-R5B-EOP	3/14/2020 12:35	XO0537	D	C019410	5.03	0.00274	4.33	<0.00002	132	0.212	77.4	<0.00001	<0.005	<0.005	0.0022	<0.005	0.0062	<0.0001	0.0382	0.00102	0.00104	0.045	<0.0001	<0.001	0.122	0.000033	44.7	0.0021	0.00044
RSEM-R5B-EOP	3/15/2020 13:00	XO0653	M	C019435	5.08	0.00301	4.26	<0.00002	140	0.218	80.1	<0.00001	<0.005	<0.005	0.00228	<0.005	0.0059	<0.0001	0.0365	0.00115	0.00126	0.038	<0.0001	<0.001	0.132	0.000023	43.9	0.0024	0.00043
RSEM-R5B-EOP	3/15/2020 13:10	XO0654	D	C019435	5.33	0.00319	4.6	<0.00002	146	0.225	83.2	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	0.037	0.00117	0.0012	0.038	<0.0001	<0.001	0.133	0.000028	43.3	0.0025	0.00046
RSEM-R5B-EOP	3/16/2020 12:50	XO2542	M	C019847	5.41	0.00345	5.04	<0.00002	160	0.231	88.3	<0.00001	<0.005	<0.005	0.00253	<0.005	<0.005	0.00011	0.037	0.0013	0.00155	0.033	<0.0001	<0.001	0.147	0.000022	42.2	0.0029	0.00036
RSEM-R5B-EOP	3/16/2020 13:00	XO2543	D	C019847	5.36	0.00343	4.79	<0.00002	161	0.227	87.8	<0.00001	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	0.0372	0.00129	0.00153	0.032	<0.0001	<0.001	0.147	0.00002	42.2	0.0029	0.00033
RSEM-R5B-EOP	3/17/2020 12:05	XO3906	M	C020169	5.43	0.0036	4.9	<0.00002	171	0.223	90.8	<0.00001	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.0387	0.00143	0.00161	0.032	<0.0001	<0.001	0.155	0.000023	41.6	0.0033	0.00028
RSEM-R5B-EOP	3/17/2020 12:15	XO3907	D	C020169	5.33	0.00374	4.85	<0.00002	164	0.223	90.1	<0.00001	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	0.0393	0.0014	0.00161	0.031	<0.0001	<0.001	0.153	0.000018	41.7	0.0033	0.00028
RSEM-R5B-EOP	3/18/2020 11:40	XO5557	M	C020445	5.39	0.0035	5.05	<0.00002	154	0.233	90.6	<0.00001	<0.005	<0.005	0.00253	<0.005	<0.005	<0.0001	0.0343	0.00125	0.00148	0.027	<0.0001	<0.001	0.136	0.000017	39.5	0.0029	0.00022
RSEM-R5B-EOP	3/18/2020 11:50	XO5558	D	C020445	5.37	0.0034	4.96	<0.00002	153	0.235	90.1	<0.00001	<0.005	<0.005	0.00255	<0.005	<0.005	0.00011	0.0355	0.00129	0.00147	0.028	<0.0001	<0.001	0.142	0.000014	39.8	0.003	0.00022

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R5B-EOP	3/19/2020 11:30	XO6999	M	C020738	4.99	0.00345	4.63	<0.00002	149	0.226	83.4	<0.00001	<0.005	<0.005	0.00232	<0.005	<0.005	0.00011	0.0401	0.00121	0.0015	0.039	<0.0001	<0.001	0.146	0.000017	43.3	0.0028	0.00024
RSEM-R5B-EOP	3/19/2020 11:40	XO7000	D	C020738	5.11	0.00363	4.67	<0.00002	153	0.232	84.2	<0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	0.00014	0.0412	0.00124	0.00154	0.039	<0.0001	<0.001	0.148	0.000017	43.4	0.0028	0.00023
RSEM-R5B-EOP	3/20/2020 12:15	XO7002	M	C020739	4.67	0.00334	4.49	<0.00002	143	0.225	77.5	<0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	0.00016	0.0347	0.00116	0.00138	0.048	<0.0001	<0.001	0.142	0.000018	44.3	0.0022	0.00028
RSEM-R5B-EOP	3/20/2020 12:25	XO7003	D	C020739	4.67	0.00318	4.34	<0.00002	142	0.221	74.4	<0.00001	<0.005	<0.005	0.00223	<0.005	<0.005	0.00012	0.0359	0.00119	0.00144	0.048	<0.0001	<0.001	0.147	0.000019	44.9	0.0023	0.00027
RSEM-R5B-EOP	3/21/2020 11:30	XO8297	M	C021037	4.98	0.0035	4.55	<0.00002	161	0.223	78.5	0.000011	<0.005	<0.005	0.0024	<0.005	<0.005	0.00012	0.034	0.00118	0.00132	0.046	<0.0001	<0.001	0.137	0.000019	42.9	0.0022	0.00029
RSEM-R5B-EOP	3/21/2020 11:40	XO8298	D	C021037	4.85	0.00351	4.43	<0.00002	159	0.216	76.9	0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	0.00012	0.0335	0.00118	0.00131	0.046	<0.0001	<0.001	0.139	0.000018	43.4	0.0021	0.00029
RSEM-R5B-EOP	3/22/2020 11:20	XO8419	M	C021064	4.67	0.00328	4.39	<0.00002	154	0.217	77.9	0.000014	<0.005	0.0051	0.00235	<0.005	0.0067	0.00017	0.0224	0.0011	0.00102	0.048	<0.0001	<0.001	0.13	0.000028	41.4	0.0016	0.00056
RSEM-R5B-EOP	3/22/2020 11:30	XO8420	D	C021064	4.55	0.00313	4.35	<0.00002	149	0.209	75.0	0.000013	<0.005	0.0062	0.00229	<0.005	0.0065	0.00018	0.0306	0.00108	0.00104	0.048	<0.0001	<0.001	0.131	0.000028	41.3	0.0017	0.00055
RSEM-R5B-EOP	3/23/2020 12:00	XO8465	M	C021073	4.28	0.003	4.01	<0.00002	145	0.208	82.4	0.000011	<0.005	<0.005	0.0021	<0.005	<0.005	0.00011	0.0178	0.00099	0.00089	0.05	<0.0001	<0.001	0.119	0.000028	40.8	0.0012	0.00062
RSEM-R5B-EOP	3/24/2020 13:10	XP0444	M	C021618	4.39	0.00304	4.24	<0.00002	150	0.232	88.9	<0.00001	<0.005	<0.005	0.00223	<0.005	0.0058	<0.0001	0.0206	0.00106	0.00092	0.05	<0.0001	<0.001	0.127	0.000038	44.7	0.0012	0.00078
RSEM-R5B-EOP	3/24/2020 13:20	XP0441	D	C021618	4.30	0.00297	4.27	<0.00002	146	0.229	87.7	<0.00001	<0.005	<0.005	0.00221	<0.005	0.0054	<0.0001	0.0203	0.00105	0.00093	0.05	<0.0001	<0.001	0.125	0.000041	45.1	0.0012	0.00077
RSEM-R5B-EOP	3/25/2020 12:50	XP1314	M	C021872	4.34	0.00318	4.55	<0.00002	148	0.245	101	<0.00001	<0.005	<0.005	0.00224	<0.005	0.0056	<0.0001	0.0186	0.00111	0.00088	0.048	<0.0001	<0.001	0.126	0.000035	47.6	0.001	0.00045
RSEM-R5B-EOP	3/25/2020 13:00	XP1315	D	C021872	4.36	0.00328	4.59	<0.00002	150	0.249	98.8	<0.00001	<0.005	<0.005	0.00225	<0.005	0.0056	<0.0001	0.0197	0.00111	0.00087	0.048	<0.0001	<0.001	0.12	0.000037	48.6	<0.001	0.00042
RSEM-R5B-EOP	3/26/2020 14:10	XP2433	M	C022151	4.40	0.00328	4.41	<0.00002	149	0.242	94.3	<0.00001	<0.005	<0.005	0.00233	<0.005	0.0057	0.00024	0.021	0.0013	0.00091	0.044	<0.0001	<0.001	0.125	0.000033	45.2	0.0012	0.00056
RSEM-R5B-EOP	3/26/2020 14:20	XP2434	D	C022151	3.61	0.00242	4.15	<0.00002	110	0.184	68.5	0.000014	<0.005	0.0128	0.00181	<0.005	0.0072	0.00042	0.0167	0.00113	0.00076	0.046	<0.0001	<0.001	0.098	0.000028	36.1	0.001	0.00043
RSEM-R5B-EOP	3/27/2020 10:50	XP2503	M	C022160	4.13	0.00293	4.1	<0.00002	138	0.209	80.2	0.000011	<0.005	0.009	0.0021	<0.005	0.0066	0.00019	0.0304	0.00157	0.0011	0.049	<0.0001	<0.001	0.126	0.00003	39.6	0.0014	0.00086
RSEM-R5B-EOP	3/27/2020 11:00	XP2504	D	C022160	4.17	0.00289	4.1	<0.00002	142	0.209	81.7	0.000012	<0.005	0.0093	0.00212	<0.005	0.0066	0.00026	0.0299	0.00159	0.00109	0.049	<0.0001	<0.001	0.126	0.000032	39.2	0.0015	0.00084
RSEM-R5B-EOP	3/28/2020 14:10	XP3712	M	C022531	4.27	0.00278	3.87	<0.00002	151	0.189	80.7	0.000012	<0.005	<0.005	0.00216	<0.005	<0.005	0.0002	0.0331	0.00162	0.00136	0.053	<0.0001	<0.001	0.133	0.000023	37.1	0.0023	0.00066
RSEM-R5B-EOP	3/28/2020 14:20	XP3713	D	C022531	4.32	0.00287	3.97	<0.00002	153	0.193	82.3	0.000012	<0.005	<0.005	0.00215	<0.005	<0.005	0.00053	0.0346	0.00164	0.00135	0.053	<0.0001	<0.001	0.132	0.000022	37.3	0.0023	0.00071
RSEM-R5B-EOP	3/29/2020 15:30	XP3675	M	C022512	4.83	0.00325	4.27	<0.00002	178	0.214	95.2	0.00001	<0.005	<0.005	0.00243	<0.005	<0.005	0.0002	0.0378	0.00177	0.00161	0.051	<0.0001	<0.001	0.147	0.000016	39.2	0.0029	0.0006
RSEM-R5B-EOP	3/30/2020 15:00	XP5011	M	C022895	5.88	0.00363	4.93	<0.00002	209	0.247	116	<0.00001	<0.005	<0.005	0.00268	<0.005	<0.005	0.00012	0.05	0.00188	0.0015	0.047	<0.0001	<0.001	0.172	0.00002	38.4	0.0039	0.00055
RSEM-R5B-EOP	3/31/2020 12:00	XP6323	M	C023153	6.63	0.0042	5.46	<0.00002	236	0.277	135	0.00001	<0.005	<0.005	0.00289	<0.005	<0.005	<0.0001	0.0508	0.0018	0.00183	0.048	<0.0001	<0.001	0.178	0.00002	40.7	0.0041	0.00049
RSEM-R5B-EOP	3/31/2020 12:10	XP6324	D	C023153	6.24	0.00342	5.17	<0.00002	222	0.262	124	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	0.00015	0.0493	0.00205	0.00159	0.05	<0.0001	<0.001	0.177	0.00002	40.4	0.004	0.00053
RSEM-R5B-EOP	4/1/2020 12:10	XP6344	M	C023159	6.14	0.00378	5.34	<0.00002	214	0.259	123	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	0.00044	0.046	0.00158	0.00192	0.05	<0.0001	<0.001	0.181	0.000015	43.3	0.0045	0.00049
RSEM-R5B-EOP	4/1/2020 12:20	XP6345	D	C023159	5.81	0.00381	5.23	<0.00002	200	0.248	117	<0.00001	<0.005	<0.005	0.00267	<0.005	<0.005	0.00016	0.049	0.00185	0.00181	0.052	<0.0001	<0.001	0.185	0.000014	44.8	0.0044	0.00043
RSEM-R5B-EOP	4/2/2020 11:00	XP7671	M	C023465	6.20	0.00389	5.47	<0.00002	214	0.277	128	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	0.0475	0.00166	0.00156	0.05	<0.0001	<0.001	0.163	<0.00001	44.9	0.0044	0.0005
RSEM-R5B-EOP	4/2/2020 11:10	XP7672	D	C023465	5.71	0.00346	5.38	<0.00002	197	0.251	116	<0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	0.0473	0.00162	0.0015	0.048	<0.0001	<0.001	0.164	<0.00001	43.1	0.0043	0.0005
RSEM-R5B-EOP	4/3/2020 11:10	XP9111	M	C023756	5.42	0.0038	5.25	<0.00002	188	0.248	115	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	0.0521	0.00164	0.00132	0.046	<0.0001	<0.001	0.161	0.000014	42.9	0.0048	0.00047
RSEM-R5B-EOP	4/3/2020 11:20	XP9112	D	C023756	5.81	0.00365	5.49	<0.00002	207	0.263	128	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	0.0559	0.00154	0.0014	0.047	<0.0001	<0.001	0.16	0.000015	44.0	0.0042	0.00039
RSEM-R5B-EOP	4/4/2020 11:30	XQ0607	M	C024053	5.40	0.00376	5.31	<0.00002	191	0.249	118	<0.00001	<0.005	<0.005	0.00289	<0.005	0.0067	<0.0001	0.0571	0.00153	0.00127	0.043	<0.0001	<0.001	0.164	0.000017	43.7	0.0045	0.00038
RSEM-R5B-EOP	4/4/2020 11:40	XQ0608	D	C024053	5.49	0.00408	5.39	<0.00002	193	0.255	118	<0.00001	<0.005	<0.005	0.00305	<0.005	0.0061	<0.0001	0.0558	0.00167	0.00152	0.043	<0.0001	<0.001	0.165	0.000013	42.5	0.0044	0.00034
RSEM-R5B-EOP	4/5/2020 12:20	XQ0577	M	C024048	5.69	0.00394	5.51	<0.00002	208	0.283	133	<0.00001	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	0.0611	0.00162	0.0013	0.042	<0.0001	<0.001	0.157	0.000019	43.0	0.0037	0.00037
RSEM-R5B-EOP	4/5/2020 12:30	XQ0578	D	C024048	5.21	0.00355	5.3	<0.00002	192	0.256	122	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	0.0626	0.00164	0.00139	0.044	<0.0001	<0.001	0.164	<0.00001	45.2	0.004	0.00035
RSEM-R5B-EOP	4/6/2020 12:25	XQ1945	M	C024407	6.03	0.00424	5.37	<0.00002	220	0.299	141	<0.00001	<0.005	<0.005	0.00319	<0.005	0.005	<0.0001	0.0604	0.00158	0.00134	0.043	<0.0001	<0.001	0.167	0.000017	45.0	0.0036	0.00036
RSEM-R5B-EOP	4/6/2020 12:35	XQ1946	D	C024407	6.35	0.00392	5.62	<0.00002	230	0.319	149	<0.00001	<0.005	<0.005	0.00326	<0.005	0.0068	<0.0001	0.0587	0.00145	0.00131	0.044	<0.0001	<0.001	0.165	0.000015	44.2	0.0036	0.00037
RSEM-R5B-EOP	4/7/2020 11:50	XQ3412	M	C024753	6.01	0.00405	5.38	<0.00002	216	0.319	144	<0.00001	<0.005	<0.005	0.00326	<0.005	<0.005	<0.0001	0.0533	0.00151	0.0012	0.05	<0.0001	<0.001	0.17	0.000021	48.6	0.0035	0.00039
RSEM-R5B-EOP	4/7/2020 12:00	XQ3413	D	C024753	5.90	0.0039	5.28	<0.00002	215	0.312	142	<0.00001	<0.005	<0.005	0.00327	<0.005	<0.005	<0.0001	0.0505	0.00155	0.00132	0.049	<0.0001	<0.001	0.166	0.00002	48.5	0.0035	0.0004
RSEM-R5B-EOP	4/8/2020 11:30	XQ4587	M	C024938	5.16	0.00213	4.26	<0.00002	137	0.256	97.8	0.000015	<0.005	0.0073	0.00256	<0.005	0.0082	0.00041	0.0287	0.00103	0.00085	0.07	<0.0001	<0.001	0.115	0.000029	49.2	0.0019	0.0006
RSEM-R5B-EOP	4/8/2020 11:40	XQ4588	D	C024938	5.23	0.00259	4.99	<0.00002	137	0.261	102	0.000011	<0.005	0.0103	0.0028	<0.005	0.0084	0.00027	0.0251	0.00099	0.00075	0.069	<0.0001	<0.001	0.123	0.000026	49.0	0.0018	<0.0002
RSEM-R5B-EOP	4/9/2020 12:20	XQ4586	M	C024937	4.50	0.00245	5.18	<0.00002	108	0.195	88.2	0.000027	<0.005	0.0347	0.00209	0.0051	<0.005	0.00048	0.0171	0.00078	0.00083	0.053	<0.0001	<0.001	0.079	<0.00001	35.6	0.0019	<0.0002
RSEM-R5B-EOP	4/10/2020 11:30	XQ5867	M	C025257	4.57	0.00242	5	0.000033	90.6	0.19	95.4	0.000034	<0.005	0.0326	0.00215	<0.005	0.0135	0.00028	0.0177	0.00067	0.00061	0.057	<0.0001	<0.001	0.075	0.000031	44.5	0.0018	<0.0002
RSEM-R5B-EOP	4/10/2020 11:40	XQ5868	D	C025257	4.22	0.00224	5.67	0.000022	75.6	0.173	91.6	0.000029	<0.005	0.0212	0.00197	<0.005	0.0146	0.00061	0.0203	0.00065	0.00064	0.058	<0.0001	<0.001	0.074	0.000035	49.1	0.0018	0.00041
RSEM-R5B-EOP	4/11/2020 18:50	XQ5966	M	C025274	5.17	0.00357	3.21	<0.00002	117	0.249	114	0.00001	<0.005	<0.005	0.00218	<0.005	0.0153	<0.0001	0.037	0.00096	0.00089	0.052	<0.0001	<0.001	0.101	0.000021	47.0	0.0028	<0.0002
RSEM-R5B-EOP	4/12/2020 13:35	XQ6093	M	C025305	4.97	0.00441	3.56	<0.00002	116	0.24	109	0.000012	<0.005	<0.005	0.00229	<0.005	0.0104	<0.0001	0.0321	0.00101	0.00096	0.054	<0.0001	<0.001	0.097	0.000043	49.7	0.003	0.00066
RSEM-R5B-EOP	4/12/2020 13:45	XQ6094	D	C025305	4.94	0.00373	3.48	<0.00002	113	0.237	109	0.000013	<0.005	<0.005	0.00234	<0.005	0.0103	<0.0001	0.0331	0.00093	0.00097	0.052	<0.0001	<0.001	0.1	0.000041	48.8	0.0028	0.00119
RSEM-R5B-EOP	4/13/2020 10:30	XQ5692	M	C025217	5.06	0.00416	3.65	<0.00002	110	0.246	103	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	0.0051	<0.0005	0.00053	0.039	<0.0001	<0.001	<0.05	0.00005	42.6	<0.001	0.00065
RSEM-R5B-EOP	4/14/2020 18:05	XQ8327	M	C025913	4.90	0.00412	3.36	<0.00002	104	0.213	94.7	<0.00001	<0.005	<0.005	0.00225	<0.005	0.0094	<0.0001	0.0242	0.0009	0.00148	0.053	<0.0001	<0.001	0.096	0.000035	45.2	0.0031	0.00111
RSEM-R5B-EOP	4/15/2020 13:05	XQ9337	M	C026226	4.97	0.00436	3.45	<0.00002	110	0.21	92.7	0.000012	<0.005	<0.005	0.00201	<0.005	0.0082	0.00013	0.0222	0.00129	0.00161	0.053	<0.0001	<0.001	0.11	0.000042	45.6	0.0034	0.00128
RSEM-R5B-EOP	4/15/2020 13:15	XQ9338	D	C026226	4.79	0.00421	3.36	<0.00002	105	0.202	85.7	0.000018	<0.005	<0.005	0.00198	<0.005	0.011	<0.0001	0.0223	0.00112	0.00163	0.054	<0.0001	<0.001	0.107	0.000039	47.2	0.0033	0.00141
RSEM-R5B-EOP	4/16/2020 12:30	XR0406	M	C026516	4.37	0.00418	3.71	<0.00002	100	0.182	84.0	0.000023	<0.005	<0.005	0.00193	<0.005	<0.005	0.00049	0.0184	0.00126	0.00163	0.049	<0.0001	<0.001	0.098	0.000031	42.9	0.0037	0.00069
RSEM-R5B-EOP	4/16/2020 12:40	XR0407	D	C026516	4.83	0.00437	3.87	<0.00002	113	0.193	94.3	<0.00001	<0.005	<0.005	0.00211	<0.005	0.0055	<0.0001	0.02	0.00128	0.00192	0.051	<0.0001	<0.001	0.106	0.000032	47.1	0.004	0.00072
RSEM-R5B-EOP	4/17/2020 11:25	XR0398	M	C026514	4.89	0.00488	3.76	<0.00002	120	0.203	96.5	0.000019	<0.005	0.005	0.00201	<0.005	0.0122	<0.0001	0.021	0.00146	0.00169	0.051	<0.0001	<0.001	0.111	0.000043	70.8	0.0038	0.00136
RSEM-R5B-EOP	4/18/2020 10:30	XR2299	M	C026869	4.17	0.00435	3.43	<0.00002	109	0.175	87.7	<0.00001	<0.005	<0.005	0.00197	<0.005	0.0114	<0.0001	0.0196	0.00135	0.00147	0.047	<0.0001	<0.001	0.094	0.000082	42.1	0.0038	0.00162
RSEM-R5B-EOP	4/18/2020 10:40	XR2300	D	C026869	4.04	0.00412	3.22	<0.00002	108	0.175	84.0	0.00001	<0.005	<0.005	0.0019	<0.005	0.0112	<0.0001	0.0204	0.00135	0.00152	0.046	<0.0001	<0.001	0.093	0.000065	42.2	0.0034	0.00151
RSEM-R5B-EOP	4/19/2020 14:45	XR2517	M	C026927	4.69	0.00535	3.87	<0.00002	139	0.213	110	0.000011	<0.005	<0.005	0.00231	<0.005	0.0106	<0.0001	0.0182	0.00134	0.00139	0.037	<0.0001	<0.001	0.085	0.000055	34.4	0.0035	0.00152
RSEM-R5B-EOP	4/20/2020 16:40	XR3425	M	C027099	4.36	0.00535	3.78	<0.00002	145	0.204	110	0.000014	<0.005	<0.005	0.00233	<0.005	0.0056	<0.0001	0.0398	0.00114	0.00183	0.041	<0.0001	<0.001	0.097	0.000048	36.1	0.004	0.0015
RSEM-R5B-EOP	4/21/2020 11:20	XR4950	M	C027465	4.52	0.00506	3.62	<0.00002	155	0.203	115	<0.00001	<0.005	<0.005	0.00238	<0.005	0.0102	<0.0001	0.0217	0.0013	0.00166	0.04	<0.0001	<0.001	0.111	0.000035	39.6	0.0039	0.0008
RSEM-R5B-EOP	4/21/2020 11:30	XR4951	D	C027465	5.10	0.00521	3.93	<0.00002	174	0.224	130	<0.00001	<0.005	<0.005	0.00254	<0.005	<0.005	<0.0001	0.0235	0.00139	0.00135	0.042	<0.0001	<0.001	0.122	0.000028	38.1	0.0035	0.00078
RSEM-R5B-EOP	4/22/2020 11:30	XR6353	M	C027799	6.29	0.00696	4.66	<0.00002	212	0.225	163	<0.00001	<0.005	<0.005	0.00316	<0.005	<0.005	<0.0001	0.0219	0.00148	0.00212	0.041	<0.0001	<0.001	0.11	0.000038	36.2	0.0031	0.00135
RSEM-R5B-EOP	4/22/2020 11:40	XR6354	D	C027799	6.56	0.00778	5.08	<0.00002	219	0.119	178	<0.00001	<0.005	<0.005	0.00347	<0.005	<0.005	<0.0001	0.0206	0.0015	0.00186	0.042	<0.0001	<0.001	0.117	0.000037	39.2	0.0032	0.0011
RSEM-R5B-EOP	4/23/2020 14:05	XR7182	M	C027994	3.98	0.00464	2.91	0.00002	146	0.205	117	<0.00001	<0.005	<0.005	0.00214	<0.005	0.0106	<0.0001	0.0198	0.00133	0.00148	0.039	<0.0001	<0.001	0.112	0.000038	39.4	0.0032	0.0009
RSEM-R5B-EOP	4/24/2020 11:05	XR7266	M	C028014	4.62	0.00546	3.26	<0.00002	186	0.266	151	0.000016	<0.005	<0.005	0.00226	<0.005	0.0081	<0.0001	0.0255	0.00165	0.00129	0.04	<0.0001	<0.001	0.126	0.000037	45.8	0.0031	0.00089
RSEM-R5B-EOP	4/24/2020 11:15	XR7267	D	C028014	4.42	0.00542	3.2	<0.00002	178	0.259	145	0.000016	<0.005	<0.005	0.0023	<0.005	0.0082	<0.0001	0.0255	0.00166	0.00143	0.042	<0.0001	<0.001	0.125	0.000031	46.7	0.003	0.00104
RSEM-R5B-EOP	4/25/2020 11:05	XR8893	M	C028412	5.12	0.00568	3.48	<0.00002	210	0.323	184	0.000017	<0.005	<0.005	0.00241	<0.005	<0.005	0.00024	0.0051	0.00153	0.00147	0.008	<0.0001	<0.001	0.173	<0.00001	28.8	0.0028	0.00036
RSEM-R5B-EOP	4/25/2020 11:15	XR8894	D	C028412	5.00	0.00519	3.33	<0.00002	205	0.315	172	0.00002	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	0.0056	0.00183	0.00102	0.008	<0.0001	<0.001	0.12	0.000018	46.0	0.0025	<0.0002
RSEM-R5B-EOP	4/26/2020 11:50	XR8990	M	C028429	5.28	0.00671	3.59	<0.00002	228	0.318	188	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	0.00015	0.0324	0.00186	0.00124	0.033	<0.0001	<0.001	0.124	0.00003	44.2	0.0021	<0.0002
RSEM-R5B-EOP	4/26/2020 12:00	XR8991	D	C028429	5.33	0.00637	3.59	<0.00002	233	0.341	184	<0.00001	<0.005	<0.005	0.00293	<0.005	0.0055	<0.0001	0.0382	0.00217	0.00133	0.036	<0.0001	<0.001	0.141	<0.00001	47.6	0.0024	<0.0002
RSEM-R5B-EOP	4/27/2020 13:05	XS0059	M	C028666	4.74	0.00584	3.11	<0.00002	209	0.29	168	<0.00001	<0.005	<0.005	0.00237	<0.005	<0.005	<0.0001	0.0312	0.00186	0.00135	0.028	<0.0001	<0.001	0.124	0.000032	39.1	0.0022	<0.0002
RSEM-R5B-EOP	4/28/2020 14:10	XS2090	M	C029151	4.03	0.0058	3.53	<0.00002	202	0.206	146	<0.00001	<0.005	<0.005	0.0025	<0.005	<0.005	<0.0001	0.0219	0.00214	0.00113	0.033	<0.0001	<0.001	0.168	<0.00001	42.7	0.0025	0.00023

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R5B-EOP	4/29/2020 11:45	XS3520	M	C029452	4.71	0.00655	3.26	<0.00002	236	0.236	176	<0.00001	<0.005	<0.005	0.00286	<0.005	0.0076	0.00015	0.0203	0.00213	0.00129	0.032	<0.0001	<0.001	0.167	0.000011	41.7	0.0026	0.00028
RSEM-R5B-EOP	4/30/2020 11:45	XS4884	M	C029734	5.26	0.00633	3.22	<0.00002	259	0.27	195	0.000039	<0.005	<0.005	0.00257	<0.005	0.0081	<0.0001	0.0178	0.00285	0.0013	0.03	<0.0001	<0.001	0.15	0.000023	36.4	0.0026	<0.0002
RSEM-R5B-EOP	5/1/2020 12:00	XS5998	M	C029956	5.13	0.00627	2.95	<0.00002	256	0.261	188	0.000017	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	0.021	0.00314	0.00114	0.035	<0.0001	<0.001	0.166	0.000034	46.8	0.0026	<0.0002
RSEM-R5B-EOP	5/2/2020 12:35	XS7463	M	C030328	5.26	0.0064	3.01	<0.00002	246	0.27	194	0.000024	<0.005	<0.005	0.00273	<0.005	0.0054	<0.0001	0.0232	0.00294	0.0015	0.035	<0.0001	<0.001	0.148	<0.00001	42.7	0.0029	0.0002
RSEM-R5B-EOP	5/4/2020 14:30	XS8356	M	C030506	4.88	0.00529	2.61	<0.00002	232	0.253	183	0.000031	<0.005	<0.005	0.00225	<0.005	0.0158	<0.0001	0.0565	0.00234	0.00094	0.037	<0.0001	<0.001	0.174	0.000094	42.9	0.0014	0.00103
RSEM-R5B-EOP	5/7/2020 12:00	XT2577	M	C031444	6.04	0.00617	2.53	<0.00002	304	0.336	224	0.000013	<0.005	<0.005	0.00348	<0.005	<0.005	0.00012	0.0187	0.00279	0.00145	0.04	<0.0001	<0.001	0.231	0.000019	47.4	0.0028	<0.0002
RSEM-R5B-EOP	5/8/2020 13:00	XT2572	M	C031442	5.26	0.00559	2.08	<0.00002	258	0.297	189	0.000014	<0.005	<0.005	0.00283	<0.005	<0.005	0.00021	0.0175	0.00266	0.00148	0.047	<0.0001	<0.001	0.197	0.000018	49.5	0.0026	0.00021
RSEM-R5B-EOP	5/9/2020 12:40	XT4488	M	C031859	5.47	0.00529	1.84	<0.00002	285	0.277	193	<0.00001	<0.005	<0.005	0.00289	<0.005	0.0062	<0.0001	0.019	0.00242	0.00111	0.041	<0.0001	<0.001	0.196	<0.00001	46.3	0.0022	<0.0002
RSEM-R5B-EOP	5/9/2020 12:50	XT4490	D	C031859	6.44	0.00621	2.18	0.000021	339	0.346	234	<0.00001	<0.005	<0.005	0.00335	<0.005	<0.005	<0.0001	0.0206	0.00255	0.00141	0.042	<0.0001	<0.001	0.214	0.000015	49.5	0.0025	<0.0002
RSEM-R5B-EOP	5/10/2020 13:30	XT4528	M	C031867	5.14	0.00503	1.62	<0.00002	266	0.269	182	<0.00001	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	0.0224	0.00223	0.00084	0.044	<0.0001	<0.001	0.176	0.000016	47.6	0.0027	<0.0002
RSEM-R5B-EOP	5/11/2020 9:45	XT5198	M	C032074	5.50	0.00484	1.53	<0.00002	254	0.283	185	<0.00001	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	0.0211	0.00238	0.00126	0.042	<0.0001	<0.001	0.183	0.000011	44.5	0.0023	<0.0002
RSEM-R5B-EOP	5/12/2020 11:40	XT7069	M	C032509	6.03	0.00577	1.63	<0.00002	280	0.315	203	<0.00001	<0.005	<0.005	0.00325	<0.005	<0.005	<0.0001	0.0235	0.00241	0.0012	0.049	<0.0001	<0.001	0.208	<0.00001	53.3	0.0026	<0.0002
RSEM-R5B-EOP	5/16/2020 12:00	XU2649	M	C033733	5.74	0.00583	0.971	<0.00002	254	0.316	186	0.000026	<0.005	<0.005	0.0034	<0.005	0.0077	0.00029	0.0194	0.00215	0.00106	0.046	<0.0001	<0.001	0.158	<0.00001	47.8	0.0022	<0.0002
RSEM-R5B-EOP	5/17/2020 10:40	XU2515	M	C033704	5.90	0.00517	0.724	<0.00002	252	0.232	195	<0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	0.0171	0.00212	0.00105	0.043	<0.0001	<0.001	0.168	0.000019	47.5	0.0023	<0.0002
RSEM-R5B-EOP	5/18/2020 0:10	XU2636	M	C033728	5.25	0.00533	0.779	<0.00002	229	0.295	169	0.000031	<0.005	<0.005	0.00307	<0.005	<0.005	<0.0001	0.0173	0.00218	0.00095	0.045	<0.0001	<0.001	0.147	<0.00001	47.4	0.002	<0.0002
RSEM-R5B-EOP	5/21/2020 14:30	XU7000	M	C034623	4.93	0.00465	0.658	<0.00002	212	0.269	165	0.000037	<0.005	<0.005	0.00267	<0.005	<0.005	0.00014	0.0114	0.0016	0.00081	0.037	<0.0001	<0.001	0.145	0.000012	43.3	0.0014	<0.0002
RSEM-R5B-EOP	5/22/2020 15:40	XU8403	M	C034984	4.64	0.00481	0.555	<0.00002	190	0.26	152	0.000017	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	0.0143	0.00174	0.00086	0.042	<0.0001	<0.001	0.123	<0.00001	39.8	0.0013	<0.0002
RSEM-R5B-EOP	6/9/2020 17:10	XX3628	M	C039793	4.91	0.003	0.925	<0.00002	156	0.325	128	0.000022	<0.005	0.0099	0.00247	<0.005	<0.005	0.00028	0.0112	0.0011	0.00081	0.067	<0.0001	<0.001	0.125	0.000014	55.5	<0.001	<0.0002
RSEM-R5B-EOP	6/14/2020 15:25	XX9648	M	C040993	4.66	0.00233	1.85	<0.00002	109	0.346	102	0.000031	<0.005	0.0147	0.00264	<0.005	0.0076	0.00027	0.0104	0.00089	0.00077	0.088	<0.0001	<0.001	0.102	<0.00001	63.3	<0.001	<0.0002
RSEM-R5B-EOP	6/15/2020 16:30	XY1607	M	C041415	3.49	0.00228	3.12	<0.00002	43.3	0.277	67.5	0.000016	<0.005	0.0137	0.00163	<0.005	0.0097	0.00029	0.0234	0.00085	0.00064	0.1	<0.0001	<0.001	0.083	0.000075	67.5	0.0012	0.0017
RSEM-R5B-EOP	6/16/2020 11:25	XY1507	M	C041388	3.81	0.00276	3.5	<0.00002	44.9	0.34	86.8	0.000014	<0.005	0.0067	0.0019	<0.005	0.0347	<0.0001	0.0245	0.0009	0.00056	0.11	<0.0001	<0.001	0.092	0.000362	81.1	<0.001	0.0105
RSEM-R5B-EOP	6/17/2020 13:20	XY6279	M	C042380	4.00	0.00309	3.46	<0.00002	49.2	0.365	97.3	0.000012	<0.005	<0.005	0.0019	<0.005	0.0363	<0.0001	0.0226	0.00095	0.00054	0.12	<0.0001	<0.001	0.096	0.00038	87.1	<0.001	0.0119
RSEM-R5B-EOP	6/18/2020 14:30	XY6286	M	C042383	4.30	0.00343	3.57	<0.00002	57.5	0.398	115	0.000013	<0.005	<0.005	0.00206	<0.005	0.059	<0.0001	0.0199	0.00095	0.00055	0.119	<0.0001	<0.001	0.107	0.000507	96.5	<0.001	0.0144
RSEM-R5B-EOP	6/19/2020 12:00	XY6265	M	C042375	4.34	0.00362	3.53	<0.00002	59.2	0.41	117	0.000015	<0.005	<0.005	0.00213	<0.005	0.0585	<0.0001	0.0196	0.00102	0.00056	0.121	<0.0001	<0.001	0.114	0.000546	97.2	<0.001	0.0147
RSEM-R5B-EOP	6/19/2020 12:10	XY6266	D	C042375	4.53	0.0037	3.52	<0.00002	61.8	0.407	121	0.000015	<0.005	<0.005	0.00215	<0.005	0.0614	<0.0001	0.0189	0.00099	0.00054	0.12	<0.0001	<0.001	0.114	0.000526	96.9	<0.001	0.0143
RSEM-R5B-EOP	6/20/2020 15:30	XY9032	M	C042884	4.30	0.00393	3.33	<0.00002	64.6	0.392	119	0.000014	<0.005	<0.005	0.00222	<0.005	0.0526	<0.0001	0.016	0.00103	0.00058	0.109	<0.0001	<0.001	0.127	0.000464	97.0	<0.001	0.0126
RSEM-R5B-EOP	6/21/2020 14:45	XY9119	M	C042904	4.39	0.00428	3.2	<0.00002	71.1	0.406	122	0.000017	<0.005	<0.005	0.00229	<0.005	0.0492	<0.0001	0.0153	0.00113	0.00063	0.113	<0.0001	<0.001	0.133	0.000464	96.9	<0.001	0.0117
RSEM-R5B-EOP	6/22/2020 12:30	XZ0405	M	C043197	4.58	0.00457	2.85	<0.00002	77.7	0.424	127	0.000018	<0.005	<0.005	0.00236	<0.005	0.0426	<0.0001	0.0124	0.00122	0.00068	0.113	<0.0001	<0.001	0.134	0.000377	99.8	<0.001	0.0094
RSEM-R5B-EOP	6/23/2020 16:40	XZ2251	M	C043604	4.90	0.00512	2.83	<0.00002	85.9	0.432	136	0.000019	<0.005	<0.005	0.00244	<0.005	0.0292	<0.0001	0.0118	0.00133	0.00076	0.113	<0.0001	<0.001	0.15	0.00028	99.1	0.001	0.0063
RSEM-R5B-EOP	6/24/2020 13:50	XZ5350	M	C044267	5.16	0.00517	3.16	<0.00002	93.2	0.414	137	0.000021	<0.005	<0.005	0.0025	<0.005	0.0419	<0.0001	0.0101	0.00139	0.00081	0.11	<0.0001	<0.001	0.147	0.00024	95.4	0.0011	0.00459
RSEM-R5B-EOP	6/25/2020 16:30	XZ5986	M	C044346	5.20	0.0054	2.96	<0.00002	96.1	0.415	139	0.000021	<0.005	<0.005	0.00259	<0.005	0.0222	0.00085	0.0096	0.00142	0.00087	0.109	<0.0001	<0.001	0.155	0.000159	96.3	0.0012	0.00353
RSEM-R5B-EOP	6/26/2020 15:20	XZ7318	M	C044624	5.31	0.00541	2.73	<0.00002	101	0.42	142	0.000019	<0.005	<0.005	0.00268	<0.005	0.0133	<0.0001	0.01	0.0015	0.00085	0.109	<0.0001	<0.001	0.154	0.000149	93.3	0.0012	0.00273
RSEM-R5B-EOP	6/27/2020 18:20	XZ9067	M	C044897	5.32	0.00577	2.53	<0.00002	102	0.404	140	0.00002	<0.005	<0.005	0.00264	<0.005	0.0118	<0.0001	0.008	0.00163	0.00089	0.105	<0.0001	<0.001	0.157	0.000091	94.6	0.0012	0.00024
RSEM-R5B-EOP	6/28/2020 11:15	XZ9157	M	C044916	5.48	0.00586	2.57	<0.00002	106	0.414	142	0.00002	<0.005	<0.005	0.0027	<0.005	0.0075	0.00012	0.0081	0.00154	0.0009	0.101	<0.0001	<0.001	0.16	0.00009	88.3	0.0012	0.00115
RSEM-R5B-EOP	6/29/2020 15:00	YA0780	M	C045275	5.71	0.00667	2.38	<0.00002	121	0.394	138	0.000019	<0.005	<0.005	0.00282	<0.005	0.006	<0.0001	0.0085	0.00179	0.00102	0.099	<0.0001	<0.001	0.173	0.000059	87.3	0.0013	<0.0002
RSEM-R5B-EOP	6/29/2020 15:10	YA0781	D	C045275	5.62	0.00671	2.44	<0.00002	117	0.393	135	0.00002	<0.005	<0.005	0.00281	<0.005	0.0062	<0.0001	0.0081	0.00178	0.00103	0.099	<0.0001	<0.001	0.167	0.000051	87.7	0.0013	<0.0002
RSEM-R5B-EOP	6/30/2020 12:35	YA2736	M	C045692	5.66	0.00667	2.73	<0.00002	121	0.397	133	0.00002	<0.005	<0.005	0.003	<0.005	<0.005	<0.0001	0.0089	0.00186	0.00113	0.094	<0.0001	<0.001	0.177	0.000036	83.1	0.0013	<0.0002
RSEM-R5B-EOP	7/1/2020 12:30	YA2710	M	C045689	5.33	0.0046	5.09	<0.00002	96.9	0.365	83.8	0.000027	<0.005	0.0128	0.00294	<0.005	0.0089	0.00023	0.009	0.00135	0.00109	0.09	<0.0001	<0.001	0.15	<0.00001	76.8	<0.001	<0.0002
RSEM-R5B-EOP	7/2/2020 14:25	YA4191	M	C045985	3.58	0.00251	4.03	0.000034	49.2	0.306	48.2	0.000045	<0.005	0.0084	0.00221	<0.005	<0.005	0.00019	0.0074	0.00091	0.00071	0.092	<0.0001	<0.001	0.111	0.000013	70.8	<0.001	0.00021
RSEM-R5B-EOP	7/3/2020 16:35	YA5157	M	C046179	2.98	0.0012	3.76	0.000026	20.9	0.226	37.8	0.000039	<0.005	0.0165	0.00155	<0.005	0.0097	0.00025	0.0087	<0.0005	0.00043	0.085	<0.0001	<0.001	0.056	0.000016	63.0	<0.001	0.00025
RSEM-R5B-EOP	7/4/2020 12:45	YA6731	M	C046470	3.04	0.00085	5.37	<0.00002	14.4	0.184	39.5	0.000039	<0.005	0.0611	0.00148	0.0054	0.0143	0.00148	0.0205	<0.0005	0.00031	0.091	<0.0001	<0.001	<0.05	0.000073	61.2	<0.001	0.00172
RSEM-R5B-EOP	7/4/2020 12:55	YA6732	D	C046470	2.98	0.00084	6.08	<0.00002	14.6	0.184	39.7	0.00004	<0.005	0.0516	0.00158	0.0051	0.0151	0.00128	0.0207	<0.0005	0.00032	0.091	<0.0001	<0.001	<0.05	0.000073	61.3	<0.001	0.00182
RSEM-R5B-EOP	7/5/2020 10:50	YA6920	M	C046500	2.87	0.00095	3.09	<0.00002	22.5	0.208	62.1	0.000019	<0.005	0.0127	0.00159	<0.005	0.0755	0.00064	0.0276	<0.0005	0.00024	0.104	<0.0001	<0.001	0.059	0.000488	72.0	<0.001	0.0117
RSEM-R5B-EOP	7/6/2020 11:45	YA8350	M	C046846	3.13	0.00126	3.36	<0.00002	28.7	0.294	87.2	<0.00001	<0.005	<0.005	0.00195	<0.005	0.0762	<0.0001	0.0267	<0.0005	0.00027	0.11	<0.0001	<0.001	0.068	0.000614	85.5	<0.001	0.0155
RSEM-R5B-EOP	7/7/2020 13:00	YB0052	M	C047206	3.45	0.00167	3.47	<0.00002	36.8	0.314	104	0.000015	<0.005	<0.005	0.00231	<0.005	0.103	<0.0001	0.0231	<0.0005	0.00027	0.115	<0.0001	<0.001	0.078	0.000721	98.5	<0.001	0.0181
RSEM-R5B-EOP	7/8/2020 15:30	YB2462	M	C047619	3.59	0.00185	3.43	<0.00002	38.6	0.34	104	0.000016	<0.005	<0.005	0.00236	<0.005	0.0863	<0.0001	0.0192	<0.0005	0.0003	0.117	<0.0001	<0.001	0.081	0.000626	104	<0.001	0.016
RSEM-R5B-EOP	7/9/2020 15:30	YB4138	M	C047920	3.67	0.00175	3.36	<0.00002	35.6	0.333	92.6	0.000015	<0.005	<0.005	0.00243	<0.005	0.0491	<0.0001	0.0212	<0.0005	0.00028	0.113	<0.0001	<0.001	0.076	0.000396	101	<0.001	0.0104
RSEM-R5B-EOP	7/10/2020 10:45	YB4118	M	C047917	3.87	0.00191	3.47	<0.00002	33.4	0.348	83.3	0.000014	<0.005	<0.005	0.00258	<0.005	0.0256	<0.0001	0.0225	<0.0005	0.00033	0.107	<0.0001	<0.001	0.078	0.000217	102	<0.001	0.00666
RSEM-R5B-EOP	7/11/2020 16:00	YB7195	M	C048486	3.81	0.00187	3.23	<0.00002	30.2	0.31	69.0	<0.00001	<0.005	<0.005	0.00243	<0.005	0.0068	<0.0001	0.0224	<0.0005	0.0003	0.105	<0.0001	<0.001	0.075	0.000027	91.0	<0.001	0.00323
RSEM-R5B-EOP	7/12/2020 15:40	YB7110	M	C048462	3.96	0.00181	3.42	<0.00002	27.9	0.312	62.1	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	0.02	<0.0005	0.0003	0.1	<0.0001	<0.001	0.074	<0.00001	89.7	<0.001	0.00167
RSEM-R5B-EOP	7/13/2020 15:30	YB9221	M	C048875	4.03	0.00179	3.42	<0.00002	26.6	0.324	57.3	0.000014	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	0.0166	<0.0005	0.00031	0.092	<0.0001	<0.001	0.069	<0.00001	84.9	<0.001	0.00079
RSEM-R5B-EOP	7/14/2020 12:45	YC1070	M	C049344	3.95	0.00164	3.21	<0.00002	25.2	0.306	53.3	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	0.0153	<0.0005	0.00029	0.09	<0.0001	<0.001	0.066	<0.00001	82.2	<0.001	0.00064
RSEM-R5B-EOP	7/15/2020 11:35	YC2136	M	C049614	3.88	0.00169	3.28	<0.00002	25.5	0.315	51.2	0.000012	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	0.015	<0.0005	0.00029	0.086	<0.0001	<0.001	0.068	<0.00001	78.0	<0.001	0.00047
RSEM-R5B-EOP	7/16/2020 14:20	YC4663	M	C049952	3.75	0.00151	3.19	<0.00002	24.3	0.311	46.7	0.000021	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	0.0138	<0.0005	0.00031	0.086	<0.0001	<0.001	0.066	<0.00001	78.9	<0.001	0.00062
RSEM-R5B-EOP	7/16/2020 14:30	YC4664	D	C049952	3.96	0.00159	3.29	<0.00002	25.1	0.326	49.9	0.000015	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	0.0137	<0.0005	0.0003	0.086	<0.0001	<0.001	0.067	<0.00001	78.7	<0.001	0.00061
RSEM-R5B-EOP	7/17/2020 12:45	YC5479	M	C050110	3.84	0.00154	3.32	<0.00002	23.7	0.308	46.0	0.000012	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	0.0127	<0.0005	0.00028	0.084	<0.0001	<0.001	0.064	<0.00001	76.1	<0.001	0.00038
RSEM-R5B-EOP	7/17/2020 12:55	YC5480	D	C050110	3.95	0.0016	3.36	<0.00002	24.5	0.316	48.2	0.000011	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	0.0131	<0.0005	0.0003	0.084	<0.0001	<0.001	0.065	<0.00001	76.3	<0.001	0.00038
RSEM-R5B-EOP	7/18/2020 12:05	YC7456	M	C050583	3.89	0.0015	3.12	<0.00002	24.1	0.308	47.7	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0133	<0.0005	0.00026	0.085	<0.0001	<0.001	0.066	<0.00001	75.1	<0.001	0.0003
RSEM-R5B-EOP	7/18/2020 12:15	YC7457	D	C050583	3.94	0.00152	3.09	<0.00002	23.9	0.314	45.9	<0.00001	<0.005	<0.005	0.00198	<0.005	<0.005	<0.0001	0.0129	<0.0005	0.00025	0.083	<0.0001	<0.001	0.066	<0.00001	75.5	<0.001	0.00028
RSEM-R5B-EOP	7/19/2020 12:40	YC7534	D	C050603	3.82	0.00148	2.94	<0.00002	23.2	0.306	43.6	<0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.014	<0.0005	0.00029	0.086	<0.0001	<0.001	0.067	<0.00001	74.0	<0.001	<0.0002
RSEM-R5B-EOP	7/19/2020 13:30	YC7533	M	C050603	3.77	0.00149	2.86	<0.00002	22.7	0.301	42.9	<0.00001	<0.005	<0.005	0.00187	<0.005	<0.005	<0.0001	0.0139	<0.0005	0.00031	0.085	<0.0001	<0.001	0.068	<0.00001	74.1	<0.001	0.00021
RSEM-R5B-EOP	7/20/2020 12:30	YC8545	M	C050811	3.78	0.00147	3	<0.00002	21.9	0.304	41.0	0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.0119	<0.0005	0.00031	0.092	<0.0001	<0.001	0.058	<0.00001	74.1	<0.001	<0.0002
RSEM-R5B-EOP	7/21/2020 15:20	YD0798	M	C051251	3.68	0.00138	2.83	<0.00002	20.4	0.301	38.3	<0.00001	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	0.0126	<0.0005	0.00027	0.094	<0.0001	<0.001	0.065	<0.00001	74.5	<0.001	<0.0002
RSEM-R5B-EOP	7/22/2020 14:20	YD2619	M	C051641	3.83	0.00148	2.78	<0.00002	20.2	0.312	38.9	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.0121	<0.0005	0.0003	0.092	<0.0001	<0.001	0.06	<0.00001	73.0	<0.001	<0.0002
RSEM-R5B-EOP	7/23/2020 14:20	YD4256	M	C051864	3.88	0.00145	2.54	<0.00002	20.4	0.323	39.3	<0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.0121	<0.0005	0.00025	0.094	<0.0001	<0.001	0.06	<0.00001	70.5	<0.001	<0.0002
RSEM-R5B-EOP	7/24/2020 14:05	YD5908	M	C052038	3.87	0.00144	2.04	<0.00002	21.0	0.3	39.9	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.0121	<0.0005	0.00027	0.09	<0.0001	<0.001	0.062	<0.00001	69.2	<0.001	<0.0002
RSEM-R5B-EOP	7/25/2020 12:00	YD7676	M	C052402	3.91	0.00143	1.95	<0.00002	20.8	0.297	39.7	<0.00001	<0.005	<0.005	0.00187	<0.005	<0.005	<0.0001	0.0109	<0.0005	0.00027	0.091	<0.0001	<0.001	0.059	<0.00001	66.5	<0.001	<0.0002
RSEM-R5B-EOP	7/26/2020 13:15	YD7711	M	C052420	3.88	0.0014	1.72	<0.00002	20.8	0.297	39.6	0.000011	<0.005	<0.005	0.00184	<0.005	<0.005	<0.0001	0.0113	<0.0005	0.00028	0.089	<0.0001	<0.001	0.062	<0.00001	65.1	<0.001	<0.0002
RSEM-R5B-EOP	7/26/2020 13:25	YD7712	D	C052420	3.91	0.00136	1.72	<0.00002	21.0	0.298	38.6	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	0.00013	0.0108	<0.0005	0.00027	0.087	<0.0001	<0.001	0.06	<0.00001	65.3	<0.001	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R5B-EOP	7/27/2020 11:50	YD7771	M	C052432	3.90	0.00137	1.63	<0.00002	20.7	0.298	39.3	<0.00001	<0.005	<0.005	0.00184	<0.005	<0.005	<0.0001	0.0102	<0.0005	0.00028	0.088	<0.0001	<0.001	0.06	<0.00001	64.6	<0.001	<0.0002
RSEM-R5B-EOP	7/28/2020 13:45	YE2031	M	C053295	3.94	0.00147	1.62	<0.00002	20.2	0.312	39.8	0.000011	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	0.0094	<0.0005	0.00031	0.084	<0.0001	<0.001	0.059	<0.00001	62.2	<0.001	<0.0002
RSEM-R5B-EOP	7/30/2020 14:30	YE4007	M	C053695	3.73	0.00138	1.46	<0.00002	20.0	0.302	37.8	<0.00001	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	0.0086	<0.0005	0.00029	0.083	<0.0001	<0.001	0.059	<0.00001	61.6	<0.001	<0.0002
RSEM-R5B-EOP	7/31/2020 12:10	YE5652	M	C054023	3.73	0.00123	1.22	<0.00002	20.2	0.273	34.9	<0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.0076	<0.0005	0.00029	0.083	<0.0001	<0.001	0.067	<0.00001	61.7	<0.001	<0.0002
RSEM-R5B-EOP	7/31/2020 12:20	YE5654	D	C054023	3.88	0.00128	1.3	<0.00002	20.3	0.293	36.4	0.000011	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	0.008	<0.0005	0.00028	0.083	<0.0001	<0.001	0.066	<0.00001	60.2	<0.001	<0.0002
RSEM-R5B-EOP	8/1/2020 11:30	YE6667	M	C054219	3.86	0.00124	1.33	<0.00002	20.5	0.293	36.5	0.000011	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	0.0076	<0.0005	0.00031	0.079	<0.0001	<0.001	0.066	<0.00001	61.6	<0.001	<0.0002
RSEM-R5B-EOP	8/2/2020 13:45	YE8518	M	C054579	3.76	0.00129	1.14	<0.00002	19.4	0.3	37.1	0.000012	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	0.0071	<0.0005	0.00029	0.081	<0.0001	<0.001	0.069	<0.00001	59.8	<0.001	<0.0002
RSEM-R5B-EOP	8/3/2020 11:40	YE8526	M	C054582	3.83	0.00129	1.2	<0.00002	19.6	0.309	36.5	0.000013	<0.005	<0.005	0.00184	<0.005	<0.005	<0.0001	0.0067	<0.0005	0.00032	0.084	<0.0001	<0.001	0.071	<0.00001	59.2	<0.001	<0.0002
RSEM-R5B-EOP	8/4/2020 11:20	YF1642	M	C055153	3.73	0.00121	1.08	<0.00002	19.1	0.299	36.5	0.000014	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	0.0057	<0.0005	0.0004	0.08	<0.0001	<0.001	0.07	<0.00001	60.0	<0.001	<0.0002
RSEM-R5B-EOP	8/5/2020 11:05	YF2975	M	C055442	3.67	0.0012	0.838	<0.00002	19.1	0.293	36.0	0.000011	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	0.0051	<0.0005	0.00033	0.083	<0.0001	<0.001	0.067	<0.00001	58.2	<0.001	<0.0002
RSEM-R5B-EOP	8/6/2020 12:40	YF2970	M	C055440	3.84	0.00123	0.829	<0.00002	19.8	0.304	38.4	0.000011	<0.005	<0.005	0.00188	<0.005	0.0108	<0.0001	0.0051	<0.0005	0.00035	0.084	<0.0001	<0.001	0.066	<0.00001	59.1	<0.001	<0.0002
RSEM-R5B-EOP	8/7/2020 10:45	YF4855	M	C055741	3.93	0.0013	0.85	<0.00002	18.6	0.309	38.0	0.000012	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	0.0052	<0.0005	0.00038	0.077	<0.0001	<0.001	0.071	<0.00001	56.3	<0.001	<0.0002
RSEM-R5B-EOP	8/8/2020 11:15	YF8356	M	C056281	3.79	0.00118	0.649	<0.00002	19.3	0.286	36.2	0.000013	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	0.0048	<0.0005	0.00034	0.073	<0.0001	<0.001	0.073	<0.00001	52.8	<0.001	<0.0002
RSEM-R5B-EOP	8/9/2020 13:20	YF8359	M	C056282	3.93	0.00121	0.629	<0.00002	20.4	0.293	37.3	0.000012	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	0.0046	<0.0005	0.00034	0.072	<0.0001	<0.001	0.075	<0.00001	51.6	<0.001	<0.0002
RSEM-R5B-EOP	8/9/2020 13:30	YF8360	D	C056282	3.72	0.00115	0.61	<0.00002	19.5	0.282	35.6	0.000012	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	0.0044	<0.0005	0.00036	0.072	<0.0001	<0.001	0.075	<0.00001	51.8	<0.001	<0.0002
RSEM-R5B-EOP	8/10/2020 11:00	YG0104	M	C056587	4.07	0.00123	0.561	<0.00002	21.0	0.278	38.5	0.000011	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	0.0045	<0.0005	0.00035	0.074	<0.0001	<0.001	0.077	<0.00001	53.6	<0.001	<0.0002
RSEM-R5B-EOP	8/11/2020 11:35	YG2364	M	C056973	4.16	0.00126	0.58	<0.00002	22.0	0.28	40.7	0.00001	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	0.0037	<0.0005	0.00039	0.073	<0.0001	<0.001	0.071	<0.00001	52.8	<0.001	<0.0002
RSEM-R5B-EOP	8/11/2020 11:45	YG2365	D	C056973	4.27	0.00126	0.574	<0.00002	22.1	0.285	41.3	0.000011	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	0.004	<0.0005	0.00037	0.074	<0.0001	<0.001	0.073	<0.00001	52.4	<0.001	<0.0002
RSEM-R5B-EOP	8/12/2020 16:10	YG4634	M	C057417	4.18	0.00129	0.555	<0.00002	21.7	0.3	39.8	0.000012	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	0.0043	<0.0005	0.0004	0.074	<0.0001	<0.001	0.075	<0.00001	53.2	<0.001	<0.0002
RSEM-R5B-EOP	8/13/2020 11:50	YG7258	M	C057823	4.24	0.00124	0.518	<0.00002	22.0	0.309	39.9	0.000012	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	0.0036	<0.0005	0.00037	0.069	<0.0001	<0.001	0.071	<0.00001	52.4	<0.001	<0.0002
RSEM-R5B-EOP	8/14/2020 12:00	YG7188	M	C057817	4.15	0.00122	0.506	<0.00002	21.2	0.289	37.5	0.000011	<0.005	<0.005	0.00203	<0.005	<0.005	<0.0001	0.0038	<0.0005	0.00039	0.072	<0.0001	<0.001	0.08	<0.00001	52.4	<0.001	<0.0002
RSEM-R5B-EOP	8/15/2020 13:20	YH0058	M	C058356	4.04	0.00123	0.442	<0.00002	21.6	0.282	36.7	0.000011	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	0.0036	<0.0005	0.00037	0.074	<0.0001	<0.001	0.08	<0.00001	52.3	<0.001	<0.0002
RSEM-R5B-EOP	8/15/2020 13:30	YH0059	D	C058356	4.20	0.0012	0.466	<0.00002	22.0	0.29	37.6	0.000011	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	0.0051	<0.0005	0.00036	0.073	<0.0001	<0.001	0.082	<0.00001	52.0	<0.001	<0.0002
RSEM-R5B-EOP	8/16/2020 11:00	YH0171	M	C058389	4.20	0.00123	0.468	<0.00002	21.9	0.291	37.8	0.000015	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	0.0031	<0.0005	0.0004	0.072	<0.0001	<0.001	0.083	<0.00001	52.5	<0.001	<0.0002
RSEM-R5B-EOP	8/17/2020 10:10	YG9871	M	C058326	4.12	0.00123	0.527	<0.00002	22.2	0.296	38.9	0.000022	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	0.0032	<0.0005	0.00038	0.073	<0.0001	<0.001	0.085	<0.00001	52.2	<0.001	<0.0002
RSEM-R5B-EOP	8/18/2020 15:45	YH3310	M	C059056	4.22	0.00119	0.561	<0.00002	22.2	0.288	37.0	0.000013	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	0.0037	<0.0005	0.00041	0.07	<0.0001	<0.001	0.082	<0.00001	52.9	<0.001	<0.0002
RSEM-R5B-EOP	8/19/2020 16:00	YH5389	M	C059422	4.13	0.0012	0.571	<0.00002	22.9	0.28	37.2	0.000013	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	0.0034	<0.0005	0.00037	0.07	<0.0001	<0.001	0.08	<0.00001	52.7	<0.001	<0.0002
RSEM-R5B-EOP	8/23/2020 15:30	YI0111	M	C060255	3.57	0.002	2.03	<0.00002	31.5	0.24	40.9	0.00002	<0.005	0.0086	0.002	<0.005	0.0052	0.00016	0.0059	<0.0005	0.00048	0.089	<0.0001	<0.001	0.079	<0.00001	55.7	<0.001	<0.0002
RSEM-R5B-EOP	8/24/2020 14:40	YI2200	M	C060702	3.69	0.00206	2.05	<0.00002	32.9	0.244	42.2	0.000016	<0.005	0.0105	0.00204	<0.005	<0.005	0.00023	0.0052	<0.0005	0.00049	0.09	<0.0001	<0.001	0.084	0.00001	56.5	<0.001	<0.0002
RSEM-R5B-EOP	8/25/2020 11:30	YI3993	M	C061087	3.73	0.00232	2.14	<0.00002	33.3	0.271	47.4	0.000016	<0.005	0.0054	0.00197	<0.005	<0.005	0.00011	0.006	<0.0005	0.00049	0.095	<0.0001	<0.001	0.085	<0.00001	61.2	<0.001	<0.0002
RSEM-R5B-EOP	8/25/2020 11:40	YI3994	D	C061087	3.72	0.00237	2.18	<0.00002	32.8	0.271	48.2	0.000015	<0.005	0.0062	0.00193	<0.005	<0.005	0.00018	0.0057	<0.0005	0.0005	0.095	<0.0001	<0.001	0.084	0.000011	60.2	<0.001	<0.0002
RSEM-R5B-EOP	8/26/2020 12:35	YI6262	M	C061565	3.60	0.00268	1.88	<0.00002	35.1	0.26	47.9	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0065	<0.0005	0.00046	0.098	<0.0001	<0.001	0.087	0.000011	62.8	<0.001	<0.0002
RSEM-R5B-EOP	8/27/2020 11:30	YI7771	M	C061827	3.67	0.00281	1.99	<0.00002	37.0	0.266	50.3	0.000012	<0.005	<0.005	0.00205	<0.005	<0.005	0.00022	0.0075	<0.0005	0.00048	0.097	<0.0001	<0.001	0.085	<0.00001	60.9	<0.001	<0.0002
RSEM-R5B-EOP	8/27/2020 11:40	YI7772	D	C061827	3.64	0.00278	1.91	<0.00002	37.3	0.265	51.2	0.000012	<0.005	<0.005	0.00209	<0.005	<0.005	0.00016	0.0072	<0.0005	0.00047	0.096	<0.0001	<0.001	0.084	<0.00001	62.1	<0.001	<0.0002
RSEM-R5B-EOP	8/28/2020 12:40	YI9492	M	C062013	3.52	0.00283	1.61	<0.00002	35.4	0.259	50.8	0.000011	<0.005	<0.005	0.00199	<0.005	<0.005	<0.0001	0.0076	<0.0005	0.00042	0.09	<0.0001	<0.001	0.102	<0.00001	61.9	<0.001	<0.0002
RSEM-R5B-EOP	8/29/2020 11:15	YJ1740	M	C062465	3.55	0.00293	1.53	<0.00002	38.7	0.235	51.2	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0078	<0.0005	0.00045	0.097	<0.0001	<0.001	0.084	<0.00001	61.7	<0.001	<0.0002
RSEM-R5B-EOP	8/30/2020 13:35	YJ1571	M	C062426	3.51	0.00291	1.4	<0.00002	38.3	0.232	50.7	0.000016	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	0.0072	<0.0005	0.00044	0.093	<0.0001	<0.001	0.086	<0.00001	61.2	<0.001	<0.0002
RSEM-R5B-EOP	8/31/2020 17:25	YJ3641	M	C062857	3.75	0.00313	1.89	<0.00002	38.9	0.275	53.6	0.000013	<0.005	0.0052	0.00225	<0.005	<0.005	0.00023	0.0078	<0.0005	0.00046	0.091	<0.0001	<0.001	0.092	<0.00001	60.6	<0.001	<0.0002
RSEM-R5B-EOP	9/1/2020 12:55	YJ6689	M	C063433	3.56	0.00309	1.47	<0.00002	36.5	0.261	54.0	0.00001	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	0.0078	<0.0005	0.00045	0.088	<0.0001	<0.001	0.089	<0.00001	60.6	<0.001	<0.0002
RSEM-R5B-EOP	9/2/2020 15:35	YJ7833	M	C063666	3.62	0.00305	1.33	<0.00002	35.5	0.261	53.1	0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	0.00025	0.0073	<0.0005	0.00043	0.089	<0.0001	<0.001	0.086	<0.00001	58.7	<0.001	<0.0002
RSEM-R5B-EOP	9/3/2020 15:15	YK0032	M	C064047	3.79	0.00301	1.28	<0.00002	36.8	0.278	52.0	0.000012	<0.005	<0.005	0.00231	<0.005	<0.005	0.00024	0.0074	<0.0005	0.00043	0.089	<0.0001	<0.001	0.092	<0.00001	58.0	<0.001	<0.0002
RSEM-R5B-EOP	9/3/2020 15:25	YK0033	D	C064047	3.77	0.00292	1.23	<0.00002	36.4	0.27	51.2	0.000012	<0.005	<0.005	0.00228	<0.005	<0.005	0.00012	0.0076	<0.0005	0.00043	0.089	<0.0001	<0.001	0.095	<0.00001	58.4	<0.001	<0.0002
RSEM-R5B-EOP	9/4/2020 13:30	YK0087	M	C064051	3.77	0.00293	1.11	<0.00002	35.8	0.271	51.1	0.000012	<0.005	<0.005	0.00224	<0.005	<0.005	0.00011	0.0074	<0.0005	0.00041	0.085	<0.0001	<0.001	0.093	<0.00001	57.2	<0.001	<0.0002
RSEM-R5B-SP	2/22/2020 13:20	XL1355	M	C013195	5.89	0.0029	6.22	<0.00002	214	0.261	115	<0.00001	<0.005	<0.005	0.00299	<0.005	0.0051	<0.0001	0.0245	0.00129	0.00107	0.037	<0.0001	<0.001	0.161	0.000021	44.9	0.0024	0.00041
RSEM-R5B-SP	2/22/2020 13:30	XL1356	D	C013195	5.77	0.0028	6.17	<0.00002	212	0.254	111	0.00001	<0.005	<0.005	0.00297	<0.005	0.0055	<0.0001	0.0253	0.00129	0.00106	0.037	<0.0001	<0.001	0.159	0.000019	45.1	0.0023	0.00043
RSEM-R5B-SP	5/3/2020 8:20	XS7392	M	C030307	5.79	0.00712	2.98	<0.00002	289	0.306	222	0.000018	<0.005	<0.005	0.00285	<0.005	0.0149	<0.0001	0.02	0.00285	0.00164	0.032	<0.0001	<0.001	0.158	<0.00001	38.8	0.0024	<0.0002
RSEM-R5B-SP	5/5/2020 14:20	XT0143	M	C030949	5.66	0.00554	2.56	<0.00002	258	0.293	212	0.000012	<0.005	<0.005	0.00257	<0.005	<0.005	0.00051	0.0216	0.00239	0.00165	0.035	<0.0001	<0.001	0.17	<0.00001	43.8	0.0028	<0.0002
RSEM-R5B-SP	5/6/2020 14:40	XT1603	D	C031246	5.48	0.00567	2.29	<0.00002	276	0.282	204	0.000015	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	0.0185	0.00267	0.00122	0.042	<0.0001	<0.001	0.223	0.000028	47.2	0.0032	<0.0002
RSEM-R5B-SP	5/6/2020 14:50	XT1601	M	C031246	5.62	0.00584	2.4	<0.00002	279	0.299	205	0.000017	<0.005	<0.005	0.0031	<0.005	<0.005	0.00014	0.0196	0.00225	0.00151	0.046	<0.0001	<0.001	0.196	0.000014	49.0	0.0025	<0.0002
RSEM-R5B-SP	5/13/2020 11:35	XT8150	M	C032775	5.45	0.00533	1.41	<0.00002	238	0.288	179	0.000024	<0.005	<0.005	0.00286	<0.005	<0.005	<0.0001	0.0203	0.002	0.00154	0.042	<0.0001	<0.001	0.153	0.00002	45.4	0.0019	<0.0002
RSEM-R5B-SP	5/15/2020 9:35	XU0134	M	C033173	5.49	0.00546	1.17	0.000037	241	0.289	188	0.000053	<0.005	<0.005	0.00291	<0.005	<0.005	0.00023	0.0197	0.00195	0.001	0.048	<0.0001	<0.001	0.167	<0.00001	49.3	0.0022	<0.0002
RSEM-R5B-SP	5/23/2020 14:20	XU8588	M	C034993	5.06	0.00478	0.567	<0.00002	211	0.286	153	0.000013	<0.005	<0.005	0.00267	<0.005	<0.005	<0.0001	0.0129	0.00174	0.00102	0.048	<0.0001	<0.001	0.134	0.000017	44.1	0.0015	<0.0002
RSEM-R5B-SP	5/30/2020 14:45	XV8356	M	C037043	5.12	0.00429	0.299	<0.00002	204	0.287	146	0.000014	<0.005	<0.005	0.00265	<0.005	<0.005	<0.0001	0.0136	0.00168	0.00096	0.049	<0.0001	<0.001	0.131	<0.00001	45.4	0.0012	<0.0002
RSEM-R5B-SP	6/10/2020 14:30	XX4755	M	C040036	4.87	0.00304	0.905	<0.00002	150	0.339	125	0.00002	<0.005	0.0068	0.00266	<0.005	<0.005	0.00068	0.011	0.00107	0.00079	0.07	<0.0001	<0.001	0.115	0.000013	56.8	<0.001	<0.0002
RSEM-R5B-SP	8/22/2020 12:20	YI0130	M	C060262	3.69	0.00176	2.52	<0.00002	29.2	0.247	38.4	0.000032	<0.005	0.0166	0.00202	<0.005	0.0111	0.00022	0.004	<0.0005	0.00049	0.087	<0.0001	<0.001	0.079	<0.00001	55.2	<0.001	<0.0002
RSEM-R5B-W	4/8/2020 14:20	XQ4591	M	C024938	8.59	0.00281	42.8	0.000536	17.8	0.33	33.9	0.000659	<0.005	0.282	0.00441	0.0927	0.249	0.00837	0.0501	<0.0005	0.00061	0.09	<0.0001	<0.001	<0.05	0.000024	44.3	<0.001	0.00026
RSEM-R5B-W	7/2/2020 14:45	YA4186	M	C045984	9.81	0.00233	32.9	0.000343	32.6	0.493	86.4	0.000476	<0.01	0.322	0.00551	0.056	0.154	0.00712	0.0093	0.00073	0.00056	0.084	<0.0001	<0.001	0.096	0.000027	104	<0.001	0.00032
RSEM-R6E-EOP	1/1/2020 13:45	XE7145	M	C000229	5.65	0.00133	5.19	<0.00002	127	0.341	46.0	0.000011	<0.005	<0.005	0.0016	<0.005	0.0069	0.00013	0.0638	0.00118	0.00127	0.133	<0.0001	<0.001	0.185	0.00002	73.6	<0.001	0.00107
RSEM-R6E-EOP	1/2/2020 10:55	XE7180	M	C000238	5.62	0.0014	5.31	<0.00002	127	0.34	45.8	0.000011	<0.005	<0.005	0.00158	<0.005	0.0067	0.00013	0.0607	0.0012	0.00125	0.132	<0.0001	<0.001	0.194	0.000017	76.4	<0.001	0.00106
RSEM-R6E-EOP	1/3/2020 14:05	XE8698	M	C000625	6.18	0.00141	4.66	<0.00002	126	0.346	45.8	0.000011	<0.005	<0.005	0.00155	<0.005	0.0061	<0.0001	0.0594	0.00114	0.00119	0.129	<0.0001	<0.001	0.185	0.000019	78.9	0.0036	0.00095
RSEM-R6E-EOP	1/4/2020 15:30	XE9881	M	C000877	6.81	0.00172	5.2	<0.00002	139	0.39	51.3	0.000011	<0.005	<0.005	0.00167	<0.005	0.0063	<0.0001	0.0657	0.00112	0.0012	0.129	<0.0001	<0.001	0.192	0.000023	71.9	0.0037	0.00088
RSEM-R6E-EOP	1/5/2020 15:00	XE9852	M	C000870	7.20	0.00183	5.18	<0.00002	147	0.392	53.1	0.000014	<0.005	<0.005	0.00173	<0.005	0.0064	0.00012	0.0695	0.00111	0.0012	0.127	<0.0001	<0.001	0.19	0.000021	71.0	0.0047	0.00084
RSEM-R6E-EOP	1/6/2020 13:40	XF0704	M	C001127	6.80	0.00174	5.21	<0.00002	124	0.407	49.2	0.000012	<0.005	<0.005	0.00156	<0.005	0.0054	0.00015	0.0629	0.00102	0.00126	0.121	<0.0001	<0.001	0.168	0.000021	74.6	0.005	0.00076
RSEM-R6E-EOP	1/7/2020 15:00	XF1934	M	C001464	6.90	0.00158	5.94	<0.00002	119	0.429	49.9	0.000013	<0.005	<0.005	0.00164	<0.005	0.0058	0.00012	0.0737	0.00115	0.00118	0.13	<0.0001	<0.001	0.186	0.000022	80.5	0.005	0.00078
RSEM-R6E-EOP	1/8/2020 14:45	XF3043	M	C001783	7.69	0.00169	6.04	<0.00002	130	0.37	55.4	0.000015	<0.005	<0.005	0.00162	<0.005	0.0063	0.00025	0.0685	0.00108	0.00129	0.129	<0.0001	<0.001	0.19	0.000031	77.0	0.0052	0.00086
RSEM-R6E-EOP	1/9/2020 13:50	XF4213	M	C002074	6.88	0.0016	5.47	<0.00002	123	0.414	50.4	0.000012	<0.005	<0.005	0.00157	<0.005	0.0055	0.00012	0.0651	0.00111	0.00118	0.127	<0.0001	<0.001	0.184	0.000021	78.0	0.0046	0.00078
RSEM-R6E-EOP	1/10/2020 11:50	XF5141	M	C002216	6.80	0.00158	5.67	<0.00002	127	0.398	52.0	0.000013	<0.005	<0.005	0.00164	<0.005	0.0067	0.00013	0.07	0.00109	0.00119	0.134	<0.0001	<0.001	0.19	0.000034	86.6	0.0041	0.00077
RSEM-R6E-EOP	1/11/2020 13:15	XF5749	M	C002384	6.65	0.00171	5.65	<0.00002	128	0.392	50.3	0.000013	<0.005	<0.005	0.00166	<0.005	0.0051	0.00014	0.0672	0.00112	0.00121	0.131	<0.0001	<0.001	0.183	0.000016	79.5	0.0038	0.00071
RSEM-R6E-EOP	1/12/2020 14:30	XF5771	M	C002394	6.62	0.00159	5.62	<0.00002	127	0.376	49.1	0.000012	<0.005	<0.005	0.00158	<0.005	<0.005	0.00012	0.0697	0.00108	0.00123	0.129	<0.0001	<0.001	0.187	0.000015	79.2	0.0038	0.00069

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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	1/13/2020 13:00	XF7161	M	C002657	6.57	0.00165	5.82	<0.00002	126	0.375	48.1	0.000016	<0.005	<0.005	0.0016	<0.005	<0.005	0.00014	0.0682	0.00107	0.00121	0.13	<0.0001	<0.001	0.182	0.000014	80.7	0.0038	0.00068
RSEM-R6E-EOP	1/14/2020 13:05	XF8102	M	C002891	6.79	0.00161	5.27	<0.00002	129	0.359	47.1	0.000013	<0.005	<0.005	0.00175	<0.005	0.0053	0.00012	0.0678	0.00109	0.0012	0.133	<0.0001	<0.001	0.194	0.000018	80.2	0.0036	0.00068
RSEM-R6E-EOP	1/15/2020 14:00	XF9572	M	C003144	6.98	0.00164	5.86	<0.00002	132	0.398	51.1	0.000011	<0.005	<0.005	0.00161	<0.005	0.0054	0.00013	0.065	0.00108	0.00119	0.127	<0.0001	<0.001	0.177	0.000023	74.8	0.0037	0.00068
RSEM-R6E-EOP	1/16/2020 15:20	XG0618	M	C003413	6.32	0.00157	5.04	<0.00002	124	0.359	45.4	<0.00001	<0.005	<0.005	0.00153	<0.005	<0.005	0.00012	0.0627	0.00103	0.00125	0.122	<0.0001	<0.001	0.181	0.000017	74.5	0.0035	0.00063
RSEM-R6E-EOP	1/17/2020 10:20	XG0611	M	C003412	6.43	0.00152	5.04	<0.00002	125	0.36	46.8	<0.00001	<0.005	<0.005	0.00156	<0.005	0.005	0.00014	0.0609	0.00105	0.00129	0.122	<0.0001	<0.001	0.176	0.000015	74.4	0.0035	0.00063
RSEM-R6E-EOP	1/17/2020 10:30	XG0612	D	C003412	6.53	0.00165	5.13	<0.00002	128	0.367	46.0	<0.00001	<0.005	<0.005	0.00158	<0.005	<0.005	0.00014	0.0627	0.00104	0.00128	0.121	<0.0001	<0.001	0.178	0.000016	74.3	0.0036	0.00063
RSEM-R6E-EOP	1/18/2020 13:15	XG2773	M	C003851	6.89	0.00159	5.65	<0.00002	134	0.389	49.1	0.000013	<0.005	<0.005	0.0017	<0.005	0.0057	0.00014	0.065	0.00112	0.00138	0.126	<0.0001	<0.001	0.195	0.000017	76.6	0.0035	0.00069
RSEM-R6E-EOP	1/18/2020 13:25	XG2774	D	C003851	6.88	0.00164	5.7	<0.00002	133	0.395	47.3	0.000013	<0.005	<0.005	0.00169	<0.005	0.0052	0.00012	0.0672	0.00113	0.00142	0.125	<0.0001	<0.001	0.198	0.000017	76.9	0.0037	0.0007
RSEM-R6E-EOP	1/19/2020 16:40	XG2757	M	C003847	6.81	0.00161	5.68	<0.00002	133	0.396	49.3	0.000013	<0.005	<0.005	0.00165	<0.005	0.0056	0.00021	0.0659	0.00109	0.00143	0.128	<0.0001	<0.001	0.199	0.000017	78.3	0.0036	0.00073
RSEM-R6E-EOP	1/19/2020 16:50	XG2758	D	C003847	6.89	0.00167	5.73	<0.00002	134	0.391	50.6	0.000013	<0.005	<0.005	0.00171	<0.005	0.0059	0.00013	0.0635	0.00113	0.00142	0.127	<0.0001	<0.001	0.198	0.000016	78.6	0.0036	0.00072
RSEM-R6E-EOP	1/20/2020 10:15	XG2702	M	C003843	7.02	0.00171	5.96	<0.00002	147	0.408	53.9	0.000014	<0.005	<0.005	0.00175	<0.005	0.0064	0.00014	0.076	0.00119	0.00159	0.127	<0.0001	<0.001	0.202	0.000019	75.3	0.0032	0.00084
RSEM-R6E-EOP	1/20/2020 10:25	XG2703	D	C003843	6.97	0.00174	5.86	<0.00002	149	0.411	54.8	0.000013	<0.005	<0.005	0.00175	<0.005	0.0065	0.00016	0.0759	0.00118	0.00158	0.125	<0.0001	<0.001	0.203	0.000017	75.4	0.003	0.00084
RSEM-R6E-EOP	1/21/2020 15:00	XG5823	M	C004470	6.62	0.00159	5.07	<0.00002	160	0.373	56.8	<0.00001	<0.005	<0.005	0.00168	<0.005	0.0073	0.00012	0.0921	0.00123	0.00168	0.124	<0.0001	<0.001	0.213	0.000018	70.9	0.0027	0.00097
RSEM-R6E-EOP	1/22/2020 17:00	XG7451	M	C004860	6.81	0.00149	5.76	<0.00002	161	0.392	58.7	0.000012	<0.005	<0.005	0.00172	<0.005	0.0072	0.00012	0.0835	0.00122	0.00163	0.122	<0.0001	<0.001	0.195	0.000015	69.2	0.0025	0.00098
RSEM-R6E-EOP	1/23/2020 17:00	XG9561	M	C005172	6.59	0.00169	5.08	<0.00002	150	0.377	52.7	<0.00001	<0.005	<0.005	0.00171	<0.005	0.007	0.00018	0.0811	0.00125	0.00171	0.122	<0.0001	<0.001	0.213	0.000018	72.6	0.0025	0.0009
RSEM-R6E-EOP	1/24/2020 10:20	XG9567	M	C005174	6.59	0.00165	4.93	<0.00002	155	0.356	52.5	<0.00001	<0.005	<0.005	0.00166	<0.005	0.0071	0.00014	0.0813	0.00135	0.00172	0.124	<0.0001	<0.001	0.205	0.000015	71.9	0.0024	0.00097
RSEM-R6E-EOP	1/25/2020 11:00	XH2065	M	C005631	6.63	0.00172	5.85	<0.00002	156	0.358	57.1	0.000012	<0.005	<0.005	0.00172	<0.005	0.0073	<0.0001	0.0753	0.00132	0.00171	0.13	<0.0001	<0.001	0.214	0.000017	70.2	0.0024	0.001
RSEM-R6E-EOP	1/26/2020 12:30	XH2024	M	C005623	6.39	0.00147	5.62	<0.00002	151	0.351	55.5	0.000014	<0.005	<0.005	0.00173	<0.005	0.0068	<0.0001	0.0662	0.00141	0.00166	0.131	<0.0001	<0.001	0.213	0.000017	72.1	0.0021	0.00102
RSEM-R6E-EOP	1/27/2020 16:30	XH3885	M	C005941	6.22	0.00155	6.36	<0.00002	152	0.349	53.1	<0.00001	<0.005	<0.005	0.00161	<0.005	0.0066	0.00013	0.0704	0.0013	0.00154	0.125	<0.0001	<0.001	0.247	0.00002	68.0	0.0022	0.00099
RSEM-R6E-EOP	1/28/2020 14:05	XH5362	M	C006197	6.26	0.00155	5.14	<0.00002	149	0.332	52.8	0.000011	<0.005	<0.005	0.00164	<0.005	0.0073	0.00012	0.065	0.00131	0.00156	0.123	<0.0001	<0.001	0.201	0.000022	68.3	0.0023	0.001
RSEM-R6E-EOP	1/29/2020 12:25	XH6913	M	C006592	6.68	0.00171	5.76	<0.00002	160	0.314	57.4	0.000013	<0.005	<0.005	0.00166	<0.005	0.0081	0.0001	0.0621	0.00138	0.00157	0.134	<0.0001	<0.001	0.206	0.000022	68.1	0.0023	0.00098
RSEM-R6E-EOP	1/30/2020 14:15	XH8749	M	C006955	6.29	0.00165	5.72	<0.00002	150	0.363	52.3	0.000013	<0.005	<0.005	0.00172	<0.005	0.0068	<0.0001	0.0577	0.00137	0.00148	0.133	<0.0001	<0.001	0.194	0.000018	72.8	0.0023	0.00097
RSEM-R6E-EOP	1/31/2020 14:40	XH9852	M	C007079	6.63	0.00173	6.04	<0.00002	151	0.379	54.7	0.000012	<0.005	<0.005	0.00172	<0.005	0.0077	0.00011	0.0545	0.00139	0.00156	0.135	<0.0001	<0.001	0.206	0.000017	72.0	0.0022	0.00093
RSEM-R6E-EOP	2/1/2020 12:30	XI1805	M	C007448	6.24	0.00156	5.69	<0.00002	146	0.353	51.2	0.000013	<0.005	<0.005	0.00172	<0.005	0.0068	<0.0001	0.05	0.00125	0.00142	0.123	<0.0001	<0.001	0.208	0.000019	73.1	0.0022	0.00089
RSEM-R6E-EOP	2/2/2020 15:05	XI1835	M	C007454	6.32	0.00164	5.77	<0.00002	148	0.359	51.4	0.000013	<0.005	<0.005	0.00172	<0.005	0.0071	0.00011	0.0467	0.00128	0.00136	0.125	<0.0001	<0.001	0.205	0.000021	71.6	0.0021	0.00085
RSEM-R6E-EOP	2/3/2020 13:10	XI3482	M	C007820	6.28	0.00165	5.62	<0.00002	148	0.36	51.4	0.000012	<0.005	<0.005	0.00169	<0.005	0.0071	0.00011	0.0175	0.00144	0.00144	0.131	<0.0001	<0.001	0.203	<0.00001	76.7	0.0021	0.00061
RSEM-R6E-EOP	2/4/2020 12:55	XI3463	M	C007815	6.05	0.00162	5.48	<0.00002	143	0.344	48.9	0.000013	<0.005	<0.005	0.00166	<0.005	0.0067	0.0001	0.0167	0.00146	0.0018	0.128	<0.0001	<0.001	0.226	<0.00001	74.0	0.0021	0.00067
RSEM-R6E-EOP	2/5/2020 14:15	XI6889	M	C008469	6.46	0.0016	5.07	<0.00002	152	0.333	49.9	0.000012	<0.005	<0.005	0.00174	<0.005	0.0071	<0.0001	0.0361	0.00126	0.00135	0.122	<0.0001	<0.001	0.191	0.000019	69.7	0.0019	0.00084
RSEM-R6E-EOP	2/6/2020 13:05	XI8760	M	C008772	5.94	0.00146	5.3	<0.00002	147	0.339	48.7	0.000014	<0.005	<0.005	0.00168	<0.005	0.0078	<0.0001	0.0364	0.00131	0.0014	0.121	<0.0001	<0.001	0.207	0.000042	69.7	0.002	0.00092
RSEM-R6E-EOP	2/7/2020 11:15	XI8779	M	C008775	5.92	0.00141	5.17	<0.00002	141	0.331	49.0	0.000014	<0.005	<0.005	0.00167	<0.005	0.008	<0.0001	0.035	0.00128	0.00131	0.122	<0.0001	<0.001	0.211	0.000018	70.1	0.0022	0.00095
RSEM-R6E-EOP	2/7/2020 11:25	XI8780	D	C008775	6.02	0.00144	5.43	<0.00002	145	0.348	50.5	0.000014	<0.005	<0.005	0.0017	<0.005	0.0082	0.00014	0.0345	0.00129	0.00136	0.121	<0.0001	<0.001	0.218	0.000025	74.2	0.0021	0.0009
RSEM-R6E-EOP	2/8/2020 13:00	XJ1673	M	C009232	6.22	0.00153	5.71	<0.00002	143	0.344	51.7	0.000012	<0.005	<0.005	0.00176	<0.005	0.0085	0.0001	0.0311	0.00125	0.00121	0.121	<0.0001	<0.001	0.197	0.000018	73.5	0.0022	0.0009
RSEM-R6E-EOP	2/9/2020 14:30	XJ1693	M	C009242	6.07	0.00162	5.54	<0.00002	138	0.348	49.7	0.000012	<0.005	<0.005	0.00171	<0.005	0.0084	<0.0001	0.0287	0.00127	0.00115	0.12	<0.0001	<0.001	0.197	0.000018	74.6	0.0023	0.00088
RSEM-R6E-EOP	2/10/2020 10:05	XJ1713	M	C009249	6.13	0.00158	5.61	<0.00002	141	0.344	50.0	0.000012	<0.005	<0.005	0.00172	<0.005	0.0085	<0.0001	0.0282	0.00129	0.00111	0.122	<0.0001	<0.001	0.198	0.000016	74.0	0.0024	0.00085
RSEM-R6E-EOP	2/11/2020 13:15	XJ6270	M	C010122	6.02	0.00164	5.62	<0.00002	139	0.35	49.5	0.000011	<0.005	<0.005	0.00174	<0.005	0.0089	0.00011	0.0049	0.00121	0.00129	0.101	<0.0001	<0.001	0.17	<0.00001	61.8	0.0019	0.00044
RSEM-R6E-EOP	2/12/2020 13:50	XJ8070	M	C010503	6.28	0.00153	5.68	<0.00002	143	0.367	51.8	0.000014	<0.005	<0.005	0.00174	<0.005	0.0096	0.00017	0.038	0.00131	0.00126	0.123	<0.0001	<0.001	0.206	<0.00001	68.2	0.0024	0.00061
RSEM-R6E-EOP	2/22/2020 14:35	XL1358	M	C013195	5.95	0.00153	5.22	<0.00002	139	0.346	47.8	0.000011	<0.005	<0.005	0.00168	<0.005	0.0089	0.00011	0.0235	0.00128	0.0011	0.124	<0.0001	<0.001	0.178	0.000015	69.6	0.0024	0.0008
RSEM-R6E-EOP	2/23/2020 13:00	XL1345	M	C013192	6.58	0.00149	4.81	<0.00002	132	0.369	48.6	<0.00001	<0.005	<0.005	0.00166	<0.005	0.0089	0.00013	0.023	0.00117	0.00114	0.124	<0.0001	<0.001	0.19	0.00002	76.6	0.0039	0.00106
RSEM-R6E-EOP	2/24/2020 10:30	XL1314	M	C013183	6.72	0.0017	5.56	<0.00002	134	0.408	52.5	0.000012	<0.005	<0.005	0.0017	<0.005	0.0089	0.00015	0.023	0.00117	0.001	0.125	<0.0001	<0.001	0.175	0.000016	71.1	0.0038	0.00102
RSEM-R6E-EOP	2/24/2020 10:40	XL1315	D	C013183	6.75	0.00166	5.57	<0.00002	136	0.423	51.7	0.000014	<0.005	<0.005	0.00176	<0.005	0.0099	0.00011	0.0227	0.00117	0.00101	0.124	<0.0001	<0.001	0.175	0.000015	72.4	0.0039	0.001
RSEM-R6E-EOP	2/25/2020 12:50	XL5026	M	C014003	7.41	0.00168	5.6	<0.00002	138	0.447	56.0	<0.00001	<0.005	<0.005	0.00167	<0.005	0.0123	0.00011	0.0241	0.00118	0.00112	0.126	<0.0001	<0.001	0.205	0.00002	81.8	0.0053	0.00107
RSEM-R6E-EOP	2/26/2020 12:15	XL6614	M	C014425	7.59	0.00173	5.27	<0.00002	141	0.449	56.4	0.000013	<0.005	<0.005	0.00173	<0.005	0.0099	0.00014	0.0268	0.00112	0.001	0.127	<0.0001	<0.001	0.199	0.000027	79.4	0.0056	0.00112
RSEM-R6E-EOP	2/27/2020 10:40	XL6654	M	C014448	8.72	0.00203	5.28	<0.00002	137	0.493	59.9	0.000013	<0.005	<0.005	0.00172	<0.005	0.0086	0.00017	0.0248	0.00107	0.00111	0.126	<0.0001	<0.001	0.187	0.000025	85.2	0.009	0.00118
RSEM-R6E-EOP	2/27/2020 10:50	XL6655	D	C014448	9.06	0.00216	5.44	<0.00002	143	0.507	61.5	0.000013	<0.005	<0.005	0.00179	<0.005	0.0091	0.00017	0.0254	0.00108	0.0011	0.127	<0.0001	<0.001	0.197	0.000027	83.6	0.0087	0.00106
RSEM-R6E-EOP	2/28/2020 11:10	XL8817	M	C014870	9.59	0.00181	6.72	<0.00002	128	0.477	61.6	0.000019	<0.005	0.0135	0.00159	<0.005	0.0081	0.00032	0.0121	0.00106	0.00117	0.131	<0.0001	<0.001	0.183	0.00001	87.0	0.0088	0.00093
RSEM-R6E-EOP	2/28/2020 11:20	XL8818	D	C014870	9.77	0.00184	6.75	<0.00002	128	0.477	62.3	0.00002	<0.005	0.0148	0.00164	<0.005	0.0084	0.00028	0.0118	0.00104	0.00112	0.129	<0.0001	<0.001	0.183	0.000011	82.2	0.0091	0.00098
RSEM-R6E-EOP	2/29/2020 13:30	XM2599	M	C015563	9.38	0.00206	6.26	<0.00002	110	0.518	54.2	0.000018	<0.005	0.0069	0.00156	<0.005	0.0067	0.00025	0.0097	0.00096	0.00115	0.124	<0.0001	<0.001	0.154	0.000017	79.9	0.0113	0.00071
RSEM-R6E-EOP	2/29/2020 13:40	XM2600	D	C015563	9.35	0.00206	6.29	<0.00002	109	0.519	54.2	0.000018	<0.005	0.0062	0.00158	<0.005	0.0061	0.00023	0.0107	0.00094	0.00115	0.123	<0.0001	<0.001	0.15	0.00002	80.1	0.0113	0.00072
RSEM-R6E-EOP	3/1/2020 11:50	XM2631	M	C015569	9.23	0.00203	5.76	<0.00002	103	0.491	52.0	0.000016	<0.005	<0.005	0.00148	<0.005	<0.005	0.00019	0.0104	0.00099	0.00117	0.115	<0.0001	<0.001	0.145	0.000015	77.1	0.012	0.00068
RSEM-R6E-EOP	3/1/2020 12:00	XM2632	D	C015569	8.99	0.00199	5.61	<0.00002	101	0.485	49.8	0.000015	<0.005	<0.005	0.00148	<0.005	<0.005	0.00018	0.01	0.001	0.0012	0.115	<0.0001	<0.001	0.149	0.000017	77.6	0.0119	0.00067
RSEM-R6E-EOP	3/2/2020 18:45	XM6320	M	C016408	9.93	0.00189	6.09	<0.00002	96.4	0.461	49.7	0.000019	<0.005	0.0132	0.00142	<0.005	0.0069	0.00038	0.0158	0.00097	0.00119	0.115	<0.0001	<0.001	0.136	0.000024	76.9	0.0121	0.00058
RSEM-R6E-EOP	3/3/2020 12:40	XM6546	M	C016468	9.30	0.00199	5.59	<0.00002	90.1	0.465	46.3	0.000013	<0.005	<0.005	0.00139	<0.005	<0.005	0.00021	0.017	0.001	0.00126	0.111	<0.0001	<0.001	0.137	0.00002	72.6	0.0132	0.00046
RSEM-R6E-EOP	3/4/2020 14:30	XM8002	M	C016829	9.04	0.00186	6.21	<0.00002	87.5	0.463	44.9	0.000012	<0.005	0.0051	0.00131	<0.005	<0.005	0.00022	0.0179	0.00093	0.00116	0.1	<0.0001	<0.001	0.128	0.000019	69.6	0.0131	0.00046
RSEM-R6E-EOP	3/5/2020 13:45	XN0418	M	C017276	9.57	0.00206	6.11	<0.00002	88.7	0.475	45.6	0.000013	<0.005	<0.005	0.00136	<0.005	<0.005	0.00014	0.0173	0.00096	0.00115	0.1	<0.0001	<0.001	0.124	0.000031	70.6	0.0129	0.00056
RSEM-R6E-EOP	3/10/2020 12:45	XN6089	M	C018396	9.75	0.00191	6.21	<0.00002	87.5	0.493	44.5	0.000017	<0.005	<0.005	0.00132	<0.005	<0.005	0.00017	0.0153	0.00098	0.0012	0.105	<0.0001	<0.001	0.106	0.000027	70.8	0.0132	0.00055
RSEM-R6E-EOP	3/10/2020 12:55	XN6090	D	C018396	9.36	0.00187	5.96	<0.00002	84.9	0.473	44.6	0.000015	<0.005	<0.005	0.0013	<0.005	0.0056	0.00016	0.0151	0.00099	0.00117	0.105	<0.0001	<0.001	0.107	0.000028	71.0	0.0134	0.00053
RSEM-R6E-EOP	3/11/2020 14:25	XN7891	M	C018851	9.75	0.00187	6.67	<0.00002	75.3	0.488	43.7	0.00002	<0.005	0.0105	0.00132	<0.005	0.005	0.00036	0.018	0.00095	0.00122	0.097	<0.0001	<0.001	0.116	0.000034	73.5	0.016	0.00051
RSEM-R6E-EOP	3/11/2020 14:35	XN7892	D	C018851	9.72	0.00183	6.49	<0.00002	75.3	0.48	43.8	0.000019	<0.005	0.009	0.00129	<0.005	0.0053	0.00037	0.0174	0.0009	0.00121	0.095	<0.0001	<0.001	0.118	0.000034	71.6	0.0156	0.00053
RSEM-R6E-EOP	3/12/2020 12:00	XN8894	M	C019027	9.93	0.00177	5.71	<0.00002	76.8	0.463	44.2	0.000016	<0.005	0.0057	0.00123	<0.005	0.0051	0.00015	0.0184	0.0009	0.00116	0.089	<0.0001	<0.001	0.109	0.000033	70.2	0.0168	0.00046
RSEM-R6E-EOP	3/12/2020 12:10	XN8895	D	C019027	10.0	0.00183	5.88	<0.00002	77.6	0.469	44.2	0.000017	<0.005	0.0051	0.00126	<0.005	<0.005	0.00043	0.0187	0.00093	0.00115	0.089	<0.0001	<0.001	0.11	0.00003	70.3	0.0168	0.00049
RSEM-R6E-EOP	3/13/2020 11:30	XN9529	M	C019176	9.86	0.00184	6.17	<0.00002	72.4	0.482	43.4	0.000017	<0.005	0.0054	0.00127	<0.005	<0.005	0.00027	0.0191	0.0009	0.00119	0.091	<0.0001	<0.001	0.11	0.00003	73.2	0.0168	0.00057
RSEM-R6E-EOP	3/13/2020 11:40	XN9530	D	C019176	10.1	0.00189	6.18	<0.00002	73.4	0.49	44.3	0.000016	<0.005	0.0064	0.00129	<0.005	<0.005	0.00018	0.0189	0.00091	0.00119	0.091	<0.0001	<0.001	0.112	0.000035	71.7	0.0168	0.00057
RSEM-R6E-EOP	3/16/2020 13:45	XO2545	M	C019847	10.3	0.00188	5.89	<0.00002	76.4	0.493	44.7	0.000016	<0.005	<0.005	0.00127	<0.005	<0.005	0.0001	0.0219	0.00094	0.0012	0.09	<0.0001	<0.001	0.11	0.000034	71.0	0.0171	0.00061
RSEM-R6E-EOP	3/17/2020 13:15	XO3910	M	C020169	10.8	0.00188	5.93	<0.00002	81.7	0.508	46.6	0.000017	<0.005	<0.005	0.00132	<0.005	<0.005	0.00013	0.0337	0.00098	0.00124	0.097	<0.0001	<0.001	0.112	0.000038	73.4	0.0171	0.00065
RSEM-R6E-EOP	3/18/2020 12:50	XO5560	M	C020445	10.5	0.0018	6.03	<0.00002	80.0	0.491	44.5	0.000015	<0.005	<0.005	0.00128	<0.005	0.005	0.0002	0.0824	0.00103	0.00132	0.087	<0.0001	<0.001	0.124	0.00003	67.8	0.0163	0.0006
RSEM-R6E-EOP	3/21/2020 12:05	XO8300	M	C021037	11.0	0.00209	5.59	<0.00002	94.4	0.488	45.5	0.000017	<0.005	<0.005	0.00139	<0.005	<0.005	0.00066	0.0646	0.00104	0.00136	0.092	<0.0001	<0.001	0.126	0.000032	67.3	0.0159	0.0006
RSEM-R6E-EOP	3/22/2020 12:10	XO8422	M	C021064	12.2	0.00216	5.48	<0.00002	99.5	0.52	47.4	0.000018	<0.005	0.013	0.00143	<0.005	0.005	0.00027	0.0703	0.00099	0.00129	0.096	<0.0001	<0.001	0.125	0.000029	66.7	0.0182	0.00064
RSEM-R6E-EOP	3/23/2020 11:05	XO8462	M	C021073	12.6	0.00215	5.23	<0.00002	93.9	0.524	46.7	0.000017	<0.005	0.0074	0.00136	<0.005	<0.005	0.00028	0.0573	0.00096	0.00122	0.094	<0.0001	<0.001	0.118	0.000028	67.4	0.0192	0.00062
RSEM-R6E-EOP	3/23/2020 11:15	XO8463	D	C021073	12.3	0.00214	5.18	<0.00002	91.8	0.52	45.7	0.000016	<0.005	<0.005	0.00132	<0.005	<0.005	0.00025	0.0581	0.00089	0.00119	0.093	<0.0001	<0.001	0.122	0.00003	66.4	0.0191	0.00064

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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	3/24/2020 11:00	XP0443	M	C021618	12.6	0.002	5.03	<0.00002	77.0	0.58	43.6	0.000014	<0.005	<0.005	0.00126	<0.005	<0.005	0.00011	0.038	0.0008	0.00109	0.092	<0.0001	<0.001	0.107	0.000038	69.8	0.0209	0.00064
RSEM-R6E-EOP	3/25/2020 11:00	XP1312	M	C021872	12.4	0.00193	4.9	<0.00002	64.4	0.6	42.6	0.000014	<0.005	<0.005	0.00115	<0.005	<0.005	0.00015	0.0306	0.00075	0.00101	0.087	<0.0001	<0.001	0.094	0.00003	69.9	0.0199	0.00053
RSEM-R6E-EOP	3/26/2020 17:50	XP2431	M	C022151	13.7	0.00224	5.64	<0.00002	92.2	0.626	51.7	0.000015	<0.005	0.0056	0.00142	<0.005	<0.005	0.00019	0.0441	0.00086	0.00117	0.102	<0.0001	<0.001	0.119	0.000025	75.2	0.0224	0.00069
RSEM-R6E-EOP	3/27/2020 10:15	XP2501	M	C022160	13.4	0.0021	5.06	<0.00002	73.4	0.605	45.8	0.000015	<0.005	0.006	0.00125	<0.005	<0.005	0.00023	0.0337	0.00075	0.00099	0.091	<0.0001	<0.001	0.1	0.000032	71.9	0.023	0.00068
RSEM-R6E-EOP	3/28/2020 11:45	XP3710	M	C022531	10.4	0.00142	3.91	<0.00002	43.9	0.517	32.7	0.000014	<0.005	<0.005	0.00098	<0.005	<0.005	0.0002	0.0153	0.00057	0.00075	0.077	<0.0001	<0.001	0.066	0.000028	63.3	0.017	0.00065
RSEM-R6E-EOP	4/7/2020 13:30	XQ3417	M	C024753	16.2	0.00239	5.05	<0.00002	75.0	0.699	55.2	0.000019	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0252	0.00084	0.00104	0.101	<0.0001	<0.001	0.109	0.000041	83.9	0.0316	0.00079
RSEM-R6E-EOP	4/8/2020 12:30	XQ4590	M	C024938	14.1	0.00175	4.76	<0.00002	60.1	0.651	46.5	0.000011	<0.005	<0.005	0.00129	<0.005	<0.005	0.00016	0.0219	0.00061	0.00067	0.092	<0.0001	<0.001	0.089	0.00002	77.1	0.0247	0.00065
RSEM-R6E-EOP	4/9/2020 11:00	XQ4583	M	C024937	14.0	0.00193	5.17	<0.00002	56.9	0.664	47.4	0.000018	<0.005	0.0122	0.00122	<0.005	0.0086	<0.0001	0.0213	0.00065	0.0007	0.091	<0.0001	<0.001	0.084	0.00004	76.9	0.0231	0.00066
RSEM-R6E-EOP	4/9/2020 11:10	XQ4584	D	C024937	14.1	0.00192	4.75	<0.00002	57.0	0.666	46.3	0.00001	<0.005	0.005	0.00123	<0.005	0.0102	<0.0001	0.0207	0.00068	0.00053	0.09	<0.0001	<0.001	0.084	0.000033	76.6	0.0234	0.00068
RSEM-R6E-EOP	4/10/2020 12:35	XQ5870	M	C025257	11.5	0.00129	4.2	<0.00002	42.7	0.592	39.7	0.000023	<0.005	0.0064	0.00112	<0.005	0.0089	0.00025	0.0242	0.00057	0.00081	0.091	<0.0001	<0.001	0.072	0.000039	71.2	0.0193	0.00054
RSEM-R6E-EOP	4/11/2020 18:10	XQ5963	M	C025274	10.7	0.0013	3.78	<0.00002	37.9	0.554	39.8	0.000014	<0.005	<0.005	0.00098	<0.005	0.0088	<0.0001	0.0252	0.00053	0.00063	0.085	<0.0001	<0.001	0.07	0.000039	60.8	0.0176	0.00068
RSEM-R6E-EOP	4/11/2020 18:20	XQ5964	D	C025274	10.8	0.00129	3.82	<0.00002	38.3	0.555	37.9	0.000015	<0.005	<0.005	0.00105	<0.005	0.0088	<0.0001	0.0242	0.00057	0.00056	0.085	<0.0001	<0.001	0.071	0.000028	61.9	0.0177	0.00071
RSEM-R6E-EOP	4/12/2020 15:15	XQ6096	M	C025305	11.0	0.00147	3.79	<0.00002	37.9	0.583	35.9	0.000021	<0.005	<0.005	0.0011	<0.005	0.0066	0.00019	0.024	0.00054	0.0008	0.08	<0.0001	<0.001	0.062	0.000026	57.5	0.0162	0.00064
RSEM-R6E-EOP	4/13/2020 10:30	XQ5690	D	C025217	9.14	0.00102	3.37	<0.00002	31.6	0.499	31.7	0.000019	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0224	<0.0005	0.00031	0.071	<0.0001	<0.001	<0.05	0.000025	55.2	0.014	0.00072
RSEM-R6E-EOP	4/13/2020 10:30	XQ5689	M	C025217	9.35	0.00124	3.52	<0.00002	32.4	0.518	32.9	0.000018	<0.005	<0.005	0.00087	<0.005	0.005	<0.0001	0.0229	0.00052	0.00041	0.071	<0.0001	<0.001	<0.05	0.000029	68.9	0.0148	0.00084
RSEM-R6E-EOP	4/14/2020 18:55	XQ8328	M	C025913	11.5	0.0014	3.73	<0.00002	42.1	0.593	45.3	0.000023	<0.005	<0.005	0.00112	<0.005	0.0071	0.0002	0.0245	0.00054	0.0006	0.088	<0.0001	<0.001	0.071	0.000038	66.1	0.0203	0.00086
RSEM-R6E-EOP	4/15/2020 14:25	XQ9341	M	C026226	9.90	0.00123	3.16	<0.00002	37.5	0.522	37.2	0.000018	<0.005	<0.005	0.00096	<0.005	0.0053	<0.0001	0.0286	<0.0005	0.00065	0.088	<0.0001	<0.001	0.072	0.000041	66.4	0.0191	0.00086
RSEM-R6E-EOP	4/16/2020 13:35	XR0409	M	C026516	9.20	0.00125	3.22	<0.00002	36.1	0.499	40.6	0.000012	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0245	0.00065	0.00056	0.087	<0.0001	<0.001	0.067	0.000016	73.6	0.0187	0.0007
RSEM-R6E-EOP	4/17/2020 10:30	XR0395	M	C026514	9.05	0.0014	3.19	<0.00002	34.7	0.497	41.4	0.000017	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.0231	0.00051	0.00069	0.079	<0.0001	<0.001	0.153	0.000031	67.4	0.0173	0.00082
RSEM-R6E-EOP	4/17/2020 10:40	XR0396	D	C026514	8.94	0.00124	3.13	<0.00002	34.7	0.513	41.2	0.000024	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	0.0233	<0.0005	0.00034	0.072	<0.0001	<0.001	0.074	0.00002	63.5	0.0179	0.00066
RSEM-R6E-EOP	4/18/2020 11:40	XR2302	M	C026869	6.77	0.00124	2.33	<0.00002	26.7	0.373	31.4	<0.00001	<0.005	<0.005	0.00077	<0.005	<0.005	<0.0001	0.0218	<0.0005	0.00031	0.065	<0.0001	<0.001	<0.05	0.000011	56.4	0.0145	0.0006
RSEM-R6E-EOP	4/19/2020 12:30	XR2516	M	C026927	7.94	0.00118	2.49	<0.00002	33.1	0.437	37.3	0.000011	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	0.021	<0.0005	0.00041	0.069	<0.0001	<0.001	<0.05	0.000024	58.6	0.0157	0.00062
RSEM-R6E-EOP	4/20/2020 17:30	XR3426	M	C027099	7.87	0.00108	2.8	<0.00002	35.0	0.476	39.2	0.000011	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0606	<0.0005	0.00036	0.075	<0.0001	<0.001	<0.05	<0.00001	56.0	0.0116	0.00086
RSEM-R6E-EOP	4/21/2020 12:25	XR4953	M	C027465	8.01	0.00092	2.58	<0.00002	39.1	0.455	40.9	<0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0229	<0.0005	0.00034	0.081	<0.0001	<0.001	0.064	<0.00001	57.9	0.0079	0.00069
RSEM-R6E-EOP	4/22/2020 13:05	XR6356	M	C027799	6.64	0.00072	2.2	<0.00002	33.6	0.408	35.3	<0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	0.02	<0.0005	0.00035	0.074	<0.0001	<0.001	0.053	<0.00001	57.1	0.0045	0.0007
RSEM-R6E-EOP	4/23/2020 15:05	XR7184	M	C027994	5.27	0.00072	1.94	<0.00002	25.9	0.34	28.9	<0.00001	<0.005	0.0099	0.00081	<0.005	<0.005	0.00035	0.0183	<0.0005	0.00038	0.063	<0.0001	<0.001	<0.05	<0.00001	46.3	0.0028	0.00048
RSEM-R6E-EOP	4/24/2020 12:40	XR7269	M	C028014	5.28	0.00072	1.93	<0.00002	26.3	0.348	28.3	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	0.00027	0.0189	<0.0005	0.00047	0.064	<0.0001	<0.001	<0.05	<0.00001	45.4	0.0023	0.00053
RSEM-R6E-EOP	4/25/2020 12:35	XR8896	M	C028412	4.96	0.00076	2.01	<0.00002	25.0	0.366	26.0	0.000012	<0.005	<0.005	0.00089	<0.005	<0.005	0.00027	0.0802	<0.0005	0.00032	0.069	<0.0001	<0.001	<0.05	0.000018	49.4	0.0019	0.0003
RSEM-R6E-EOP	4/26/2020 13:25	XR8994	M	C028429	5.04	0.00074	2	<0.00002	25.9	0.375	25.0	0.000014	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0456	<0.0005	0.00032	0.062	<0.0001	<0.001	<0.05	0.000015	45.5	0.0016	0.00037
RSEM-R6E-EOP	4/27/2020 14:00	XS0060	M	C028666	5.18	0.00061	1.7	<0.00002	28.5	0.365	6.2	0.000027	<0.005	<0.005	0.00071	<0.005	<0.005	<0.0001	0.0778	<0.0005	0.00029	0.064	<0.0001	<0.001	<0.05	<0.00001	44.8	0.0014	0.00033
RSEM-R6E-EOP	4/28/2020 12:15	XS2084	M	C029151	4.77	0.00056	1.88	<0.00002	25.8	0.38	25.2	<0.00001	<0.005	<0.005	0.00081	<0.005	0.0173	0.00015	0.0194	<0.0005	0.00047	0.081	<0.0001	<0.001	0.051	<0.00001	55.9	0.0013	0.00038
RSEM-R6E-EOP	4/28/2020 12:25	XS2085	D	C029151	4.57	0.00052	1.81	<0.00002	25.1	0.324	24.9	<0.00001	<0.005	<0.005	0.0008	<0.005	0.0188	<0.0001	0.0194	<0.0005	0.00046	0.076	<0.0001	<0.001	<0.05	<0.00001	46.3	<0.001	0.00028
RSEM-R6E-EOP	4/29/2020 11:00	XS3516	M	C029452	4.79	0.00068	1.95	<0.00002	27.0	0.352	27.0	<0.00001	<0.005	<0.005	0.00096	<0.005	0.0283	<0.0001	0.0255	<0.0005	0.00037	0.079	<0.0001	<0.001	<0.05	<0.00001	52.7	0.001	0.00036
RSEM-R6E-EOP	4/29/2020 11:10	XS3517	D	C029452	4.76	0.00059	1.83	<0.00002	26.5	0.358	26.3	<0.00001	<0.005	0.005	0.00091	<0.005	0.0131	<0.0001	0.0237	<0.0005	0.00039	0.083	<0.0001	<0.001	0.052	<0.00001	51.9	0.001	0.00035
RSEM-R6E-EOP	4/30/2020 11:10	XS4883	M	C029734	4.87	0.00073	1.9	<0.00002	27.6	0.362	26.2	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0186	<0.0005	0.0006	0.08	<0.0001	<0.001	0.056	0.000013	52.6	0.0011	0.00034
RSEM-R6E-EOP	5/22/2020 12:50	XU8402	M	C034984	5.95	0.00051	0.396	<0.00002	33.6	0.928	31.4	0.000018	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.031	<0.0005	0.00056	0.104	<0.0001	<0.001	0.061	<0.00001	72.3	<0.001	<0.0002
RSEM-R6E-EOP	5/23/2020 14:10	XU8587	M	C034993	7.06	0.00069	0.724	<0.00002	37.4	1.33	30.0	0.000019	<0.005	<0.005	0.00135	<0.005	<0.005	0.00028	0.0242	<0.0005	0.00052	0.13	<0.0001	<0.001	0.082	<0.00001	96.6	<0.001	<0.0002
RSEM-R6E-EOP	5/24/2020 12:50	XU8645	M	C035010	6.97	0.00069	0.651	<0.00002	36.7	1.37	29.4	0.000019	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0239	<0.0005	0.00054	0.132	<0.0001	<0.001	0.085	<0.00001	101	<0.001	<0.0002
RSEM-R6E-EOP	5/25/2020 8:50	XU8663	M	C035018	7.30	0.00074	0.732	<0.00002	39.6	1.52	30.6	0.000022	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	0.0236	<0.0005	0.0005	0.139	<0.0001	<0.001	0.087	<0.00001	101	<0.001	<0.0002
RSEM-R6E-EOP	5/26/2020 15:00	XV2882	M	C035941	7.28	0.00078	0.766	<0.00002	39.9	1.5	31.1	0.000023	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0243	<0.0005	0.00048	0.14	<0.0001	<0.001	0.087	<0.00001	105	<0.001	<0.0002
RSEM-R6E-EOP	5/27/2020 15:10	XV4564	M	C036323	7.10	0.00075	0.698	<0.00002	39.2	1.46	29.9	0.000023	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.025	<0.0005	0.00048	0.142	<0.0001	<0.001	0.085	<0.00001	109	<0.001	<0.0002
RSEM-R6E-EOP	5/28/2020 14:30	XV5618	M	C036526	7.25	0.00077	0.697	<0.00002	42.1	1.54	31.5	0.000024	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.0273	<0.0005	0.00046	0.145	<0.0001	<0.001	0.088	<0.00001	109	<0.001	<0.0002
RSEM-R6E-EOP	5/29/2020 11:40	XV5614	M	C036525	7.28	0.00079	0.668	<0.00002	41.9	1.54	31.5	0.000025	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	0.0259	<0.0005	0.00047	0.142	<0.0001	<0.001	0.09	<0.00001	107	<0.001	<0.0002
RSEM-R6E-EOP	5/30/2020 14:00	XV8353	M	C037043	7.17	0.0008	0.622	<0.00002	42.8	1.51	32.0	0.000024	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0259	<0.0005	0.00053	0.139	<0.0001	<0.001	0.091	<0.00001	107	<0.001	<0.0002
RSEM-R6E-EOP	5/31/2020 12:30	XV8399	M	C037057	6.73	0.0008	0.591	<0.00002	41.4	1.41	30.2	0.000026	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.0255	<0.0005	0.00052	0.137	<0.0001	<0.001	0.092	<0.00001	102	<0.001	<0.0002
RSEM-R6E-EOP	5/31/2020 13:00	XV8401	D	C037057	7.08	0.00078	0.624	<0.00002	43.2	1.51	31.8	0.000026	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	0.0256	<0.0005	0.00051	0.137	<0.0001	<0.001	0.089	<0.00001	102	<0.001	<0.0002
RSEM-R6E-EOP	6/1/2020 14:45	XW0112	M	C037316	6.60	0.00081	0.734	<0.00002	43.7	1.37	32.8	0.000028	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.028	<0.0005	0.00046	0.135	<0.0001	<0.001	0.094	<0.00001	97.3	<0.001	<0.0002
RSEM-R6E-EOP	6/2/2020 11:45	XW3133	M	C037913	6.29	0.00078	0.625	<0.00002	41.6	1.35	31.6	0.000025	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.0261	<0.001	0.00045	0.135	<0.0002	<0.002	<0.1	<0.00002	94.9	<0.002	<0.0004
RSEM-R6E-EOP	6/3/2020 13:00	XW5133	M	C038222	6.43	0.00079	0.535	<0.00002	43.1	1.3	32.8	0.000024	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.0258	<0.0005	0.00048	0.136	<0.0001	<0.001	0.111	<0.00001	93.7	<0.001	<0.0002
RSEM-R6E-EOP	6/4/2020 12:50	XW6864	M	C038528	6.13	0.00076	0.438	<0.00002	42.9	1.22	31.6	0.000023	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0271	<0.0005	0.00048	0.136	<0.0001	<0.001	0.103	<0.00001	91.5	<0.001	<0.0002
RSEM-R6E-EOP	6/5/2020 16:30	XW9908	M	C039108	6.09	0.00071	0.431	<0.00002	42.6	1.23	31.9	0.000024	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.0296	<0.0005	0.00047	0.128	<0.0001	<0.001	0.105	<0.00001	86.1	<0.001	<0.0002
RSEM-R6E-EOP	6/6/2020 11:30	XX0124	M	C039138	6.03	0.0007	0.427	<0.00002	43.3	1.17	31.6	0.000024	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0276	<0.0005	0.00046	0.131	<0.0001	<0.001	0.102	<0.00001	83.6	<0.001	<0.0002
RSEM-R6E-EOP	6/7/2020 12:10	XW9323	M	C038976	5.57	0.00062	0.599	<0.00002	41.7	1.09	30.1	0.000022	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0244	<0.0005	0.00048	0.131	<0.0001	<0.001	0.106	<0.00001	83.9	<0.001	<0.0002
RSEM-R6E-EOP	6/8/2020 15:40	XX1066	M	C039370	5.39	0.00064	0.943	<0.00002	39.8	1.05	28.4	0.000024	<0.005	0.0104	0.00125	<0.005	<0.005	0.00012	0.0217	<0.0005	0.00045	0.131	<0.0001	<0.001	0.1	<0.00001	81.3	<0.001	<0.0002
RSEM-R6E-EOP	6/8/2020 15:50	XX1067	D	C039370	5.46	0.00066	0.917	<0.00002	40.3	1.07	29.0	0.000022	<0.005	0.006	0.00129	<0.005	<0.005	0.00014	0.0216	<0.0005	0.00046	0.131	<0.0001	<0.001	0.106	<0.00001	81.6	<0.001	<0.0002
RSEM-R6E-EOP	6/9/2020 15:20	XX3624	M	C039793	6.35	0.00086	1.74	<0.00002	39.7	1.31	34.7	0.000024	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0247	<0.0005	0.00039	0.133	<0.0001	<0.001	0.105	0.000023	111	<0.001	0.00044
RSEM-R6E-EOP	6/9/2020 15:30	XX3625	D	C039793	6.25	0.00084	1.63	<0.00002	39.3	1.3	34.9	0.000024	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	0.0248	<0.0005	0.0004	0.131	<0.0001	<0.001	0.102	0.000024	110	<0.001	0.00043
RSEM-R6E-EOP	6/10/2020 13:20	XX4753	M	C040036	6.43	0.00089	1.45	<0.00002	41.1	1.34	36.2	0.000024	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	0.0263	<0.0005	0.0004	0.131	<0.0001	<0.001	0.096	0.000018	106	<0.001	0.0004
RSEM-R6E-EOP	6/11/2020 13:30	XX7039	M	C040416	6.19	0.00084	1.29	<0.00002	39.2	1.25	34.5	0.000023	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0292	<0.0005	0.00039	0.133	<0.0001	<0.001	0.102	<0.00001	108	<0.001	0.00037
RSEM-R6E-EOP	6/11/2020 13:40	XX7040	D	C040416	6.01	0.00084	1.29	<0.00002	38.2	1.25	34.2	0.000023	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.0294	<0.0005	0.00041	0.132	<0.0001	<0.001	0.102	<0.00001	107	<0.001	0.00037
RSEM-R6E-EOP	6/12/2020 13:55	XX9580	M	C040980	6.07	0.00081	1.26	<0.00002	38.9	1.24	34.7	0.000023	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0301	<0.0005	0.00041	0.13	<0.0001	<0.001	0.098	<0.00001	104	<0.001	0.00035
RSEM-R6E-EOP	6/12/2020 14:05	XX9581	D	C040980	6.00	0.00079	1.26	<0.00002	37.5	1.24	34.1	0.000021	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.0306	<0.0005	0.00041	0.132	<0.0001	<0.001	0.099	<0.00001	102	<0.001	0.00037
RSEM-R6E-EOP	6/13/2020 14:35	XX9598	M	C040986	5.86	0.0008	1.15	<0.00002	38.4	1.19	34.4	0.000024	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.0292	<0.0005	0.00041	0.122	<0.0001	<0.001	0.094	<0.00001	92.5	<0.001	0.00029
RSEM-R6E-EOP	6/13/2020 14:45	XX9599	D	C040986	5.75	0.00077	1.15	<0.00002	37.8	1.14	34.3	0.000022	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0289	<0.0005	0.00042	0.122	<0.0001	<0.001	0.093	<0.00001	92.0	<0.001	0.00029
RSEM-R6E-EOP	6/14/2020 14:00	XX9646	M	C040993	5.58	0.00075	1.66	<0.00002	35.6	1.03	34.2	0.000024	<0.005	<0.005	0.00155	<0.005	<0.005	0.00011	0.032	<0.0005	0.00046	0.128	<0.0001	<0.001	0.095	<0.00001	98.3	<0.001	0.00039
RSEM-R6E-EOP	6/15/2020 14:45	XY1602	M	C041415	4.41	0.00091	2.06	<0.00002	25.8	0.805	49.3	0.000023	<0.005	<0.005	0.00223	<0.005	0.0096	0.00023	0.0623	<0.0005	0.00029	0.11	<0.0001	<0.001	0.076	0.000162	96.1	<0.001	0.00559
RSEM-R6E-EOP	6/16/2020 10:45	XY1504	M	C041388	4.44	0.00102	2.49	<0.00002	28.4	0.83	61.8	0.000024	<0.005	0.0067	0.00313	<0.005	0.014	<0.0001	0.0728	<0.0005	0.00025	0.121	<0.0001	<0.001	0.076	0.000267	103	<0.001	0.0118
RSEM-R6E-EOP	6/17/2020 15:30	XY6277	M	C042380	4.27	0.00105	2.53	<0.00002	29.9	0.798	66.3	0.00002	<0.005	<0.005	0.00327	<0.005	0.0134	<0.0001	0.105	<0.0005	0.00026	0.132	<0.0001	<0.001	0.077	0.000278	101	<0.001	0.0131
RSEM-R6E-EOP	6/18/2020 16:20	XY6284	M	C042383	4.05	0.00103	2.67	<0.00002	32.2	0.725	65.9	0.00002	<0.005	<0.005	0.00334	<0.005	0.0115	<0.0001	0.129	<0.0005	0.00026	0.135	<0.0001	<0.001	0.08	0.000222	99.1	<0.001	0.0119

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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	6/19/2020 11:30	XY6263	M	C042375	3.92	0.00101	2.67	<0.00002	33.8	0.685	64.5	0.000018	<0.005	<0.005	0.00329	<0.005	0.0093	<0.0001	0.144	<0.0005	0.00026	0.138	<0.0001	<0.001	0.081	0.000217	95.6	<0.001	0.0108
RSEM-R6E-EOP	6/20/2020 14:00	XY9027	M	C042884	3.59	0.00095	2.43	<0.00002	35.2	0.605	60.5	0.000018	<0.005	<0.005	0.00321	<0.005	0.0067	<0.0001	0.138	<0.0005	0.00028	0.126	<0.0001	<0.001	0.085	0.00015	94.4	<0.001	0.0082
RSEM-R6E-EOP	6/21/2020 15:15	XY9120	M	C042904	3.23	0.00084	2.22	<0.00002	33.5	0.504	52.0	0.000016	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	0.16	<0.0005	0.00028	0.136	<0.0001	<0.001	0.089	0.000013	86.4	<0.001	0.00493
RSEM-R6E-EOP	6/22/2020 13:00	XZ0403	M	C043197	3.26	0.00081	2.06	<0.00002	34.2	0.535	52.6	0.000018	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	0.164	<0.0005	0.00031	0.135	<0.0001	<0.001	0.087	<0.00001	83.7	<0.001	0.00335
RSEM-R6E-EOP	6/23/2020 16:00	XZ2249	M	C043604	2.83	0.00065	2.03	<0.00002	29.6	0.442	41.3	0.000016	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	0.163	<0.0005	0.00028	0.145	<0.0001	<0.001	0.079	<0.00001	78.8	<0.001	0.00209
RSEM-R6E-EOP	6/24/2020 13:00	XZ5349	M	C044267	2.86	0.00061	1.81	<0.00002	29.2	0.405	37.9	0.000015	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	0.145	<0.0005	0.00031	0.137	<0.0001	<0.001	0.076	<0.00001	73.9	<0.001	0.0014
RSEM-R6E-EOP	6/25/2020 15:20	XZ5981	M	C044346	2.77	0.00058	1.63	<0.00002	28.2	0.391	34.3	0.000015	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	0.142	<0.0005	0.00032	0.134	<0.0001	<0.001	0.074	<0.00001	68.4	<0.001	0.0009
RSEM-R6E-EOP	6/25/2020 15:30	XZ5982	D	C044346	2.77	0.00058	1.62	<0.00002	28.0	0.383	34.9	0.000015	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	0.142	<0.0005	0.00031	0.137	<0.0001	<0.001	0.074	<0.00001	68.9	<0.001	0.00096
RSEM-R6E-EOP	6/26/2020 12:20	XZ7315	M	C044624	2.73	0.00054	1.74	<0.00002	27.4	0.381	31.9	0.000014	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	0.134	<0.0005	0.00031	0.14	<0.0001	<0.001	0.073	<0.00001	67.5	<0.001	0.00083
RSEM-R6E-EOP	6/26/2020 12:30	XZ7316	D	C044624	2.78	0.00052	1.73	<0.00002	27.6	0.391	32.2	0.000015	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	0.134	<0.0005	0.00031	0.142	<0.0001	<0.001	0.074	<0.00001	68.0	<0.001	0.00083
RSEM-R6E-EOP	6/27/2020 19:00	XZ9069	M	C044897	2.68	0.00052	1.73	<0.00002	26.7	0.367	28.5	0.000015	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	0.117	<0.0005	0.0003	0.135	<0.0001	<0.001	0.071	<0.00001	65.2	<0.001	0.00041
RSEM-R6E-EOP	6/28/2020 12:40	XZ9159	M	C044916	2.79	0.00053	1.94	<0.00002	26.6	0.397	28.0	0.000013	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.106	<0.0005	0.00029	0.139	<0.0001	<0.001	0.071	<0.00001	66.1	<0.001	0.00059
RSEM-R6E-EOP	6/28/2020 12:50	XZ9160	D	C044916	2.73	0.00051	1.92	<0.00002	25.7	0.402	26.9	0.000014	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	0.107	<0.0005	0.00032	0.137	<0.0001	<0.001	0.072	<0.00001	66.2	<0.001	0.00061
RSEM-R6E-EOP	6/29/2020 15:55	YA0783	M	C045275	2.85	0.00056	1.95	<0.00002	26.3	0.409	25.2	0.000013	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.0973	<0.0005	0.00028	0.139	<0.0001	<0.001	0.071	<0.00001	67.1	<0.001	0.00037
RSEM-R6E-EOP	6/30/2020 13:50	YA2738	M	C045692	2.92	0.00051	2.25	<0.00002	25.5	0.412	24.0	0.000012	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0967	<0.0005	0.00027	0.144	<0.0001	<0.001	0.074	<0.00001	68.5	<0.001	0.00056
RSEM-R6E-EOP	6/30/2020 14:00	YA2739	D	C045692	2.88	0.00053	2.2	<0.00002	25.4	0.411	25.3	0.000013	<0.005	<0.005	0.00142	<0.005	<0.005	0.00012	0.0972	<0.0005	0.00027	0.144	<0.0001	<0.001	0.072	<0.00001	68.1	<0.001	0.00052
RSEM-R6E-EOP	7/1/2020 11:30	YA2706	M	C045689	2.58	0.0005	2.66	<0.00002	21.1	0.358	21.5	0.000012	0.0051	<0.005	0.0013	<0.005	<0.005	<0.0001	0.09	<0.0005	0.00026	0.16	<0.0001	<0.001	0.06	0.000012	74.4	<0.001	0.00065
RSEM-R6E-EOP	7/1/2020 11:40	YA2707	D	C045689	2.59	0.00051	2.79	<0.00002	21.7	0.382	21.5	0.000011	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	0.0882	<0.0005	0.00029	0.158	<0.0001	<0.001	0.06	<0.00001	71.5	<0.001	0.00061
RSEM-R6E-EOP	7/2/2020 13:30	YA4188	M	C045985	4.19	0.00068	2.83	<0.00002	21.3	0.627	35.6	0.00002	<0.005	<0.005	0.002	<0.005	0.0054	0.00012	0.0931	<0.0005	0.00028	0.126	<0.0001	<0.001	0.069	0.000073	87.4	0.001	0.00264
RSEM-R6E-EOP	7/2/2020 13:40	YA4189	D	C045985	3.98	0.00066	2.78	<0.00002	20.6	0.617	35.6	0.000017	<0.005	<0.005	0.00191	<0.005	0.0064	0.00013	0.0934	<0.0005	0.00028	0.129	<0.0001	<0.001	0.068	0.000072	86.9	0.001	0.00257
RSEM-R6E-EOP	7/3/2020 16:10	YA5155	M	C046179	3.55	0.00072	3.31	<0.00002	21.5	0.527	42.4	0.000024	<0.005	0.0093	0.0023	<0.005	0.0089	0.00016	0.11	<0.0005	0.00022	0.122	<0.0001	<0.001	0.062	0.000099	83.2	<0.001	0.00449
RSEM-R6E-EOP	7/4/2020 15:05	YA6735	M	C046470	3.04	0.00069	2.87	<0.00002	21.4	0.413	49.2	0.000018	<0.005	0.0083	0.00261	<0.005	0.0137	0.00013	0.1	<0.0005	0.00017	0.131	<0.0001	<0.001	0.06	0.000229	79.4	<0.001	0.00934
RSEM-R6E-EOP	7/5/2020 10:05	YA6916	M	C046500	2.95	0.00071	3.21	<0.00002	21.2	0.422	52.3	0.000014	<0.005	<0.005	0.00245	<0.005	0.0166	<0.0001	0.128	<0.0005	0.00019	0.138	<0.0001	<0.001	0.063	0.000251	84.3	<0.001	0.0117
RSEM-R6E-EOP	7/5/2020 10:15	YA6917	D	C046500	2.90	0.00069	2.64	<0.00002	22.2	0.376	48.9	0.000015	<0.005	<0.005	0.00251	<0.005	0.0162	<0.0001	0.129	<0.0005	0.00018	0.134	<0.0001	<0.001	0.062	0.000248	84.1	<0.001	0.0116
RSEM-R6E-EOP	7/6/2020 11:30	YA8348	D	C046846	2.71	0.0007	3.38	<0.00002	20.6	0.398	48.8	<0.00001	<0.005	<0.005	0.00234	<0.005	0.0153	<0.0001	0.168	<0.0005	0.00024	0.146	<0.0001	<0.001	0.056	0.000233	83.6	<0.001	0.011
RSEM-R6E-EOP	7/6/2020 23:20	YA8347	M	C046846	2.70	0.00071	3.5	<0.00002	20.7	0.396	49.1	<0.00001	<0.005	<0.005	0.00237	<0.005	0.0155	<0.0001	0.167	<0.0005	0.00023	0.147	<0.0001	<0.001	0.055	0.000223	83.7	<0.001	0.0108
RSEM-R6E-EOP	7/7/2020 12:30	YB0051	M	C047206	2.81	0.0007	3.41	<0.00002	21.3	0.354	43.3	0.000012	<0.005	<0.005	0.00223	<0.005	0.0165	<0.0001	0.192	<0.0005	0.0002	0.156	<0.0001	<0.001	0.054	0.000173	85.0	<0.001	0.00824
RSEM-R6E-EOP	7/8/2020 12:30	YB2460	M	C047619	2.93	0.0007	3.58	<0.00002	21.7	0.351	39.4	0.000011	<0.005	<0.005	0.002	<0.005	0.0179	0.00015	0.196	<0.0005	0.00022	0.162	<0.0001	<0.001	0.054	0.00014	88.3	<0.001	0.00678
RSEM-R6E-EOP	7/9/2020 14:00	YB4136	M	C047920	2.97	0.00063	3.65	<0.00002	21.4	0.336	34.3	0.000012	<0.005	<0.005	0.00179	<0.005	0.0189	<0.0001	0.188	<0.0005	0.00026	0.169	<0.0001	<0.001	0.053	0.000063	87.6	<0.001	0.00533
RSEM-R6E-EOP	7/9/2020 14:10	YB4139	D	C047920	2.91	0.00067	3.61	<0.00002	21.1	0.335	33.6	0.000013	<0.005	<0.005	0.00179	<0.005	0.0188	<0.0001	0.191	<0.0005	0.00022	0.173	<0.0001	<0.001	0.052	0.000068	85.6	<0.001	0.00526
RSEM-R6E-EOP	7/10/2020 10:00	YB4116	M	C047917	2.82	0.00061	3.5	<0.00002	20.0	0.327	30.5	0.000012	<0.005	<0.005	0.00162	<0.005	0.0157	<0.0001	0.179	<0.0005	0.00025	0.177	<0.0001	<0.001	0.051	0.000064	86.5	<0.001	0.00448
RSEM-R6E-EOP	7/11/2020 15:10	YB7193	M	C048486	2.65	0.0006	3.37	<0.00002	17.3	0.302	25.1	<0.00001	<0.005	<0.005	0.0014	<0.005	0.009	<0.0001	0.167	<0.0005	0.00024	0.194	<0.0001	<0.001	<0.05	<0.00001	80.8	<0.001	0.00278
RSEM-R6E-EOP	7/12/2020 14:00	YB7108	M	C048462	2.64	0.0006	3.43	<0.00002	16.5	0.299	24.5	<0.00001	<0.005	<0.005	0.00128	<0.005	0.006	<0.0001	0.147	<0.0005	0.00022	0.205	<0.0001	<0.001	<0.05	<0.00001	83.1	<0.001	0.0021
RSEM-R6E-EOP	7/13/2020 14:30	YB9219	M	C048875	2.71	0.00068	3.39	<0.00002	16.6	0.311	25.9	0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	0.12	<0.0005	0.00023	0.201	<0.0001	<0.001	<0.05	<0.00001	80.2	<0.001	0.00144
RSEM-R6E-EOP	7/14/2020 14:30	YC1074	M	C049344	2.66	0.00063	3.23	<0.00002	16.9	0.293	26.3	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	0.113	<0.0005	0.00022	0.196	<0.0001	<0.001	<0.05	<0.00001	79.0	<0.001	0.00117
RSEM-R6E-EOP	7/15/2020 12:45	YC2137	M	C049614	2.74	0.00068	3.39	<0.00002	17.6	0.313	26.7	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	0.104	<0.0005	0.00026	0.192	<0.0001	<0.001	0.051	<0.00001	75.8	<0.001	0.00066
RSEM-R6E-EOP	7/16/2020 15:30	YC4665	M	C049952	2.70	0.00064	3.25	<0.00002	17.8	0.317	27.2	0.000011	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	0.0946	<0.0005	0.00026	0.195	<0.0001	<0.001	<0.05	<0.00001	76.7	<0.001	0.00074
RSEM-R6E-EOP	7/17/2020 13:55	YC5481	M	C050110	2.68	0.00069	3.16	<0.00002	17.9	0.302	26.5	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	0.0933	<0.0005	0.00028	0.18	<0.0001	<0.001	0.051	<0.00001	71.5	<0.001	0.00056
RSEM-R6E-EOP	7/18/2020 13:05	YC7458	M	C050583	2.76	0.00071	3.09	<0.00002	19.4	0.32	28.8	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	0.0934	<0.0005	0.00028	0.185	<0.0001	<0.001	0.055	<0.00001	74.4	<0.001	0.00058
RSEM-R6E-EOP	7/19/2020 13:30	YC7536	M	C050603	2.79	0.0007	3.04	<0.00002	20.5	0.313	28.1	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	0.0852	<0.0005	0.0003	0.176	<0.0001	<0.001	0.057	<0.00001	71.7	<0.001	0.00043
RSEM-R6E-EOP	7/20/2020 10:40	YC8542	M	C050811	2.96	0.00075	3.17	<0.00002	20.6	0.324	29.5	0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	0.0863	<0.0005	0.0003	0.176	<0.0001	<0.001	0.054	<0.00001	73.2	<0.001	0.00048
RSEM-R6E-EOP	7/21/2020 13:55	YD0796	M	C051251	2.92	0.00072	2.94	<0.00002	20.8	0.326	29.3	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	0.0817	<0.0005	0.00028	0.169	<0.0001	<0.001	0.063	<0.00001	72.2	<0.001	0.00029
RSEM-R6E-EOP	7/22/2020 13:30	YD2617	M	C051641	2.96	0.00073	3.06	<0.00002	20.0	0.344	29.8	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0757	<0.0005	0.00033	0.166	<0.0001	<0.001	0.053	<0.00001	72.3	<0.001	0.00032
RSEM-R6E-EOP	7/23/2020 11:55	YD4254	M	C051864	2.96	0.00071	3.18	<0.00002	20.4	0.35	28.6	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0703	<0.0005	0.00027	0.172	<0.0001	<0.001	0.057	<0.00001	73.0	<0.001	0.00032
RSEM-R6E-EOP	7/24/2020 15:20	YD5909	M	C052038	3.18	0.00075	3.14	<0.00002	22.4	0.351	30.7	0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0665	<0.0005	0.00029	0.166	<0.0001	<0.001	0.058	<0.00001	70.2	<0.001	0.00023
RSEM-R6E-EOP	7/25/2020 11:05	YD7674	M	C052402	3.51	0.00077	3.07	<0.00002	23.2	0.364	30.5	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	0.00077	0.057	<0.0005	0.00031	0.175	<0.0001	<0.001	0.055	<0.00001	73.0	0.0012	0.00027
RSEM-R6E-EOP	7/26/2020 14:15	YD7713	M	C052420	3.63	0.00075	2.98	<0.00002	22.9	0.353	30.6	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	0.0534	<0.0005	0.00032	0.168	<0.0001	<0.001	0.056	<0.00001	66.3	0.0015	0.00021
RSEM-R6E-EOP	7/27/2020 10:30	YD7769	M	C052432	3.60	0.00075	3.08	<0.00002	23.0	0.346	31.2	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.0509	<0.0005	0.00031	0.167	<0.0001	<0.001	0.056	<0.00001	65.0	0.0014	0.0002
RSEM-R6E-EOP	7/28/2020 12:30	YE2029	M	C053295	3.93	0.00083	3.3	<0.00002	23.9	0.384	30.8	0.000011	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	0.0457	<0.0005	0.00033	0.158	<0.0001	<0.001	0.057	<0.00001	63.0	0.0015	<0.0002
RSEM-R6E-EOP	7/30/2020 12:30	YE4008	M	C053695	3.38	0.00068	3.18	<0.00002	21.4	0.331	27.7	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0383	<0.0005	0.00032	0.168	<0.0001	<0.001	0.054	<0.00001	67.3	0.0012	<0.0002
RSEM-R6E-EOP	7/30/2020 16:30	YE5556	M	C054021	3.18	0.00058	2.99	<0.00002	20.8	0.303	23.8	<0.00001	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	0.0395	<0.0005	0.00033	0.165	<0.0001	<0.001	0.06	<0.00001	62.1	<0.001	<0.0002
RSEM-R6E-EOP	7/31/2020 11:00	YE5650	M	C054023	3.30	0.0006	3.05	<0.00002	21.8	0.313	24.4	<0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0371	<0.0005	0.00034	0.177	<0.0001	<0.001	0.059	<0.00001	63.4	<0.001	<0.0002
RSEM-R6E-EOP	8/1/2020 12:15	YE6665	M	C054219	3.17	0.00057	3.13	<0.00002	21.5	0.309	23.4	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0344	<0.0005	0.00035	0.175	<0.0001	<0.001	0.059	<0.00001	65.6	<0.001	<0.0002
RSEM-R6E-EOP	8/2/2020 12:40	YE8516	M	C054579	3.06	0.00054	3.25	<0.00002	20.5	0.324	23.2	0.000011	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	0.0363	<0.0005	0.00036	0.184	<0.0001	<0.001	0.062	<0.00001	66.0	<0.001	<0.0002
RSEM-R6E-EOP	8/3/2020 13:00	YE8524	M	C054582	3.04	0.00053	3.34	<0.00002	20.9	0.325	23.4	0.000011	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	0.035	<0.0005	0.00038	0.182	<0.0001	<0.001	0.062	<0.00001	64.1	<0.001	<0.0002
RSEM-R6E-EOP	8/4/2020 12:50	YF1643	M	C055153	2.85	0.00054	3.32	<0.00002	19.6	0.314	21.8	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0313	<0.0005	0.00045	0.192	<0.0001	<0.001	0.061	<0.00001	67.6	<0.001	<0.0002
RSEM-R6E-EOP	8/4/2020 13:00	YF1644	D	C055153	2.88	0.00048	3.39	<0.00002	19.8	0.316	22.0	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0312	<0.0005	0.00046	0.193	<0.0001	<0.001	0.061	<0.00001	67.0	<0.001	<0.0002
RSEM-R6E-EOP	8/5/2020 12:20	YF2976	M	C055442	2.86	0.00051	3.47	<0.00002	20.1	0.322	22.0	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0286	<0.0005	0.00037	0.198	<0.0001	<0.001	0.055	<0.00001	65.8	<0.001	<0.0002
RSEM-R6E-EOP	8/5/2020 12:30	YF2977	D	C055442	2.79	0.00055	3.45	<0.00002	19.7	0.314	21.6	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0286	<0.0005	0.00035	0.196	<0.0001	<0.001	0.055	<0.00001	65.1	<0.001	<0.0002
RSEM-R6E-EOP	8/6/2020 11:20	YF2968	M	C055440	2.74	0.00051	3.55	<0.00002	19.1	0.317	20.9	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	0.0269	<0.0005	0.00039	0.2	<0.0001	<0.001	0.055	<0.00001	65.6	<0.001	<0.0002
RSEM-R6E-EOP	8/7/2020 11:55	YF4856	M	C055741	2.77	0.00048	3.69	<0.00002	18.4	0.323	20.8	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	0.00024	0.0244	<0.0005	0.00042	0.187	<0.0001	<0.001	0.055	<0.00001	62.8	<0.001	<0.0002
RSEM-R6E-EOP	8/7/2020 12:05	YF4857	D	C055741	2.71	0.00049	3.54	<0.00002	17.7	0.321	19.4	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.0245	<0.0005	0.00042	0.187	<0.0001	<0.001	0.056	<0.00001	61.8	<0.001	<0.0002
RSEM-R6E-EOP	8/8/2020 12:40	YF8358	M	C056281	2.58	0.00043	3.42	<0.00002	18.6	0.289	18.6	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	0.0215	<0.0005	0.00035	0.176	<0.0001	<0.001	0.056	<0.00001	57.5	<0.001	<0.0002
RSEM-R6E-EOP	8/9/2020 14:10	YF8361	M	C056282	2.46	0.00038	3.27	<0.00002	17.6	0.281	18.2	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	0.0232	<0.0005	0.00038	0.18	<0.0001	<0.001	0.055	<0.00001	59.6	<0.001	<0.0002
RSEM-R6E-EOP	8/10/2020 12:50	YG0105	M	C056587	2.73	0.00044	3.31	<0.00002	20.3	0.282	20.8	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0215	<0.0005	0.00036	0.179	<0.0001	<0.001	0.056	<0.00001	57.2	<0.001	<0.0002
RSEM-R6E-EOP	8/11/2020 13:10	YG2366	M	C056973	2.72	0.00043	3.23	<0.00002	20.9	0.276	20.4	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0203	<0.0005	0.00044	0.179	<0.0001	<0.001	0.056	<0.00001	56.4	<0.001	<0.0002
RSEM-R6E-EOP	8/12/2020 17:30	YG4635	M	C057417	2.86	0.00049	3.29	<0.00002	22.1	0.306	20.7	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0206	<0.0005	0.00044	0.172	<0.0001	<0.001	0.06	<0.00001	53.1	<0.001	<0.0002
RSEM-R6E-EOP	8/13/2020 13:20	YG7260	M	C057823	2.87	0.00049	3.11	<0.00002	23.5	0.304	20.5	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0194	<0.0005	0.00041	0.158	<0.0001	<0.001	0.063	<0.00001	52.0	<0.001	<0.0002
RSEM-R6E-EOP	8/13/2020 13:30	YG7261	D	C057823	2.90	0.00044	3.11	<0.00002	23.8	0.312	21.3	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.0191	<0.0005	0.0004	0.158	<0.0001	<0.001	0.062	<0.00001	51.3	<0.001	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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	8/14/2020 12:45	YG7189	M	C057817	3.19	0.0005	3.13	<0.00002	25.8	0.333	24.4	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0201	<0.0005	0.00042	0.159	<0.0001	<0.001	0.069	<0.00001	51.3	<0.001	<0.0002
RSEM-R6E-EOP	8/15/2020 14:45	YH0060	M	C058356	3.21	0.0005	2.6	<0.00002	26.5	0.306	22.9	<0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	0.0201	<0.0005	0.00046	0.159	<0.0001	<0.001	0.07	<0.00001	50.0	0.001	<0.0002
RSEM-R6E-EOP	8/16/2020 11:40	YH0172	M	C058389	3.35	0.0006	2.58	<0.00002	27.4	0.316	23.7	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0218	<0.0005	0.00046	0.156	<0.0001	<0.001	0.078	<0.00001	47.7	0.001	<0.0002
RSEM-R6E-EOP	8/17/2020 9:20	YG9869	M	C058326	3.42	0.00058	2.74	<0.00002	27.4	0.324	24.6	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0217	<0.0005	0.00044	0.146	<0.0001	<0.001	0.076	<0.00001	47.7	0.0012	<0.0002
RSEM-R6E-EOP	8/18/2020 16:30	YH3312	M	C059056	3.47	0.00052	2.43	<0.00002	28.7	0.311	23.8	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	0.0244	<0.0005	0.00048	0.136	<0.0001	<0.001	0.085	<0.00001	42.9	0.0012	<0.0002
RSEM-R6E-EOP	8/19/2020 15:00	YH5387	M	C059422	3.51	0.00051	2.29	<0.00002	29.5	0.298	24.3	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	0.0247	<0.0005	0.00046	0.133	<0.0001	<0.001	0.076	<0.00001	40.3	0.0012	<0.0002
RSEM-R6E-EOP	8/20/2020 14:50	YH7341	M	C059760	3.79	0.00054	2.28	<0.00002	32.2	0.324	25.8	0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0226	<0.0005	0.00047	0.132	<0.0001	<0.001	0.081	<0.00001	40.7	0.0011	<0.0002
RSEM-R6E-EOP	8/21/2020 11:10	YH7339	M	C059759	3.72	0.00049	2.2	<0.00002	31.1	0.324	25.0	0.000012	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	0.0231	<0.0005	0.00046	0.132	<0.0001	<0.001	0.081	<0.00001	41.8	0.0011	<0.0002
RSEM-R6E-EOP	8/22/2020 11:30	YI0129	M	C060262	6.33	0.00082	2.03	<0.00002	33.1	0.909	47.1	0.000015	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	0.0382	<0.0005	0.00041	0.135	<0.0001	<0.001	0.085	0.000028	97.8	0.0014	0.00059
RSEM-R6E-EOP	8/23/2020 14:50	YI0109	M	C060255	5.98	0.00078	1.89	<0.00002	32.4	0.916	46.2	0.000015	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.0353	<0.0005	0.00043	0.136	<0.0001	<0.001	0.086	0.000015	100	0.0011	0.00036
RSEM-R6E-EOP	8/23/2020 15:00	YI0112	D	C060255	6.27	0.00081	1.97	<0.00002	33.1	0.936	48.4	0.000014	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	0.0347	<0.0005	0.00046	0.135	<0.0001	<0.001	0.085	0.000012	99.4	0.0011	0.00037
RSEM-R6E-EOP	8/24/2020 13:40	YI2198	M	C060702	6.09	0.00075	1.83	<0.00002	33.8	0.923	46.4	0.000013	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	0.0309	<0.0005	0.00045	0.134	<0.0001	<0.001	0.087	<0.00001	96.8	0.001	0.00025
RSEM-R6E-EOP	8/25/2020 12:20	YI3995	M	C061087	6.11	0.00073	2.01	<0.00002	32.5	0.965	47.5	0.000014	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	0.03	<0.0005	0.00046	0.135	<0.0001	<0.001	0.094	<0.00001	96.4	<0.001	<0.0002
RSEM-R6E-EOP	8/26/2020 13:50	YI6263	M	C061565	5.79	0.00073	2.03	<0.00002	34.3	0.882	45.7	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0299	<0.0005	0.00047	0.125	<0.0001	<0.001	0.099	<0.00001	91.8	<0.001	<0.0002
RSEM-R6E-EOP	8/27/2020 12:40	YI7773	M	C061827	5.42	0.00063	2.1	<0.00002	34.1	0.818	41.4	0.000011	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	0.0286	<0.0005	0.00047	0.118	<0.0001	<0.001	0.096	0.000039	83.8	<0.001	<0.0002
RSEM-R6E-EOP	8/28/2020 13:45	YI9493	M	C062013	5.40	0.00068	2.14	<0.00002	33.4	0.801	43.5	0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.0282	<0.0005	0.00044	0.108	<0.0001	<0.001	0.111	<0.00001	81.1	<0.001	<0.0002
RSEM-R6E-EOP	8/29/2020 10:35	YJ1737	M	C062465	5.19	0.00063	1.72	<0.00002	34.3	0.692	41.9	<0.00001	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.0274	<0.0005	0.00047	0.117	<0.0001	<0.001	0.093	<0.00001	77.3	<0.001	<0.0002
RSEM-R6E-EOP	8/29/2020 10:45	YJ1738	D	C062465	5.15	0.00061	1.7	<0.00002	34.3	0.689	41.6	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0255	<0.0005	0.00046	0.116	<0.0001	<0.001	0.093	<0.00001	77.6	<0.001	<0.0002
RSEM-R6E-EOP	8/30/2020 11:50	YJ1569	M	C062426	5.18	0.00062	1.7	<0.00002	34.1	0.668	40.6	<0.00001	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0242	<0.0005	0.00048	0.117	<0.0001	<0.001	0.091	<0.00001	95.8	0.001	<0.0002
RSEM-R6E-EOP	8/31/2020 17:00	YJ3638	M	C062857	5.17	0.00061	1.84	<0.00002	34.0	0.703	40.5	<0.00001	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0246	<0.0005	0.00047	0.115	<0.0001	<0.001	0.1	<0.00001	71.0	0.0012	<0.0002
RSEM-R6E-EOP	8/31/2020 17:10	YJ3639	D	C062857	5.06	0.00061	1.83	<0.00002	34.4	0.697	40.6	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0248	<0.0005	0.00049	0.114	<0.0001	<0.001	0.101	<0.00001	69.9	0.0012	<0.0002
RSEM-R6E-EOP	9/1/2020 14:10	YJ6690	M	C063433	4.94	0.0006	1.76	<0.00002	31.8	0.699	39.2	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0236	<0.0005	0.00046	0.11	<0.0001	<0.001	0.096	<0.00001	66.3	0.0013	<0.0002
RSEM-R6E-EOP	9/2/2020 13:45	YJ7830	M	C063666	5.06	0.00065	1.79	<0.00002	32.6	0.697	39.8	<0.00001	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.0094	<0.0005	0.0005	0.112	<0.0001	<0.001	0.092	<0.00001	61.7	0.0013	<0.0002
RSEM-R6E-EOP	9/3/2020 14:20	YK0030	M	C064047	5.18	0.0006	1.53	<0.00002	33.9	0.653	38.0	<0.00001	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	0.0262	<0.0005	0.00047	0.116	<0.0001	<0.001	0.102	0.000011	61.8	0.0013	<0.0002
RSEM-R6E-EOP	9/4/2020 11:50	YK0085	M	C064051	5.03	0.00058	1.44	<0.00002	33.0	0.634	37.0	<0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.022	<0.0005	0.00047	0.112	<0.0001	<0.001	0.101	<0.00001	59.1	0.0013	<0.0002
RSEM-R6E-EOP	9/5/2020 12:20	YK1344	M	C064288	5.18	0.0006	1.43	<0.00002	34.5	0.627	37.9	<0.00001	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.0219	<0.0005	0.00048	0.115	<0.0001	<0.001	0.098	<0.00001	54.7	0.0012	<0.0002
RSEM-R6E-EOP	9/5/2020 12:30	YK1345	D	C064288	4.94	0.00054	1.34	<0.00002	32.5	0.609	35.4	<0.00001	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0217	<0.0005	0.00048	0.114	<0.0001	<0.001	0.098	<0.00001	53.8	0.0013	<0.0002
RSEM-R6E-EOP	9/6/2020 10:50	YK2529	M	C064579	4.87	0.00054	1.23	<0.00002	32.4	0.612	34.7	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	0.02	<0.0005	0.00045	0.113	<0.0001	<0.001	0.101	<0.00001	57.0	0.0012	<0.0002
RSEM-R6E-EOP	9/6/2020 11:00	YK2530	D	C064579	4.86	0.00056	1.21	<0.00002	32.3	0.607	34.8	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.02	<0.0005	0.00047	0.115	<0.0001	<0.001	0.102	<0.00001	57.0	0.0012	<0.0002
RSEM-R6E-EOP	9/7/2020 10:15	YK2584	M	C064592	4.71	0.00051	1.3	<0.00002	32.3	0.605	34.2	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	0.0197	<0.0005	0.00051	0.115	<0.0001	<0.001	0.102	<0.00001	57.1	0.0011	<0.0002
RSEM-R6E-EOP	9/8/2020 10:45	YK6314	M	C065313	4.65	0.0005	1.05	<0.00002	33.9	0.51	34.7	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	0.00013	0.0178	<0.0005	0.00048	0.112	<0.0001	<0.001	0.098	<0.00001	56.5	<0.001	<0.0002
RSEM-R6E-EOP	9/9/2020 14:30	YK6316	M	C065314	4.93	0.00057	1.04	<0.00002	36.1	0.532	36.9	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	0.02	<0.0005	0.0005	0.114	<0.0001	<0.001	0.098	<0.00001	52.5	<0.001	<0.0002
RSEM-R6E-EOP	9/10/2020 11:40	YK8213	M	C065709	4.90	0.00053	1.08	<0.00002	37.3	0.538	35.8	<0.00001	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0203	<0.0005	0.00047	0.121	<0.0001	<0.001	0.1	<0.00001	51.5	<0.001	<0.0002
RSEM-R6E-EOP	9/11/2020 11:30	YK8182	M	C065706	4.86	0.00052	0.978	<0.00002	37.6	0.528	35.2	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.02	<0.0005	0.00052	0.12	<0.0001	<0.001	0.105	<0.00001	50.1	<0.001	<0.0002
RSEM-R6E-EOP	9/12/2020 14:10	YL1185	M	C066169	4.72	0.00049	0.917	<0.00002	37.5	0.498	34.2	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	0.0212	<0.0005	0.00051	0.121	<0.0001	<0.001	0.104	<0.00001	50.2	<0.001	<0.0002
RSEM-R6E-EOP	9/13/2020 12:50	YL1414	M	C066239	4.71	0.00049	0.944	<0.00002	38.4	0.506	33.9	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	0.0187	<0.0005	0.00049	0.13	<0.0001	<0.001	0.107	<0.00001	50.4	<0.001	<0.0002
RSEM-R6E-EOP	9/14/2020 12:30	YL3784	M	C066659	4.57	0.00045	1.11	<0.00002	36.2	0.5	31.8	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	0.0181	<0.0005	0.00048	0.138	<0.0001	<0.001	0.104	<0.00001	49.8	<0.001	<0.0002
RSEM-R6E-EOP	9/15/2020 14:40	YL6685	M	C067245	7.15	0.00071	2.37	<0.00002	37.2	0.829	40.4	0.000013	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0325	<0.0005	0.00046	0.152	<0.0001	<0.001	0.097	0.000013	86.3	0.0013	0.00037
RSEM-R6E-EOP	9/15/2020 14:50	YL6686	D	C067245	7.03	0.00068	2.42	<0.00002	36.7	0.854	40.1	0.000012	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0327	<0.0005	0.00042	0.149	<0.0001	<0.001	0.1	0.000012	85.4	0.0013	0.00037
RSEM-R6E-EOP	9/16/2020 15:20	YL8113	M	C067490	6.30	0.0006	2.14	<0.00002	36.2	0.696	36.4	0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	0.03	<0.0005	0.00041	0.152	<0.0001	<0.001	0.093	0.000011	82.1	0.0011	0.00022
RSEM-R6E-EOP	9/17/2020 12:50	YL8047	M	C067474	5.97	0.00056	2.07	<0.00002	35.0	0.675	35.7	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0305	<0.0005	0.00042	0.151	<0.0001	<0.001	0.096	<0.00001	80.3	<0.001	<0.0002
RSEM-R6E-EOP	9/17/2020 13:00	YL8048	D	C067474	5.82	0.00056	1.96	<0.00002	34.4	0.681	35.6	0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0317	<0.0005	0.00045	0.153	<0.0001	<0.001	0.098	<0.00001	79.7	<0.001	<0.0002
RSEM-R6E-EOP	9/18/2020 9:40	YL9984	M	C067838	5.65	0.00059	2.05	<0.00002	35.7	0.61	35.1	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	0.0304	<0.0005	0.00042	0.149	<0.0001	<0.001	0.096	<0.00001	75.3	<0.001	0.0002
RSEM-R6E-EOP	9/19/2020 12:30	YM3342	M	C068349	5.45	0.00058	2.16	<0.00002	36.6	0.581	35.3	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	0.0301	<0.0005	0.0004	0.144	<0.0001	<0.001	0.098	<0.00001	72.1	<0.001	<0.0002
RSEM-R6E-EOP	9/19/2020 12:40	YM3343	D	C068349	5.46	0.00055	2.18	<0.00002	36.6	0.58	35.1	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0295	<0.0005	0.00041	0.146	<0.0001	<0.001	0.1	<0.00001	71.6	<0.001	<0.0002
RSEM-R6E-EOP	9/20/2020 11:30	YM3373	M	C068353	5.19	0.00061	2.26	<0.00002	36.9	0.553	33.9	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0285	<0.0005	0.00041	0.143	<0.0001	<0.001	0.099	<0.00001	70.6	<0.001	<0.0002
RSEM-R6E-EOP	9/21/2020 12:30	YM6391	M	C068837	4.91	0.00063	2.07	<0.00002	39.2	0.51	35.1	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	0.0001	0.0267	<0.0005	0.00041	0.147	<0.0001	<0.001	0.1	<0.00001	67.0	<0.001	<0.0002
RSEM-R6E-EOP	9/21/2020 12:40	YM6392	D	C068837	4.77	0.00067	2.05	<0.00002	37.7	0.515	33.5	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0274	<0.0005	0.00041	0.146	<0.0001	<0.001	0.098	<0.00001	67.6	<0.001	<0.0002
RSEM-R6E-EOP	9/22/2020 13:45	YM9230	M	C069318	4.54	0.00063	1.88	<0.00002	37.8	0.474	33.4	<0.00001	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0268	<0.0005	0.00041	0.143	<0.0001	<0.001	0.104	<0.00001	65.6	<0.001	<0.0002
RSEM-R6E-EOP	9/23/2020 15:20	YN0385	M	C069533	4.49	0.00062	2.29	<0.00002	38.4	0.481	33.9	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	0.00029	0.0265	<0.0005	0.0004	0.141	<0.0001	<0.001	0.099	<0.00001	63.8	<0.001	<0.0002
RSEM-R6E-EOP	9/23/2020 15:30	YN0386	D	C069533	4.64	0.00061	2.32	<0.00002	39.7	0.491	35.1	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	0.00011	0.0275	<0.0005	0.00042	0.145	<0.0001	<0.001	0.1	<0.00001	64.9	<0.001	<0.0002
RSEM-R6E-EOP	9/24/2020 13:50	YN2678	M	C069910	4.48	0.00061	2.48	<0.00002	40.1	0.454	35.9	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	0.0266	<0.0005	0.00039	0.14	<0.0001	<0.001	0.099	<0.00001	62.6	<0.001	<0.0002
RSEM-R6E-EOP	9/25/2020 13:10	YN2672	M	C069908	4.27	0.00056	2.44	<0.00002	38.1	0.429	34.7	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	0.00016	0.0256	<0.0005	0.0004	0.143	<0.0001	<0.001	0.097	<0.00001	63.5	<0.001	<0.0002
RSEM-R6E-EOP	9/25/2020 13:20	YN2673	D	C069908	4.37	0.00063	2.56	<0.00002	40.5	0.444	36.4	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.0254	<0.0005	0.00039	0.142	<0.0001	<0.001	0.097	<0.00001	63.8	<0.001	<0.0002
RSEM-R6E-EOP	9/26/2020 13:00	YN7495	M	C070621	4.01	0.00059	2.64	<0.00002	36.6	0.423	32.0	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0247	<0.0005	0.00033	0.141	<0.0001	<0.001	0.089	<0.00001	65.7	<0.001	<0.0002
RSEM-R6E-EOP	9/27/2020 16:00	YN7528	M	C070629	3.85	0.00055	2.56	<0.00002	34.2	0.408	32.4	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.0247	<0.0005	0.00034	0.144	<0.0001	<0.001	0.085	<0.00001	65.0	<0.001	<0.0002
RSEM-R6E-EOP	9/27/2020 16:10	YN7529	D	C070629	3.73	0.00053	2.45	<0.00002	33.3	0.391	30.7	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	0.0239	<0.0005	0.00034	0.142	<0.0001	<0.001	0.086	<0.00001	64.6	<0.001	<0.0002
RSEM-R6E-EOP	9/28/2020 9:30	YN7449	M	C070613	3.74	0.00055	2.59	<0.00002	33.0	0.403	31.7	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	0.00032	0.0243	<0.0005	0.00036	0.151	<0.0001	<0.001	0.081	<0.00001	67.6	<0.001	<0.0002
RSEM-R6E-EOP	9/29/2020 16:00	YO1377	M	C071354	3.69	0.00057	2.49	<0.00002	31.5	0.393	30.7	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	0.0241	<0.0005	0.00034	0.145	<0.0001	<0.001	0.08	<0.00001	63.6	<0.001	<0.0002
RSEM-R6E-EOP	9/30/2020 13:00	YO4160	M	C071825	3.72	0.00053	2.36	<0.00002	31.3	0.392	31.1	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	0.024	<0.0005	0.00033	0.145	<0.0001	<0.001	0.083	<0.00001	62.8	<0.001	<0.0002
RSEM-R6E-EOP	10/1/2020 0:05	YO6613	D	C072228	3.66	0.00054	2.21	<0.00002	30.9	0.373	29.8	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	0.0248	<0.0005	0.00034	0.147	<0.0001	<0.001	0.077	<0.00001	62.9	<0.001	<0.0002
RSEM-R6E-EOP	10/1/2020 11:55	YO6611	M	C072228	3.70	0.00054	2.28	<0.00002	31.4	0.389	30.6	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	0.0245	<0.0005	0.00034	0.146	<0.0001	<0.001	0.077	<0.00001	62.3	<0.001	<0.0002
RSEM-R6E-EOP	10/2/2020 11:20	YO6594	M	C072223	3.88	0.00055	2.26	<0.00002	32.6	0.401	32.1	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	0.00017	0.0252	<0.0005	0.00032	0.148	<0.0001	<0.001	0.081	<0.00001	62.5	<0.001	<0.0002
RSEM-R6E-EOP	10/3/2020 16:00	YP0034	M	C072771	3.74	0.00055	1.83	<0.00002	30.5	0.372	31.1	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	0.0261	<0.0005	0.00033	0.14	<0.0001	<0.001	0.084	<0.00001	57.8	<0.001	<0.0002
RSEM-R6E-EOP	10/4/2020 16:00	YP0008	M	C072767	3.75	0.00052	1.74	<0.00002	30.0	0.364	31.0	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	0.0242	<0.0005	0.00032	0.14	<0.0001	<0.001	0.083	<0.00001	57.9	<0.001	<0.0002
RSEM-R6E-EOP	10/4/2020 16:10	YP0012	D	C072767	3.86	0.00053	1.77	<0.00002	31.0	0.379	32.5	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	0.0242	<0.0005	0.00034	0.139	<0.0001	<0.001	0.083	<0.00001	57.2	<0.001	<0.0002
RSEM-R6E-EOP	10/5/2020 17:00	YP2998	M	C073260	3.94	0.00058	1.7	<0.00002	31.8	0.392	31.9	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	0.0226	<0.0005	0.00033	0.136	<0.0001	<0.001	0.078	<0.00001	56.3	<0.001	<0.0002
RSEM-R6E-EOP	10/6/2020 14:50	YP5777	M	C073719	4.02	0.00057	1.73	<0.00002	32.4	0.369	30.9	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	0.0233	<0.0005	0.00031	0.143	<0.0001	<0.001	0.081	<0.00001	55.8	<0.001	<0.0002
RSEM-R6E-EOP	10/6/2020 15:00	YP5778	D	C073719	3.95	0.00057	1.7	<0.00002	32.0	0.373	30.6	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	0.0228	<0.0005	0.00033	0.135	<0.0001	<0.001	0.081	<0.00001	54.3	<0.001	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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	10/7/2020 14:10	YP7387	M	C074014	3.91	0.00053	1.53	<0.00002	32.5	0.374	30.5	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	0.00017	0.0199	<0.0005	0.00034	0.139	<0.0001	<0.001	0.072	<0.00001	57.0	<0.001	<0.0002
RSEM-R6E-EOP	10/8/2020 11:10	YP9901	M	C074375	4.07	0.00055	1.7	<0.00002	32.8	0.385	31.4	0.000011	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	0.0207	<0.0005	0.0003	0.135	<0.0001	<0.001	0.081	<0.00001	57.8	<0.001	<0.0002
RSEM-R6E-EOP	10/8/2020 11:20	YP9902	D	C074375	4.17	0.00056	1.74	<0.00002	33.6	0.408	32.2	<0.00001	<0.005	<0.005	0.00121	<0.005	0.0051	<0.0001	0.0207	<0.0005	0.00033	0.136	<0.0001	<0.001	0.082	<0.00001	57.4	<0.001	<0.0002
RSEM-R6E-EOP	10/9/2020 11:10	YQ0240	M	C074391	4.48	0.00056	1.66	<0.00002	33.8	0.606	31.3	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	0.0194	<0.0005	0.00031	0.143	<0.0001	<0.001	0.091	<0.00001	66.0	<0.001	<0.0002
RSEM-R6E-EOP	10/10/2020 11:50	YQ1626	M	C074557	5.51	0.00057	2.02	<0.00002	34.2	1.14	32.7	0.000014	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	0.0174	<0.0005	0.00031	0.158	<0.0001	<0.001	0.083	<0.00001	87.5	<0.001	<0.0002
RSEM-R6E-EOP	10/10/2020 12:00	YQ1627	D	C074557	5.58	0.00058	2.03	<0.00002	34.9	1.19	33.7	0.000012	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	0.0181	<0.0005	0.00033	0.159	<0.0001	<0.001	0.087	<0.00001	89.0	<0.001	<0.0002
RSEM-R6E-EOP	10/11/2020 11:30	YQ4407	M	C075136	11.7	0.00076	2.51	<0.00002	38.8	3.45	37.1	0.000024	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.0159	<0.0005	0.00032	0.199	<0.0001	<0.001	0.106	0.000013	193	0.0039	0.00036
RSEM-R6E-EOP	10/12/2020 13:30	YQ4365	M	C075125	13.5	0.00085	2.59	<0.00002	39.8	4.08	40.9	0.000026	<0.005	<0.005	0.00141	<0.005	<0.005	0.00016	0.0183	<0.0005	0.00033	0.195	<0.0001	<0.001	0.111	0.000017	227	0.005	0.00055
RSEM-R6E-EOP	10/12/2020 13:40	YQ4366	D	C075125	13.7	0.00085	2.63	<0.00002	40.0	4.16	40.2	0.000027	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0182	<0.0005	0.00032	0.199	<0.0001	<0.001	0.11	0.000018	222	0.005	0.00056
RSEM-R6E-EOP	10/13/2020 13:50	YQ8015	M	C075829	6.05	0.00045	3.87	<0.00002	19.6	1.63	21.2	0.000016	<0.005	0.0074	0.00106	<0.005	<0.005	0.00013	0.0081	<0.0005	0.00025	0.214	<0.0001	<0.001	0.056	0.000018	128	0.0019	0.00021
RSEM-R6E-EOP	10/14/2020 14:50	YQ9242	M	C076027	5.49	0.00043	3.48	<0.00002	19.6	1.47	20.1	0.000013	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.0103	<0.0005	0.00025	0.209	<0.0001	<0.001	0.057	0.000016	123	0.0016	0.00025
RSEM-R6E-EOP	10/15/2020 11:45	YR1302	M	C076291	5.75	0.00046	3.4	<0.00002	21.5	1.46	23.7	0.000015	<0.005	<0.005	0.00109	<0.005	<0.005	0.0001	0.0109	<0.0005	0.00024	0.201	<0.0001	<0.001	0.054	<0.00001	118	0.0014	0.00029
RSEM-R6E-EOP	10/16/2020 11:50	YR1520	M	C076320	5.68	0.00047	3.24	<0.00002	22.7	1.46	24.2	0.000013	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0144	<0.0005	0.00023	0.201	<0.0001	<0.001	0.057	<0.00001	112	0.0013	0.00031
RSEM-R6E-EOP	10/16/2020 12:00	YR1521	D	C076320	5.48	0.00046	3.42	<0.00002	21.7	1.39	23.8	0.000014	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	0.0142	<0.0005	0.00022	0.202	<0.0001	<0.001	0.055	<0.00001	108	0.0012	0.00028
RSEM-R6E-EOP	10/17/2020 10:20	YR5391	M	C076925	4.91	0.00042	3.2	<0.00002	20.8	1.23	22.2	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0145	<0.0005	0.00025	0.201	<0.0001	<0.001	<0.05	0.000015	110	0.0012	0.00031
RSEM-R6E-EOP	10/18/2020 12:45	YR5379	M	C076923	4.61	0.00043	3.6	<0.00002	21.5	1.1	23.9	<0.00001	<0.005	<0.005	0.00103	<0.005	<0.005	0.00015	0.0149	<0.0005	0.00027	0.207	<0.0001	<0.001	0.054	<0.00001	111	<0.001	0.0004
RSEM-R6E-EOP	10/19/2020 10:10	YR5408	M	C076929	6.73	0.0006	2.98	<0.00002	33.6	1.6	33.6	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.0288	<0.0005	0.00023	0.167	<0.0001	<0.001	0.076	<0.00001	125	0.0013	0.00052
RSEM-R6E-EOP	10/20/2020 14:40	YR8828	M	C077551	6.08	0.00059	3.39	<0.00002	34.6	1.48	32.8	0.000013	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.0252	<0.0005	0.00026	0.169	<0.0001	<0.001	0.082	<0.00001	115	0.0013	0.00049
RSEM-R6E-EOP	10/21/2020 16:00	YS1500	M	C077998	5.61	0.0006	3.43	<0.00002	34.7	1.28	32.0	0.000012	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.0248	<0.0005	0.00028	0.161	<0.0001	<0.001	0.082	0.000012	113	0.0012	0.00044
RSEM-R6E-EOP	10/22/2020 12:20	YS3854	M	C078323	5.27	0.00063	3.35	<0.00002	33.9	1.22	32.8	0.000011	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0206	<0.0005	0.00026	0.161	<0.0001	<0.001	0.079	0.00001	112	0.0012	0.00041
RSEM-R6E-EOP	10/22/2020 12:30	YS3856	D	C078323	5.28	0.00062	3.47	<0.00002	34.1	1.22	31.7	0.000011	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0208	<0.0005	0.00027	0.165	<0.0001	<0.001	0.079	<0.00001	114	0.0012	0.00041
RSEM-R6E-EOP	10/23/2020 10:20	YS3573	M	C078301	5.29	0.00067	3.33	<0.00002	35.6	1.2	32.7	0.000011	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0197	<0.0005	0.00027	0.165	<0.0001	<0.001	0.08	<0.00001	114	0.0012	0.00038
RSEM-R6E-EOP	10/24/2020 15:20	YS7915	M	C078871	5.05	0.00071	3.02	<0.00002	35.2	1.11	31.4	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0193	<0.0005	0.00029	0.162	<0.0001	<0.001	0.083	<0.00001	102	0.0012	0.00034
RSEM-R6E-EOP	10/25/2020 13:40	YS7913	M	C078870	5.12	0.00071	3.11	<0.00002	36.2	1.07	32.3	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0187	<0.0005	0.00027	0.165	<0.0001	<0.001	0.084	<0.00001	105	0.0012	0.00034
RSEM-R6E-EOP	10/26/2020 14:25	YT0276	M	C079297	5.02	0.0008	3.45	<0.00002	40.1	1.02	35.3	0.000011	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0171	<0.0005	0.00027	0.165	<0.0001	<0.001	0.08	<0.00001	99.6	0.0012	0.00036
RSEM-R6E-EOP	10/26/2020 14:35	YT0278	D	C079297	4.91	0.00078	3.35	<0.00002	39.1	0.985	34.7	0.00001	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0175	<0.0005	0.00027	0.164	<0.0001	<0.001	0.08	<0.00001	101	0.0012	0.00036
RSEM-R6E-EOP	10/27/2020 12:30	YT3320	M	C079639	4.98	0.00079	3.61	<0.00002	38.9	0.973	35.7	0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.0183	<0.0005	0.00026	0.167	<0.0001	<0.001	0.085	<0.00001	93.5	0.0011	0.00027
RSEM-R6E-EOP	10/28/2020 14:10	YT5232	M	C079984	4.76	0.00076	3.18	<0.00002	35.9	0.976	33.2	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.0173	<0.0005	0.00027	0.165	<0.0001	<0.001	0.084	<0.00001	95.6	0.0011	0.00024
RSEM-R6E-EOP	10/29/2020 14:15	YT7960	M	C080439	4.66	0.00082	3.63	<0.00002	36.5	0.947	34.9	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	0.0159	<0.0005	0.00027	0.16	<0.0001	<0.001	0.089	<0.00001	98.2	0.0011	0.00025
RSEM-R6E-EOP	10/30/2020 12:00	YT7954	M	C080436	4.35	0.0008	3.45	<0.00002	36.5	0.894	34.2	0.00001	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0166	<0.0005	0.00026	0.162	<0.0001	<0.001	0.089	<0.00001	98.2	<0.001	0.00026
RSEM-R6E-EOP	10/31/2020 14:20	YU1484	M	C081008	4.16	0.00074	3.08	<0.00002	37.1	0.718	33.9	<0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.0171	<0.0005	0.00029	0.145	<0.0001	<0.001	0.079	<0.00001	88.7	<0.001	0.0003
RSEM-R6E-EOP	10/31/2020 14:30	YU1487	D	C081008	4.11	0.00075	3.1	<0.00002	36.6	0.706	33.6	<0.00001	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0165	<0.0005	0.00028	0.143	<0.0001	<0.001	0.077	<0.00001	89.0	<0.001	0.00029
RSEM-R6E-EOP	11/1/2020 13:10	YU1489	M	C081010	4.15	0.00078	3.19	<0.00002	38.0	0.677	34.2	<0.00001	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	0.0189	<0.0005	0.00029	0.141	<0.0001	<0.001	0.077	<0.00001	87.5	<0.001	0.00034
RSEM-R6E-EOP	11/2/2020 13:40	YU2810	M	C081296	4.47	0.00165	3.76	<0.00002	77.8	0.58	70.1	0.00001	<0.005	<0.005	0.00181	<0.005	0.0079	<0.0001	0.0306	0.00058	0.00043	0.102	<0.0001	<0.001	0.096	0.000026	76.9	0.0014	0.00094
RSEM-R6E-EOP	11/3/2020 14:10	YU4781	M	C081741	4.42	0.00238	3.75	<0.00002	108	0.43	92.6	0.00001	<0.005	<0.005	0.00228	<0.005	0.0439	<0.0001	0.0324	0.00087	0.00063	0.08	<0.0001	<0.001	0.113	0.00003	60.0	0.0022	0.00085
RSEM-R6E-EOP	11/3/2020 14:20	YU4782	D	C081741	4.64	0.00254	3.88	<0.00002	114	0.434	98.7	0.00001	<0.005	<0.005	0.00241	<0.005	0.0072	<0.0001	0.0334	0.00089	0.00066	0.081	<0.0001	<0.001	0.115	0.000032	58.4	0.0023	0.00086
RSEM-R6E-EOP	11/4/2020 14:25	YU7151	M	C082156	4.64	0.00309	4.11	<0.00002	136	0.388	114	0.000011	<0.005	<0.005	0.00264	<0.005	0.0066	<0.0001	0.0316	0.00104	0.00078	0.065	<0.0001	<0.001	0.123	0.000025	55.1	0.0029	0.00027
RSEM-R6E-EOP	11/5/2020 13:20	YU9363	M	C082511	4.57	0.00312	4.17	<0.00002	145	0.38	117	0.000011	<0.005	<0.005	0.0027	<0.005	0.0068	0.00011	0.027	0.00112	0.00083	0.059	<0.0001	<0.001	0.121	0.000022	56.3	0.0031	0.00026
RSEM-R6E-EOP	11/5/2020 13:30	YU9364	D	C082511	4.62	0.00323	4.22	<0.00002	145	0.391	117	0.000011	<0.005	<0.005	0.0027	<0.005	0.0058	0.00016	0.0272	0.00112	0.00084	0.059	<0.0001	<0.001	0.12	0.000022	57.1	0.003	0.00028
RSEM-R6E-EOP	11/6/2020 13:10	YU9362	M	C082510	4.76	0.00352	4.5	<0.00002	159	0.404	126	<0.00001	<0.005	<0.005	0.00293	<0.005	0.005	0.00011	0.0245	0.00117	0.00084	0.059	<0.0001	<0.001	0.124	0.000021	56.5	0.003	0.00027
RSEM-R6E-EOP	11/7/2020 13:10	YV3091	M	C082988	4.89	0.00349	4.69	<0.00002	166	0.387	132	0.000011	<0.005	<0.005	0.00289	<0.005	0.005	0.00013	0.0203	0.00116	0.0008	0.061	<0.0001	<0.001	0.132	0.000023	52.7	0.003	0.00037
RSEM-R6E-EOP	11/7/2020 13:20	YV3092	D	C082988	4.73	0.00337	4.45	<0.00002	157	0.38	128	<0.00001	<0.005	<0.005	0.00279	<0.005	0.0058	<0.0001	0.0204	0.0012	0.0008	0.061	<0.0001	<0.001	0.132	0.000019	51.5	0.0029	0.00038
RSEM-R6E-EOP	11/8/2020 13:27	YV3108	M	C082994	4.69	0.00335	4.32	<0.00002	153	0.395	124	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	0.0001	0.0224	0.00111	0.00083	0.065	<0.0001	<0.001	0.127	0.000021	58.8	0.0028	0.00042
RSEM-R6E-EOP	11/9/2020 10:30	YV4611	M	C083253	4.64	0.0032	4.34	<0.00002	143	0.389	121	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	0.0212	0.00106	0.00071	0.068	<0.0001	<0.001	0.125	0.000019	58.6	0.0026	0.00045
RSEM-R6E-EOP	11/9/2020 10:40	YV4612	D	C083253	4.71	0.00331	4.5	<0.00002	150	0.392	122	<0.00001	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	0.0201	0.00105	0.00074	0.068	<0.0001	<0.001	0.124	0.000019	56.8	0.0026	0.00045
RSEM-R6E-EOP	11/10/2020 13:30	YV4533	M	C083245	4.47	0.00299	4.4	<0.00002	136	0.395	113	<0.00001	<0.005	<0.005	0.0026	<0.005	<0.005	<0.0001	0.0197	0.00106	0.00073	0.07	<0.0001	<0.001	0.124	0.00002	58.3	0.0024	0.00048
RSEM-R6E-EOP	11/11/2020 12:50	YV8316	M	C083838	4.55	0.00288	4.32	<0.00002	135	0.389	111	<0.00001	<0.005	<0.005	0.00259	<0.005	0.0065	<0.0001	0.0197	0.00103	0.00076	0.072	<0.0001	<0.001	0.117	0.000022	60.0	0.0023	0.00042
RSEM-R6E-EOP	11/11/2020 13:00	YV8317	D	C083838	4.73	0.00289	4.19	<0.00002	139	0.417	116	<0.00001	<0.005	<0.005	0.00262	<0.005	0.0062	<0.0001	0.0203	0.00101	0.00073	0.072	<0.0001	<0.001	0.118	0.000021	59.3	0.0023	0.00042
RSEM-R6E-EOP	11/12/2020 10:35	YV9792	M	C084025	4.26	0.00245	3.87	<0.00002	122	0.373	99.3	<0.00001	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	0.0047	0.00097	0.00073	0.063	<0.0001	<0.001	0.12	<0.00001	56.4	0.0021	0.00034
RSEM-R6E-EOP	11/13/2020 9:40	YV9728	M	C084016	4.41	0.00247	4.2	<0.00002	120	0.402	99.9	0.000012	<0.005	<0.005	0.00246	<0.005	<0.005	<0.0001	0.0177	<0.001	0.00067	0.071	<0.0002	<0.002	0.113	<0.00002	62.3	<0.002	0.00048
RSEM-R6E-EOP	11/13/2020 9:50	YV9729	D	C084016	4.32	0.00249	4.05	<0.00002	119	0.401	101	0.000011	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	0.0179	<0.001	0.00071	0.071	<0.0002	<0.002	0.119	<0.00002	63.5	0.0021	0.00051
RSEM-R6E-EOP	11/14/2020 12:05	YW2819	M	C084420	4.42	0.00249	4.12	<0.00002	122	0.404	101	<0.00001	<0.005	<0.005	0.00257	<0.005	0.0067	<0.0001	0.0154	0.00091	0.0007	0.075	<0.0001	<0.001	0.114	0.000019	66.1	0.002	0.00053
RSEM-R6E-EOP	11/15/2020 12:30	YW2809	M	C084417	4.29	0.00235	4.15	<0.00002	110	0.412	93.9	<0.00001	<0.005	<0.005	0.00258	<0.005	0.0057	<0.0001	0.0151	0.0008	0.00063	0.08	<0.0001	<0.001	0.108	0.00002	71.5	0.0016	0.00052
RSEM-R6E-EOP	11/15/2020 12:40	YW2810	D	C084417	4.40	0.00241	4.24	<0.00002	114	0.43	97.1	<0.00001	<0.005	<0.005	0.00264	<0.005	0.0054	0.0001	0.0143	0.00082	0.00063	0.081	<0.0001	<0.001	0.11	0.000016	72.2	0.0016	0.00053
RSEM-R6E-EOP	11/16/2020 10:20	YW2813	M	C084418	4.23	0.00219	4.1	<0.00002	103	0.424	90.0	<0.00001	<0.005	<0.005	0.00255	<0.005	0.0058	<0.0001	0.0137	0.00073	0.00059	0.084	<0.0001	<0.001	0.108	0.00002	75.7	0.0014	0.00054
RSEM-R6E-EOP	11/17/2020 12:45	YW6847	M	C085190	4.06	0.00228	4.01	<0.00002	92.3	0.427	82.0	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	0.013	0.00065	0.00054	0.089	<0.0001	<0.001	0.106	0.000015	78.4	0.0012	0.00052
RSEM-R6E-EOP	11/18/2020 16:00	YW9288	M	C085621	4.00	0.00195	3.97	<0.00002	84.9	0.453	77.4	<0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	0.0122	0.00056	0.00056	0.094	<0.0001	<0.001	0.1	0.000018	84.6	<0.001	0.00048
RSEM-R6E-EOP	11/19/2020 13:30	YX1119	M	C085951	3.82	0.00188	3.58	<0.00002	78.0	0.416	68.5	<0.00001	<0.005	<0.005	0.00225	<0.005	0.0059	<0.0001	0.0124	0.00054	0.00049	0.093	<0.0001	<0.001	0.095	0.00002	83.9	<0.001	0.00049
RSEM-R6E-EOP	11/19/2020 13:40	YX1121	D	C085951	3.92	0.00186	3.55	<0.00002	78.9	0.415	70.9	<0.00001	<0.005	<0.005	0.00231	<0.005	0.0057	<0.0001	0.0119	0.00053	0.0005	0.095	<0.0001	<0.001	0.094	0.000016	85.0	<0.001	0.00051
RSEM-R6E-EOP	11/20/2020 11:30	YX1116	M	C085949	3.80	0.00183	3.66	<0.00002	74.5	0.434	69.0	<0.00001	<0.005	<0.005	0.00231	<0.005	0.0052	<0.0001	0.0117	<0.0005	0.00049	0.095	<0.0001	<0.001	0.093	0.000017	85.0	<0.001	0.0005
RSEM-R6E-EOP	11/21/2020 13:30	YX3969	M	C086434	4.00	0.00177	4.05	<0.00002	76.7	0.454	73.0	<0.00001	<0.005	<0.005	0.00239	<0.005	0.0063	<0.0001	0.0123	<0.0005	0.00046	0.097	<0.0001	<0.001	0.095	0.000015	90.7	<0.001	0.00053
RSEM-R6E-EOP	11/22/2020 13:45	YX3965	M	C086433	3.86	0.00176	4.24	<0.00002	72.2	0.464	69.5	0.000012	<0.005	<0.005	0.0024	<0.005	0.0056	<0.0001	0.0119	<0.0005	0.00044	0.099	<0.0001	<0.001	0.091	0.000018	94.5	<0.001	0.00049
RSEM-R6E-EOP	11/22/2020 13:55	YX3968	D	C086433	3.79	0.0017	4.04	<0.00002	72.0	0.461	68.2	<0.00001	<0.005	<0.005	0.00231	<0.005	0.0058	<0.0001	0.012	<0.0005	0.0004	0.099	<0.0001	<0.001	0.09	0.000018	93.0	<0.001	0.00051
RSEM-R6E-EOP	11/23/2020 13:30	YX5756	M	C086734	3.76	0.00167	4.07	<0.00002	68.1	0.457	64.8	<0.00001	<0.005	<0.005	0.00224	<0.005	0.0055	<0.0001	0.0127	<0.0005	0.00041	0.101	<0.0001	<0.001	0.093	0.000016	94.4	<0.001	0.00052
RSEM-R6E-EOP	11/24/2020 13:45	YX7832	M	C087146	3.47	0.00161	3.85	<0.00002	60.6	0.437	58.1	<0.00001	<0.005	<0.005	0.00209	<0.005	0.0055	<0.0001	0.0124	<0.0005	0.00043	0.102	<0.0001	<0.001	0.083	0.000018	96.1	<0.001	0.00053
RSEM-R6E-EOP	11/24/2020 13:55	YX7833	D	C087146	3.57	0.00168	3.88	<0.00002	62.1	0.446	59.6	<0.00001	<0.005	<0.005	0.00212	<0.005	0.007	<0.0001	0.0122	<0.0005	0.0004	0.101	<0.0001	<0.001	0.085	0.000017	95.2	<0.001	0.00052
RSEM-R6E-EOP	11/25/2020 14:00	YY0221	M	C087472	3.61	0.00149	3.86	<0.00002	62.0	0.435	60.2	<0.00001	<0.005	<0.005	0.00221	<0.005	0.0078	<0.0001	0.0123	<0.0005	0.00042	0.101	<0.0001	<0.001	0.083	0.000022	90.1	<0.001	0.00052
RSEM-R6E-EOP	11/26/2020 11:40	YY2047	M	C087819	3.44	0.00147	3.79	<0.00002	57.0	0.432	56.5	<0.00001	<0.005	<0.005	0.00209	<0.005	0.0059	<0.0001	0.012	<0.0005	0.00037	0.1	<0.0001	<0.001	0.084	0.000018	90.6	<0.001	0.00056
RSEM-R6E-EOP	11/26/2020 11:50	YY2048	D	C087819	3.45	0.00144	3.77	<0.00002	57.6	0.431	57.0	<0.00001	<0.005	<0.005	0.00212	<0.005	0.0065	<0.0001	0.012	<0.0005	0.00036	0.101	<0.0001	<0.001	0.084	0.000019	93.9	<0.001	0.00055

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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	11/27/2020 11:20	YY2095	M	C087822	3.40	0.00139	3.69	<0.00002	53.6	0.431	51.9	<0.00001	<0.005	<0.005	0.00207	<0.005	0.0074	0.0001	0.0127	<0.0005	0.00032	0.101	<0.0001	<0.001	0.084	0.00002	92.2	<0.001	0.0006
RSEM-R6E-EOP	11/28/2020 12:50	YY5267	M	C088400	3.59	0.00153	4.22	<0.00002	55.6	0.463	53.8	0.000027	<0.005	<0.005	0.00218	<0.005	0.0053	<0.0001	0.0098	<0.0005	0.00035	0.096	<0.0001	<0.001	0.075	0.000015	87.6	<0.001	0.00055
RSEM-R6E-EOP	11/28/2020 13:00	YY5268	D	C088400	3.44	0.00145	4.1	<0.00002	54.7	0.456	53.2	0.000017	<0.005	<0.005	0.00204	<0.005	0.0054	<0.0001	0.0097	<0.0005	0.00035	0.095	<0.0001	<0.001	0.075	0.000011	86.7	<0.001	0.00056
RSEM-R6E-EOP	11/29/2020 12:35	YY5334	M	C088408	3.35	0.0014	3.97	<0.00002	50.7	0.429	49.0	0.000013	<0.005	<0.005	0.00199	<0.005	0.0061	<0.0001	0.0088	<0.0005	0.0004	0.101	<0.0001	<0.001	0.072	0.000011	86.8	<0.001	0.00049
RSEM-R6E-EOP	11/30/2020 14:00	YY7386	M	C088703	3.35	0.00123	3.99	<0.00002	48.6	0.42	47.0	<0.00001	<0.005	<0.005	0.00196	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00038	0.101	<0.0001	<0.001	0.079	0.000015	87.3	<0.001	0.00046
RSEM-R6E-EOP	11/30/2020 14:10	YY7387	D	C088703	3.30	0.00129	3.97	<0.00002	48.3	0.416	47.7	<0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00042	0.103	<0.0001	<0.001	0.079	0.000014	85.9	<0.001	0.00047
RSEM-R6E-EOP	12/1/2020 13:45	YY9247	M	C089096	3.36	0.00125	4.02	<0.00002	47.2	0.411	45.1	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0079	<0.0005	0.0004	0.104	<0.0001	<0.001	0.077	0.000014	87.1	<0.001	0.00046
RSEM-R6E-EOP	12/2/2020 13:00	YZ1565	M	C089572	3.30	0.0013	3.96	<0.00002	47.4	0.409	46.2	<0.00001	<0.005	<0.005	0.00201	<0.005	0.0079	<0.0001	0.0079	<0.0005	0.0004	0.106	<0.0001	<0.001	0.071	0.000014	91.5	<0.001	0.00045
RSEM-R6E-EOP	12/2/2020 13:10	YZ1566	D	C089572	3.20	0.00128	4.12	<0.00002	47.1	0.41	45.9	<0.00001	<0.005	<0.005	0.00207	<0.005	0.0065	<0.0001	0.0077	<0.0005	0.00042	0.108	<0.0001	<0.001	0.074	0.000016	89.9	<0.001	0.00046
RSEM-R6E-EOP	12/3/2020 12:40	YZ2306	M	C089704	3.30	0.0013	4.03	<0.00002	48.8	0.417	48.3	<0.00001	<0.005	<0.005	0.00209	<0.005	0.0054	<0.0001	0.0087	<0.0005	0.00041	0.106	<0.0001	<0.001	0.075	0.000013	91.1	<0.001	0.00045
RSEM-R6E-EOP	12/4/2020 13:20	YZ4236	M	C089912	3.32	0.00124	4.11	<0.00002	48.5	0.426	47.3	<0.00001	<0.005	<0.005	0.00201	<0.005	0.0052	0.00017	0.0092	<0.0005	0.00038	0.108	<0.0001	<0.001	0.071	0.000012	90.6	<0.001	0.00039
RSEM-R6E-EOP	12/4/2020 13:30	YZ4237	D	C089912	3.14	0.00119	4.01	<0.00002	45.8	0.415	45.3	<0.00001	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	0.0071	<0.0005	0.00042	0.11	<0.0001	<0.001	0.071	0.000011	88.0	<0.001	0.0004
RSEM-R6E-EOP	12/5/2020 13:20	YZ8273	M	C090368	3.01	0.00112	4.05	<0.00002	44.9	0.393	42.8	<0.00001	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	0.0065	<0.0005	0.00038	0.106	<0.0001	<0.001	0.075	0.000013	85.7	<0.001	0.00041
RSEM-R6E-EOP	12/6/2020 12:50	YZ8304	M	C090376	3.04	0.00115	3.98	<0.00002	43.2	0.394	42.9	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.0062	<0.0005	0.00037	0.106	<0.0001	<0.001	0.074	<0.00001	83.7	<0.001	0.00039
RSEM-R6E-EOP	12/6/2020 13:00	YZ8305	D	C090376	3.08	0.00116	3.98	<0.00002	43.1	0.385	43.1	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.0064	<0.0005	0.00036	0.105	<0.0001	<0.001	0.074	<0.00001	86.8	<0.001	0.0004
RSEM-R6E-EOP	12/7/2020 10:05	YZ8152	M	C090358	3.03	0.00129	3.9	<0.00002	42.7	0.399	44.9	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	0.0067	<0.0005	0.00038	0.104	<0.0001	<0.001	0.072	0.000011	86.4	<0.001	0.00041
RSEM-R6E-EOP	12/8/2020 15:10	ZA2149	M	C091061	3.44	0.00166	3.69	<0.00002	45.4	0.469	52.9	0.000014	<0.005	<0.005	0.00214	<0.005	0.0086	<0.0001	0.0133	<0.0005	0.00036	0.103	<0.0001	<0.001	0.068	0.000049	94.7	<0.001	0.00165
RSEM-R6E-EOP	12/9/2020 15:30	ZA6284	M	C091815	3.59	0.00164	3.55	<0.00002	46.1	0.497	55.2	<0.00001	<0.005	<0.005	0.00229	<0.005	0.013	<0.0001	0.0203	<0.0005	0.00033	0.101	<0.0001	<0.001	0.072	0.000085	98.1	<0.001	0.00302
RSEM-R6E-EOP	12/10/2020 14:20	ZA6276	D	C091812	3.64	0.00168	3.51	<0.00002	47.0	0.503	57.8	<0.00001	<0.005	<0.005	0.00238	<0.005	0.0211	<0.0001	0.0268	<0.0005	0.00034	0.099	<0.0001	<0.001	0.074	0.000113	95.4	<0.001	0.00389
RSEM-R6E-EOP	12/10/2020 14:30	ZA6277	M	C091812	3.61	0.0016	3.64	<0.00002	47.2	0.501	57.5	<0.00001	<0.005	<0.005	0.00236	<0.005	0.0163	<0.0001	0.0273	<0.0005	0.00034	0.101	<0.0001	<0.001	0.074	0.000116	97.0	<0.001	0.00384
RSEM-R6E-EOP	12/11/2020 23:40	ZA6280	M	C091813	3.58	0.00153	3.56	<0.00002	46.9	0.488	57.1	<0.00001	<0.005	<0.005	0.00236	<0.005	0.0161	<0.0001	0.0282	<0.0005	0.00034	0.105	<0.0001	<0.001	0.074	0.000113	94.7	<0.001	0.00369
RSEM-R6E-EOP	12/13/2020 15:10	ZA8556	M	C092267	3.61	0.00149	3.94	<0.00002	48.6	0.475	57.5	<0.00001	<0.005	<0.005	0.00247	<0.005	0.0151	<0.0001	0.0258	<0.0005	0.00035	0.107	<0.0001	<0.001	0.076	0.000099	97.9	<0.001	0.00289
RSEM-R6E-EOP	12/13/2020 16:50	ZA8523	M	C092261	3.59	0.00152	3.89	<0.00002	47.9	0.464	55.8	<0.00001	<0.005	<0.005	0.00238	<0.005	0.0165	<0.0001	0.0264	<0.0005	0.00034	0.105	<0.0001	<0.001	0.074	0.000107	97.3	<0.001	0.00309
RSEM-R6E-EOP	12/14/2020 13:00	ZA8428	M	C092250	3.50	0.0015	3.81	<0.00002	48.1	0.463	56.2	<0.00001	<0.005	<0.005	0.00242	<0.005	0.0155	<0.0001	0.0252	<0.0005	0.00033	0.106	<0.0001	<0.001	0.069	0.000096	99.3	<0.001	0.00294
RSEM-R6E-EOP	12/15/2020 15:10	ZB1647	M	C092932	3.73	0.00158	3.96	<0.00002	51.5	0.515	60.7	<0.00001	<0.005	<0.005	0.00243	<0.005	0.0168	<0.0001	0.0251	<0.0005	0.00031	0.106	<0.0001	<0.001	0.068	0.000109	98.5	<0.001	0.00282
RSEM-R6E-EOP	12/15/2020 15:20	ZB1648	D	C092932	3.65	0.00155	3.87	<0.00002	50.3	0.523	56.6	0.000011	<0.005	<0.005	0.00244	<0.005	0.0162	<0.0001	0.0238	<0.0005	0.00033	0.107	<0.0001	<0.001	0.07	0.000092	97.0	<0.001	0.00275
RSEM-R6E-EOP	12/16/2020 14:10	ZB3421	M	C093364	3.64	0.00152	3.48	<0.00002	49.2	0.515	54.6	<0.00001	<0.005	<0.005	0.00235	<0.005	0.0144	<0.0001	0.0218	<0.0005	0.00035	0.108	<0.0001	<0.001	0.065	0.000088	95.9	<0.001	0.00241
RSEM-R6E-EOP	12/17/2020 14:30	ZB5911	M	C093625	3.64	0.00142	3.55	<0.00002	50.1	0.506	57.3	<0.00001	<0.005	<0.005	0.00217	<0.005	0.0125	0.0001	0.0211	<0.0005	0.00033	0.11	<0.0001	<0.001	0.073	0.000081	94.6	<0.001	0.00197
RSEM-R6E-EOP	12/17/2020 14:40	ZB5912	D	C093625	3.69	0.00135	3.44	<0.00002	48.6	0.503	53.9	<0.00001	<0.005	<0.005	0.00216	<0.005	0.0121	<0.0001	0.0219	<0.0005	0.00035	0.11	<0.0001	<0.001	0.071	0.000072	95.4	<0.001	0.00201
RSEM-R6E-EOP	12/18/2020 13:25	ZB5852	M	C093610	3.60	0.0014	3.61	<0.00002	48.7	0.484	53.9	<0.00001	<0.005	<0.005	0.0021	<0.005	0.0117	<0.0001	0.0203	<0.0005	0.00036	0.115	<0.0001	<0.001	0.079	0.000074	97.1	<0.001	0.00179
RSEM-R6E-EOP	12/19/2020 12:50	ZB8418	M	C094046	3.52	0.0013	4.05	<0.00002	47.5	0.472	53.5	<0.00001	<0.005	<0.005	0.00213	<0.005	0.0104	<0.0001	0.0193	<0.0005	0.00036	0.12	<0.0001	<0.001	0.078	0.000065	99.5	<0.001	0.00141
RSEM-R6E-EOP	12/20/2020 12:45	ZB8513	M	C094070	3.65	0.00123	4.09	<0.00002	46.7	0.465	53.6	<0.00001	<0.005	<0.005	0.00214	<0.005	0.0106	<0.0001	0.0179	<0.0005	0.00037	0.123	<0.0001	<0.001	0.07	0.000059	99.2	<0.001	0.00142
RSEM-R6E-EOP	12/20/2020 12:55	ZB8514	D	C094070	3.52	0.00131	4.14	<0.00002	46.5	0.458	49.6	<0.00001	<0.005	<0.005	0.00215	<0.005	0.0115	<0.0001	0.0173	<0.0005	0.00037	0.123	<0.0001	<0.001	0.071	0.000057	99.1	<0.001	0.00137
RSEM-R6E-EOP	12/21/2020 10:40	ZB8328	M	C094023	3.51	0.00118	4.02	<0.00002	44.0	0.434	49.7	<0.00001	<0.005	<0.005	0.00203	<0.005	0.0102	<0.0001	0.0153	<0.0005	0.00037	0.128	<0.0001	<0.001	0.07	0.000055	99.7	<0.001	0.00117
RSEM-R6E-EOP	12/22/2020 11:30	ZC0503	M	C094296	3.42	0.00123	4.08	<0.00002	43.6	0.427	46.3	<0.00001	<0.005	<0.005	0.00203	<0.005	0.0092	<0.0001	0.0162	<0.0005	0.00038	0.13	<0.0001	<0.001	0.07	0.000046	96.7	<0.001	0.00107
RSEM-R6E-EOP	12/23/2020 13:00	ZC1950	M	C094642	3.42	0.00121	4.22	<0.00002	45.8	0.435	47.0	<0.00001	<0.005	<0.005	0.00204	<0.005	0.0089	<0.0001	0.0127	<0.0005	0.00037	0.126	<0.0001	<0.001	0.079	0.000042	95.5	<0.001	0.00101
RSEM-R6E-EOP	12/24/2020 9:30	ZC3450	M	C094856	3.34	0.00116	4.16	<0.00002	44.3	0.419	47.7	<0.00001	<0.005	<0.005	0.00201	<0.005	0.0093	<0.0001	0.0125	<0.0005	0.00037	0.125	<0.0001	<0.001	0.063	0.000047	96.6	<0.001	0.00088
RSEM-R6E-EOP	12/24/2020 9:40	ZC3451	D	C094856	3.44	0.0012	4.24	<0.00002	45.0	0.423	47.3	<0.00001	<0.005	<0.005	0.00201	<0.005	0.0089	<0.0001	0.0128	<0.0005	0.00037	0.127	<0.0001	<0.001	0.065	0.000048	95.8	<0.001	0.0009
RSEM-R6E-EOP	12/25/2020 15:00	ZC3693	M	C094909	3.44	0.0012	4.25	<0.00002	45.4	0.429	48.1	<0.00001	<0.005	<0.005	0.00204	<0.005	0.0086	<0.0001	0.0118	<0.0005	0.0004	0.128	<0.0001	<0.001	0.067	0.000041	94.3	<0.001	0.0008
RSEM-R6E-EOP	12/26/2020 16:00	ZC3699	M	C094911	3.36	0.00117	4.27	<0.00002	43.8	0.417	47.1	<0.00001	<0.005	<0.005	0.00198	<0.005	0.008	<0.0001	0.0104	<0.0005	0.00036	0.128	<0.0001	<0.001	0.068	0.000043	92.6	<0.001	0.00074
RSEM-R6E-EOP	12/27/2020 16:10	ZC4643	M	C095191	3.34	0.00114	4.16	<0.00002	43.0	0.412	45.0	<0.00001	<0.005	<0.005	0.00197	<0.005	0.0088	<0.0001	0.0114	<0.0005	0.00039	0.133	<0.0001	<0.001	0.061	0.000045	95.4	<0.001	0.00084
RSEM-R6E-EOP	12/27/2020 16:20	ZC4645	D	C095191	3.34	0.00116	4.26	<0.00002	44.2	0.414	45.1	<0.00001	<0.005	<0.005	0.00199	<0.005	0.0085	<0.0001	0.0111	<0.0005	0.00039	0.134	<0.0001	<0.001	0.059	0.000041	95.1	<0.001	0.00085
RSEM-R6E-EOP	12/28/2020 9:30	ZC4618	M	C095179	3.36	0.00116	4.31	<0.00002	43.1	0.416	45.9	0.00001	<0.005	<0.005	0.00191	<0.005	0.0082	<0.0001	0.0105	<0.0005	0.00039	0.132	<0.0001	<0.001	0.059	0.000045	94.4	<0.001	0.00077
RSEM-R6E-EOP	12/29/2020 13:55	ZC5602	M	C095537	3.22	0.00117	4.23	<0.00002	41.8	0.392	43.1	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0086	<0.0001	0.01	<0.0005	0.00041	0.136	<0.0001	<0.001	0.063	0.000038	97.3	<0.001	0.00074
RSEM-R6E-EOP	12/30/2020 14:50	ZC6411	M	C100028	3.38	0.00113	4.39	<0.00002	43.6	0.415	43.2	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0084	<0.0001	0.0099	<0.0005	0.00039	0.138	<0.0001	<0.001	0.057	0.000041	97.7	<0.001	0.00075
RSEM-R6E-EOP	12/30/2020 14:55	ZC6410	D	C100028	3.45	0.00116	4.44	<0.00002	43.9	0.411	44.2	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0086	<0.0001	0.0101	<0.0005	0.00041	0.138	<0.0001	<0.001	0.06	0.000039	95.7	<0.001	0.00076
RSEM-R6E-EOP	12/31/2020 14:45	ZC6408	M	C100027	3.36	0.00115	4.35	<0.00002	42.4	0.405	43.4	<0.00001	<0.005	<0.005	0.0019	<0.005	0.0093	0.00015	0.0105	<0.0005	0.00041	0.136	<0.0001	<0.001	0.063	0.000043	95.6	<0.001	0.0008
RSEM-R6-EP-US-SD	4/8/2020 14:40	XQ4592	M	C024938	5.94	0.00095	14.4	0.000077	27.1	0.434	27.6	0.000147	<0.005	0.177	0.00148	0.0215	0.0731	0.00286	0.0523	<0.0005	0.00033	0.066	<0.0001	<0.001	<0.05	0.000034	51.1	0.0019	0.00085
RSEM-R6-EP-US-SD	6/15/2020 15:20	XY1606	M	C041415	12.6	0.00318	69.3	0.00098	64.6	2.49	148	0.00118	<0.025	0.394	0.0265	0.163	2.03	0.00416	0.0415	<0.0005	0.00019	0.081	<0.0001	<0.001	0.139	0.000393	174	<0.001	0.0103
RSEM-R6-EP-US-SD	10/11/2020 12:10	YQ4409	M	C075136	4.89	0.00077	5.78	<0.00002	40.5	0.708	45.7	0.000022	<0.005	0.0186	0.00196	<0.005	0.0709	0.00061	0.142	<0.0005	0.00017	0.127	<0.0001	<0.001	0.093	0.000027	105	<0.001	0.00675
RSEM-R6W-EOP	4/27/2020 14:10	XS0061	M	C028666	4.82	0.00199	4.23	<0.00002	97.6	0.166	40.5	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	0.00065	0.98	0.00118	0.00112	0.073	<0.0001	<0.001	0.126	0.000016	23.8	0.0029	0.00032
RSEM-R6W-EOP	4/28/2020 12:45	XS2087	M	C029151	5.43	0.00219	3.85	<0.00002	115	0.193	44.3	<0.00001	<0.005	<0.005	0.00129	<0.005	0.0132	0.00021	0.115	0.00135	0.00179	0.078	<0.0001	<0.001	0.185	<0.00001	32.9	0.0024	<0.0002
RSEM-R6W-EOP	4/29/2020 11:30	XS3519	M	C029452	5.85	0.00263	4.17	<0.00002	122	0.191	46.6	<0.00001	<0.005	0.0125	0.00136	0.0053	0.0073	0.00035	0.0991	0.00126	0.00075	0.069	<0.0001	<0.001	0.163	<0.00001	28.5	0.0023	<0.0002
RSEM-R6W-EOP	4/30/2020 10:40	XS4880	M	C029734	5.69	0.0025	4.24	<0.00002	119	0.19	46.1	0.000022	<0.005	0.02	0.00123	0.0059	0.0065	0.0012	0.092	0.0016	0.00159	0.072	<0.0001	<0.001	0.173	<0.00001	28.4	0.0028	<0.0002
RSEM-R6W-EOP	4/30/2020 10:50	XS4881	D	C029734	6.13	0.00263	4.45	<0.00002	128	0.213	51.9	0.000018	<0.005	0.0148	0.00145	0.0062	0.0059	0.00033	0.0955	0.0017	0.00154	0.073	<0.0001	<0.001	0.176	<0.00001	28.7	0.0029	<0.0002
RSEM-R6W-EOP	5/1/2020 11:25	XS5995	M	C029956	6.52	0.00318	5.14	<0.00002	135	0.222	52.8	0.00003	<0.005	0.0111	0.00144	0.0079	0.0079	0.00053	0.0928	0.00178	0.00161	0.07	<0.0001	<0.001	0.157	<0.00001	27.6	0.0027	<0.0002
RSEM-R6W-EOP	5/1/2020 11:35	XS5996	D	C029956	5.73	0.00283	4.52	<0.00002	120	0.195	49.3	0.000029	<0.005	0.0162	0.00128	0.0068	0.0088	0.00055	0.0985	0.00169	0.0014	0.078	<0.0001	<0.001	0.173	<0.00001	30.8	0.0029	<0.0002
RSEM-R6W-EOP	5/2/2020 11:40	XS7460	M	C030328	5.60	0.00256	4.11	<0.00002	114	0.189	47.7	0.000019	<0.005	0.0093	0.00134	0.0054	0.0099	0.00029	0.099	0.00154	0.00133	0.076	<0.0001	<0.001	0.186	0.000021	27.4	0.0033	<0.0002
RSEM-R6W-EOP	5/2/2020 11:50	XS7461	D	C030328	5.66	0.00251	4.11	<0.00002	116	0.194	47.9	0.000027	<0.005	0.0134	0.00139	0.0054	<0.005	0.00127	0.0875	0.0017	0.00124	0.074	<0.0001	<0.001	0.147	0.000012	28.8	0.0031	<0.0002
RSEM-R6W-EOP	5/3/2020 7:40	XS7389	M	C030307	6.02	0.00256	4.44	<0.00002	128	0.199	48.6	0.000019	<0.005	0.0109	0.00144	0.0055	<0.005	0.00019	0.0819	0.00173	0.00143	0.071	<0.0001	<0.001	0.152	<0.00001	25.7	0.0032	<0.0002
RSEM-R6W-EOP	5/3/2020 7:50	XS7390	D	C030307	6.05	0.00286	4.04	<0.00002	131	0.194	51.8	0.000017	<0.005	0.0124	0.00144	0.0058	0.0057	<0.0001	0.0805	0.00156	0.00162	0.071	<0.0001	<0.001	0.161	<0.00001	30.0	0.0033	<0.0002
RSEM-R6W-EOP	5/4/2020 13:00	XS8355	M	C030506	6.24	0.00281	3.84	<0.00002	127	0.214	52.0	0.000033	<0.005	0.0139	0.00144	0.0051	0.0086	0.00045	0.0873	0.00151	0.00139	0.071	<0.0001	<0.001	0.175	<0.00001	30.3	0.0031	<0.0002
RSEM-R6W-EOP	5/5/2020 16:45	XT0141	M	C030949	6.18	0.00279	3.77	<0.00002	127	0.218	55.5	0.000024	<0.005	0.0076	0.00139	<0.005	0.0093	0.00048	0.0415	0.00157	0.00154	0.075	<0.0001	<0.001	0.168	<0.00001	31.9	0.0035	<0.0002
RSEM-R6W-EOP	5/6/2020 13:15	XT1600	M	C031246	6.71	0.00288	4.06	<0.00002	144	0.239	58.0	0.000016	<0.005	<0.005	0.00185	0.0052	<0.005	0.00016	0.111	0.00204	0.002	0.107	<0.0001	<0.001	0.254	0.00002	34.6	0.0041	<0.0002
RSEM-R6W-EOP	5/7/2020 11:30	XT2576	M	C031444	6.36	0.0028	3.96	<0.00002	142	0.245	56.7	<0.00001	<0.005	<0.005	0.00173	<0.005	<0.005	0.00043	0.108	0.00184	0.00166	0.098	<0.0001	<0.001	0.225	<0.00001	38.8	0.0038	<0.0002
RSEM-R6W-EOP	5/8/2020 12:45	XT2570	M	C031442	5.82	0.00287	3.85	<0.00002	131	0.219	53.0	<0.00001	<0.005	<0.005	0.00185	<0.005	0.0082	0.00028	0.113	0.00178	0.00177	0.097	<0.0001	<0.001	0.219	0.000017	36.6	0.004	<0.0002
RSEM-R6W-EOP	5/9/2020 11:15	XT4486	M	C031859	6.11	0.00259	3.4	<0.00002	156	0.206	59.9	<0.00001	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.125	0.00184	0.00159	0.087	<0.0001	<0.001	0.234	0.000015	36.0	0.0033	<0.0002
RSEM-R6W-EOP	5/10/2020 15:30	XT4527	M	C031867	5.95	0.00275	3.41	<0.00002	188	0.206	78.4	<0.00001	<0.005	<0.005	0.00178	<0.005	<0.005	0.00016	0.101	0.00167	0.00199	0.066	<0.0001	<0.001	0.206	<0.00001	29.8	0.0033	<0.0002
RSEM-R6W-EOP	5/11/2020 11:30	XT5200	M	C032074	5.87	0.00288	3.4	<0.00002	193	0.211	87.6	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	0.133	0.00244	0.00174	0.078	<0.0001	<0.001	0.281	0.000013	36.2	0.0033	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R6W-EOP	5/12/2020 12:55	XT7070	M	C032509	6.09	0.00291	3.67	<0.00002	226	0.223	104	<0.00001	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	0.136	0.0026	0.00213	0.07	<0.0001	<0.001	0.287	0.00002	34.4	0.0029	<0.0002
RSEM-R6W-EOP	5/12/2020 13:05	XT7071	D	C032509	6.26	0.00343	3.6	<0.00002	237	0.224	114	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	0.124	0.00248	0.00179	0.065	<0.0001	<0.001	0.257	0.00001	36.0	0.0034	<0.0002
RSEM-R6W-EOP	5/13/2020 13:20	XT8153	M	C032775	5.11	0.00347	3.34	<0.00002	201	0.194	108	0.000014	<0.005	<0.005	0.00214	<0.005	<0.005	0.00034	0.109	0.00243	0.00223	0.057	<0.0001	<0.001	0.217	0.000012	26.9	0.0027	<0.0002
RSEM-R6W-EOP	5/13/2020 13:30	XT8154	D	C032775	5.30	0.00322	3.37	<0.00002	210	0.19	111	0.000012	<0.005	<0.005	0.00219	<0.005	<0.005	0.00036	0.109	0.00213	0.00169	0.057	<0.0001	<0.001	0.228	<0.00001	26.7	0.0026	<0.0002
RSEM-R6W-EOP	5/14/2020 12:40	XU0098	M	C033161	4.91	0.00367	3.16	<0.00002	210	0.182	108	0.000011	<0.005	<0.005	0.00226	<0.005	<0.005	0.00032	0.124	0.00287	0.00186	0.061	<0.0001	<0.001	0.246	<0.00001	28.1	0.0029	<0.0002
RSEM-R6W-EOP	5/14/2020 12:50	XU0099	D	C033161	4.86	0.00332	3.19	<0.00002	211	0.168	112	0.000011	<0.005	<0.005	0.00217	<0.005	<0.005	0.00033	0.129	0.0031	0.00235	0.063	<0.0001	<0.001	0.266	<0.00001	30.0	0.003	<0.0002
RSEM-R6W-EOP	5/15/2020 9:05	XU0130	M	C033173	5.13	0.00338	3.31	0.000029	234	0.186	124	0.000012	0.0057	<0.005	0.00251	<0.005	<0.005	0.00018	0.118	0.00289	0.00211	0.056	<0.0001	<0.001	0.254	<0.00001	26.4	0.0027	<0.0002
RSEM-R6W-EOP	5/15/2020 9:15	XU0131	D	C033173	4.98	0.00326	3.46	0.000021	230	0.188	129	0.000012	0.0056	<0.005	0.00242	<0.005	<0.005	0.00018	0.12	0.0031	0.00202	0.056	<0.0001	<0.001	0.262	<0.00001	27.1	0.0026	<0.0002
RSEM-R6W-EOP	5/16/2020 13:30	XU2650	M	C033733	5.52	0.00446	3.68	<0.00002	279	0.229	149	<0.00001	0.0085	<0.005	0.0032	<0.005	<0.005	0.00012	0.126	0.0029	0.00229	0.053	<0.0001	<0.001	0.24	<0.00001	27.5	0.0026	<0.0002
RSEM-R6W-EOP	5/16/2020 13:40	XU2651	D	C033733	5.34	0.00433	3.58	<0.00002	272	0.224	147	<0.00001	0.0078	<0.005	0.00302	<0.005	<0.005	0.00024	0.117	0.00285	0.00227	0.049	<0.0001	<0.001	0.244	<0.00001	26.3	0.0025	<0.0002
RSEM-R6W-EOP	5/17/2020 12:10	XU2516	M	C033704	4.85	0.0042	3.27	<0.00002	243	0.162	136	<0.00001	0.0066	<0.005	0.00237	<0.005	<0.005	<0.0001	0.122	0.00304	0.00204	0.05	<0.0001	<0.001	0.255	0.000011	26.6	0.0024	<0.0002
RSEM-R6W-EOP	5/17/2020 12:20	XU2517	D	C033704	5.60	0.0046	3.74	<0.00002	295	0.242	157	<0.00001	0.0065	<0.005	0.00332	<0.005	<0.005	0.0001	0.116	0.00295	0.0021	0.046	<0.0001	<0.001	0.257	0.000011	25.3	0.0023	<0.0002
RSEM-R6W-EOP	5/18/2020 13:50	XU2637	M	C033728	5.07	0.00446	3.42	0.000023	275	0.219	151	<0.00001	0.0084	<0.005	0.00325	<0.005	<0.005	0.00013	0.117	0.00312	0.00202	0.042	<0.0001	<0.001	0.238	<0.00001	24.0	0.0024	<0.0002
RSEM-R6W-EOP	5/18/2020 14:00	XU2638	D	C033728	5.48	0.00469	3.64	<0.00002	296	0.236	163	<0.00001	0.0086	<0.005	0.00332	<0.005	<0.005	<0.0001	0.124	0.00322	0.00219	0.044	<0.0001	<0.001	0.25	<0.00001	25.2	0.0025	<0.0002
RSEM-R6W-EOP	5/19/2020 14:20	XU3584	M	C033944	5.44	0.00456	3.55	0.000027	289	0.236	171	0.000011	0.0075	<0.005	0.00327	<0.005	<0.005	0.00012	0.132	0.00319	0.00225	0.043	<0.0001	<0.001	0.265	<0.00001	24.6	0.0023	<0.0002
RSEM-R6W-EOP	5/19/2020 14:30	XU3585	D	C033944	6.01	0.00554	3.9	<0.00002	321	0.266	183	0.000016	0.0079	<0.005	0.00354	<0.005	<0.005	0.00038	0.138	0.00325	0.00222	0.044	<0.0001	<0.001	0.281	<0.00001	26.5	0.0027	<0.0002
RSEM-R6W-EOP	5/20/2020 12:50	XU5558	M	C034306	4.53	0.0043	3.32	<0.00002	246	0.177	108	0.000017	0.0084	<0.005	0.00243	<0.005	0.0051	<0.0001	0.0939	0.00241	0.00168	0.03	<0.0001	<0.001	0.236	<0.00001	22.1	0.0017	0.00023
RSEM-R6W-EOP	5/20/2020 13:00	XU5559	D	C034306	5.05	0.00423	3.16	<0.00002	281	0.206	164	0.000031	0.0078	<0.005	0.00281	<0.005	<0.005	0.00037	0.134	0.00263	0.002	0.037	<0.0001	<0.001	0.263	<0.00001	22.6	0.0021	<0.0002
RSEM-R6W-EOP	5/21/2020 11:55	XU6997	M	C034623	4.67	0.00385	3.01	<0.00002	255	0.198	163	0.000011	0.0069	<0.005	0.00274	<0.005	<0.005	<0.0001	0.124	0.00271	0.00163	0.036	<0.0001	<0.001	0.228	0.000012	22.0	0.0019	<0.0002
RSEM-R6W-EOP	5/21/2020 12:05	XU6998	D	C034623	4.63	0.00358	2.95	<0.00002	255	0.19	155	0.000017	0.0068	<0.005	0.00275	<0.005	<0.005	<0.0001	0.115	0.0025	0.002	0.033	<0.0001	<0.001	0.22	<0.00001	21.8	0.0021	<0.0002
RSEM-R6W-EOP	5/22/2020 12:20	XU8399	M	C034984	4.96	0.00408	3.17	<0.00002	254	0.203	164	0.000015	0.0072	<0.005	0.0027	<0.005	<0.005	<0.0001	0.116	0.00261	0.00172	0.034	<0.0001	<0.001	0.205	<0.00001	22.0	0.0023	<0.0002
RSEM-R6W-EOP	5/22/2020 12:30	XU8400	D	C034984	4.89	0.00401	3.07	<0.00002	252	0.201	160	0.000016	0.0072	<0.005	0.00273	<0.005	<0.005	0.00019	0.117	0.00278	0.00146	0.034	<0.0001	<0.001	0.212	<0.00001	22.2	0.002	<0.0002
RSEM-R6W-EOP	5/23/2020 13:40	XU8584	M	C034993	5.60	0.00512	3.79	<0.00002	290	0.239	168	0.000017	0.0072	<0.005	0.00281	<0.005	<0.005	0.00017	0.12	0.0028	0.00241	0.035	<0.0002	<0.002	0.248	0.000029	24.0	0.0024	<0.0004
RSEM-R6W-EOP	5/23/2020 13:50	XU8585	D	C034993	5.62	0.00517	3.47	<0.00002	289	0.235	168	0.000017	0.0072	<0.005	0.0028	<0.005	<0.005	0.00013	0.123	0.00285	0.00228	0.037	<0.0001	<0.001	0.253	<0.00001	25.3	0.0022	<0.0002
RSEM-R6W-EOP	5/24/2020 13:00	XU8646	M	C035010	5.59	0.00568	3.54	<0.00002	290	0.246	169	0.000017	0.0072	<0.005	0.00286	<0.005	<0.005	0.00011	0.12	0.0028	0.00233	0.036	<0.0002	<0.002	0.256	<0.00002	26.0	0.0024	<0.0004
RSEM-R6W-EOP	5/24/2020 13:10	XU8647	D	C035010	5.48	0.00539	3.42	<0.00002	283	0.232	165	0.000015	0.007	<0.005	0.00277	<0.005	<0.005	0.00011	0.12	0.0029	0.00237	0.035	<0.0002	<0.002	0.252	<0.00002	24.8	0.0025	<0.0004
RSEM-R6W-EOP	5/25/2020 9:00	XU8664	M	C035018	5.70	0.00598	3.52	<0.00002	295	0.234	173	0.000016	0.007	<0.005	0.00287	<0.005	<0.005	0.00011	0.117	0.0029	0.00248	0.036	<0.0001	<0.001	0.266	<0.00001	25.0	0.0026	<0.0002
RSEM-R6W-EOP	5/25/2020 9:10	XU8665	D	C035018	5.69	0.00622	3.54	<0.00002	297	0.24	172	0.000016	0.0069	<0.005	0.00287	<0.005	<0.005	0.00011	0.117	0.003	0.00254	0.034	<0.0002	<0.002	0.261	<0.00002	26.3	0.0026	<0.0004
RSEM-R6W-EOP	5/26/2020 15:10	XV2883	M	C035941	6.09	0.00747	3.75	<0.00004	322	0.23	183	<0.00002	<0.01	<0.01	0.00309	<0.01	<0.01	<0.0002	0.122	0.0031	0.0026	0.034	<0.0002	<0.002	0.27	<0.00002	25.3	0.0029	<0.0004
RSEM-R6W-EOP	5/27/2020 15:00	XV4565	M	C036323	6.02	0.00748	3.55	<0.00002	309	0.251	180	0.000019	0.0064	<0.005	0.00306	<0.005	<0.005	0.00015	0.119	0.00312	0.00276	0.037	<0.0001	<0.001	0.264	<0.00001	25.6	0.003	<0.0002
RSEM-R6W-EOP	5/28/2020 14:15	XV5619	M	C036526	6.27	0.00824	3.43	<0.00002	323	0.262	189	0.000016	0.0064	<0.005	0.00309	<0.005	<0.005	<0.0001	0.114	0.00316	0.00276	0.036	<0.0001	<0.001	0.265	<0.00001	26.0	0.0032	<0.0002
RSEM-R6W-EOP	5/28/2020 14:40	XV5620	D	C036526	6.22	0.00808	3.3	<0.00002	328	0.261	188	0.000015	0.0065	<0.005	0.00302	<0.005	<0.005	<0.0001	0.113	0.00317	0.00271	0.036	<0.0001	<0.001	0.269	<0.00001	25.1	0.0032	<0.0002
RSEM-R6W-EOP	5/29/2020 11:30	XV5615	M	C036525	6.27	0.00833	3.2	<0.00002	326	0.258	190	0.000016	0.0063	<0.005	0.00304	<0.005	<0.005	<0.0001	0.102	0.0031	0.00276	0.034	<0.0002	<0.002	0.27	<0.00002	24.9	0.0034	<0.0004
RSEM-R6W-EOP	5/30/2020 13:45	XV8354	M	C037043	6.35	0.00865	3.15	<0.00004	337	0.237	187	<0.00002	<0.01	<0.01	0.00309	<0.01	<0.01	<0.0002	0.111	0.0033	0.00294	0.035	<0.0002	<0.002	0.272	<0.00002	25.8	0.0035	<0.0004
RSEM-R6W-EOP	5/31/2020 12:45	XV8400	M	C037057	6.39	0.00883	3.28	<0.00002	329	0.262	190	0.000016	0.0061	<0.005	0.00306	<0.005	<0.005	0.00013	0.112	0.0032	0.0029	0.035	<0.0002	<0.002	0.273	<0.00002	25.1	0.0037	<0.0004
RSEM-R6W-EOP	6/1/2020 15:00	XW0113	M	C037316	6.52	0.0096	3.44	<0.00002	343	0.259	206	0.000017	0.0064	<0.005	0.00342	<0.005	<0.005	<0.0001	0.123	0.00327	0.00296	0.035	<0.0001	<0.001	0.293	<0.00001	25.8	0.0036	<0.0002
RSEM-R6W-EOP	6/2/2020 12:00	XW3134	M	C037913	6.66	0.00945	3.65	<0.00002	341	0.27	209	0.000017	0.0063	<0.005	0.0033	<0.005	<0.005	<0.0001	0.119	0.00325	0.00298	0.037	<0.0001	<0.001	0.273	<0.00001	26.1	0.0036	<0.0002
RSEM-R6W-EOP	6/3/2020 12:45	XW5134	M	C038222	6.71	0.00962	3.23	<0.00004	349	0.258	210	<0.00002	<0.01	<0.01	0.00299	<0.01	<0.01	<0.0002	0.116	0.0033	0.00304	0.036	<0.0002	<0.002	0.306	<0.00002	24.8	0.0037	<0.0004
RSEM-R6W-EOP	6/4/2020 12:20	XW6861	M	C038528	6.91	0.00967	3.21	<0.00004	357	0.252	212	<0.00002	<0.01	<0.01	0.00292	<0.01	<0.01	<0.0002	0.12	0.00337	0.0031	0.036	<0.0001	<0.001	0.287	<0.00001	25.6	0.0037	<0.0002
RSEM-R6W-EOP	6/4/2020 12:30	XW6862	D	C038528	7.06	0.00993	3.21	<0.00004	359	0.251	215	<0.00002	<0.01	<0.01	0.00292	<0.01	<0.01	<0.0002	0.122	0.00337	0.00306	0.037	<0.0001	<0.001	0.286	<0.00001	25.6	0.0037	<0.0002
RSEM-R6W-EOP	6/5/2020 16:40	XW9909	M	C039108	6.99	0.00909	3.17	<0.00002	347	0.266	221	0.000018	0.0064	<0.005	0.0031	<0.005	<0.005	<0.0001	0.125	0.00333	0.00307	0.037	<0.0001	<0.001	0.299	<0.00001	25.0	0.0038	<0.0002
RSEM-R6W-EOP	6/5/2020 16:50	XW9910	D	C039108	7.24	0.00944	3.17	<0.00002	361	0.279	231	0.000017	0.0065	<0.005	0.00319	<0.005	<0.005	<0.0001	0.126	0.00335	0.0031	0.036	<0.0001	<0.001	0.3	<0.00001	25.6	0.0038	<0.0002
RSEM-R6W-EOP	6/6/2020 11:40	XX0125	M	C039138	6.84	0.00915	3.06	<0.00004	338	0.256	208	<0.00002	<0.01	<0.01	0.0029	<0.01	<0.01	<0.0002	0.13	0.0035	0.00311	0.038	<0.0002	<0.002	0.319	<0.00002	25.9	0.0039	<0.0004
RSEM-R6W-EOP	6/6/2020 11:50	XX0126	D	C039138	7.04	0.00948	3.15	<0.00004	359	0.259	215	<0.00002	<0.01	<0.01	0.00287	<0.01	<0.01	<0.0002	0.131	0.0036	0.00314	0.039	<0.0002	<0.002	0.33	<0.00002	26.1	0.004	<0.0004
RSEM-R6W-EOP	6/7/2020 12:20	XW9324	M	C038976	7.19	0.00862	3.43	<0.00002	353	0.274	224	0.000019	0.0068	<0.005	0.00305	<0.005	<0.005	<0.0001	0.128	0.00326	0.00297	0.037	<0.0001	<0.001	0.302	<0.00001	24.7	0.0036	<0.0002
RSEM-R6W-EOP	6/7/2020 12:30	XW9325	D	C038976	7.20	0.00904	3.53	<0.00004	358	0.271	213	0.00002	<0.01	<0.01	0.00301	<0.01	<0.01	<0.0002	0.124	0.00321	0.00294	0.036	<0.0001	<0.001	0.3	<0.00001	25.2	0.0036	<0.0002
RSEM-R6W-EOP	6/8/2020 16:00	XX1068	M	C039370	6.53	0.00806	3.5	<0.00004	310	0.25	191	<0.00002	<0.01	<0.01	0.00274	<0.01	<0.01	<0.0002	0.123	0.0033	0.00291	0.037	<0.0002	<0.002	0.32	<0.00002	25.6	0.0036	<0.0004
RSEM-R6W-EOP	6/9/2020 15:40	XX3626	M	C039793	7.35	0.0076	3.75	<0.00002	342	0.295	207	0.00002	0.0073	<0.005	0.00286	<0.005	<0.005	0.00013	0.108	0.0033	0.00285	0.046	<0.0002	<0.002	0.316	<0.00002	29.2	0.0037	<0.0004
RSEM-R6W-EOP	6/10/2020 13:30	XX4754	M	C040036	7.66	0.00801	4.14	<0.00002	341	0.314	209	0.000022	0.0078	<0.005	0.0031	<0.005	<0.005	0.00022	0.0982	0.0033	0.00271	0.046	<0.0002	<0.002	0.296	<0.00002	27.6	0.0036	<0.0004
RSEM-R6W-EOP	6/11/2020 13:50	XX7041	M	C040416	7.65	0.00773	4.09	<0.00002	323	0.295	198	0.00002	0.0075	<0.005	0.00306	<0.005	<0.005	0.00019	0.0996	0.00357	0.00273	0.048	<0.0001	<0.001	0.31	<0.00001	29.3	0.0044	<0.0002
RSEM-R6W-EOP	6/12/2020 14:15	XX9582	M	C040980	7.98	0.00748	4.04	<0.00002	310	0.319	192	0.00002	0.0073	<0.005	0.00312	<0.005	<0.005	0.00011	0.103	0.00357	0.00279	0.047	<0.0001	<0.001	0.302	<0.00001	30.6	0.0047	<0.0002
RSEM-R6W-EOP	6/13/2020 14:55	XX9600	M	C040986	8.20	0.00758	4.19	<0.00002	314	0.299	197	0.000018	0.0069	<0.005	0.00303	<0.005	<0.005	0.00017	0.101	0.00342	0.00272	0.042	<0.0001	<0.001	0.288	<0.00001	26.7	0.0049	<0.0002
RSEM-R6W-EOP	6/14/2020 14:10	XX9647	M	C040993	8.63	0.00799	4.32	<0.00002	314	0.305	199	0.000023	0.0067	0.0057	0.0031	<0.005	<0.005	0.00023	0.0972	0.0034	0.00271	0.045	<0.0001	<0.001	0.318	<0.00001	29.6	0.0051	<0.0002
RSEM-R6W-EOP	6/15/2020 14:55	XY1603	M	C041415	9.29	0.00849	7.47	<0.00004	301	0.366	197	0.000054	<0.01	0.053	0.00308	<0.01	0.024	0.00157	0.0548	0.00296	0.00203	0.055	<0.0001	<0.001	0.292	0.000032	35.6	0.005	<0.0002
RSEM-R6W-EOP	6/15/2020 15:05	XY1604	D	C041415	8.90	0.00813	8.29	<0.00004	292	0.348	186	0.000052	<0.01	0.046	0.00292	<0.01	0.023	0.00191	0.0535	0.00294	0.00197	0.054	<0.0001	<0.001	0.294	0.000032	36.1	0.005	<0.0002
RSEM-R6W-EOP	6/16/2020 10:55	XY1505	M	C041388	9.83	0.00754	12.8	<0.00004	268	0.391	191	0.000066	<0.01	0.129	0.0032	0.012	0.034	0.00296	0.0283	0.00293	0.00167	0.066	<0.0001	<0.001	0.298	0.000083	51.1	0.0052	0.00365
RSEM-R6W-EOP	6/16/2020 11:05	XY1506	D	C041388	10.5	0.00784	12.6	<0.00004	281	0.399	202	0.000074	<0.01	0.124	0.00327	0.013	0.034	0.00332	0.0303	0.00293	0.00175	0.065	<0.0001	<0.001	0.316	0.000082	49.8	0.0053	0.00353
RSEM-R6W-EOP	6/17/2020 15:15	XY6280	M	C042380	9.28	0.00777	6.43	<0.00004	261	0.368	198	0.00003	<0.01	0.021	0.00266	<0.01	0.01	0.00057	0.0335	0.00305	0.00198	0.066	<0.0001	<0.001	0.3	0.000038	52.5	0.006	0.00067
RSEM-R6W-EOP	6/18/2020 16:15	XY6285	M	C042383	9.49	0.00828	7.71	<0.00004	268	0.408	209	0.000034	<0.01	0.03	0.00257	<0.01	<0.01	0.00084	0.0285	0.003	0.00195	0.074	<0.0002	<0.002	0.293	0.000024	55.9	0.0055	<0.0004
RSEM-R6W-EOP	6/19/2020 11:40	XY6264	M	C042375	8.94	0.00914	6.74	<0.00004	272	0.414	222	0.000028	<0.01	0.019	0.00236	<0.01	<0.01	0.00151	0.0307	0.0031	0.00233	0.078	<0.0002	<0.002	0.295	<0.00002	61.1	0.0051	0.00046
RSEM-R6W-EOP	6/20/2020 14:15	XY9028	M	C042884	8.78	0.00997	5.67	<0.00002	289	0.446	235	0.000026	<0.005	0.0116	0.00236	<0.005	<0.005	0.00023	0.0268	0.003	0.00226	0.07	<0.0001	<0.001	0.29	0.000016	68.1	0.005	0.00023
RSEM-R6W-EOP	6/21/2020 15:30	XY9118	M	C042904	8.56	0.0098	5.01	<0.00004	298	0.505	265	0.000027	<0.01	<0.01	0.00204	<0.01	<0.01	<0.0002	0.0338	0.00276	0.00197	0.072	<0.0001	<0.001	0.314	0.00002	82.8	0.0051	0.00055
RSEM-R6W-EOP	6/22/2020 13:10	XZ0404	M	C043197	8.75	0.00984	4.69	<0.00002	312	0.61	291	0.000031	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	0.0365	0.0026	0.00177	0.073	<0.0002	<0.002	0.308	<0.00002	92.4	0.0049	<0.0004
RSEM-R6W-EOP	6/22/2020 13:30	XZ0407	D	C043197	8.63	0.00967	4.65	<0.00002	312	0.598	289	0.000029	<0.005	<0.005	0.00192	<0.005	<0.005	0.0001	0.0347	0.00267	0.00181	0.075	<0.0001	<0.001	0.294	0.000022	93.1	0.0047	0.00034
RSEM-R6W-EOP	6/23/2020 16:10	XZ2250	M	C043604	8.13	0.00934	4.35	<0.00002	300	0.649	305	0.000033	<0.005	<0.005	0.00161	<0.005	<0.005	<0.0001	0.0399	0.0025	0.00142	0.074	<0.0002	<0.002	0.305	<0.00002	108	0.0042	0.00047
RSEM-R6W-EOP	6/24/2020 12:50	XZ5348	M	C044267	7.67	0.00816	4.38	<0.00002	298	0.591	300	0.000033	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0385	0.00228	0.00139	0.071	<0.0001	<0.001	0.288	0.00002	108	0.0035	0.00044
RSEM-R6W-EOP	6/25/2020 15:40	XZ5983	M	C044346	7.72	0.00811	4.18	<0.00002	305	0.638	320	0.000035	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.0417	0.00219	0.00122	0.067	<0.0001	<0.001	0.286	0.000019	111	0.0028	0.00045
RSEM-R6W-EOP	6/26/2020 12:40	XZ7317	M	C044624	7.40	0.00752	3.97	<0.00002	297	0.618	315	0.000035	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	0.0408	0.00205	0.0011	0.061	<0.0001	<0.001	0.279	0.000019	109	0.0022	0.00053
RSEM-R6W-EOP	6/27/2020 18:50	XZ9068	M	C044897	7.08	0.00814	3.41	<0.00004	301	0.6	313	0.000035	<0.01	<0.01	0.00123	<0.01	<0.01	<0.0002	0.0362	0.002	0.00082	0.054	<0.0002	<0.002	0.285	<0.00002	109	<0.002	<0.0004

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R6W-EOP	6/28/2020 12:30	XZ9158	M	C044916	6.69	0.00733	3.6	<0.00004	290	0.6	314	0.000034	<0.01	<0.01	0.00119	<0.01	<0.01	<0.0002	0.0314	0.0019	0.0009	0.054	<0.0002	<0.002	0.297	0.000025	107	<0.002	0.00058
RSEM-R6W-EOP	6/29/2020 16:05	YA0784	M	C045275	6.80	0.00774	3.5	<0.00004	303	0.591	317	0.000034	<0.01	<0.01	0.0012	<0.01	<0.01	<0.0002	0.0247	0.002	0.00096	0.063	<0.0002	<0.002	0.305	0.000025	108	<0.002	<0.0004
RSEM-R6W-EOP	6/30/2020 14:20	YA2741	M	C045692	6.62	0.00722	3.54	<0.00004	293	0.583	324	0.000032	<0.01	<0.01	0.00119	<0.01	0.014	<0.0002	0.0215	0.0019	0.00098	0.062	<0.0002	<0.002	0.314	0.000026	102	<0.002	0.00053
RSEM-R6W-EOP	7/1/2020 11:50	YA2708	M	C045689	6.26	0.00663	3.79	<0.00004	294	0.56	321	0.000035	<0.01	<0.01	0.00112	<0.01	<0.01	<0.0002	0.0176	0.0018	0.00087	0.053	<0.0002	<0.002	0.301	<0.00002	95.0	<0.002	<0.0004
RSEM-R6W-EOP	7/3/2020 16:20	YA5156	M	C046179	5.33	0.00478	3.59	<0.00002	241	0.493	242	0.000025	<0.005	0.0056	0.00105	<0.005	<0.005	0.0002	0.0133	0.0012	0.00064	0.072	<0.0002	<0.002	0.229	0.000035	72.0	<0.002	0.00041
RSEM-R6W-EOP	7/4/2020 15:15	YA6736	M	C046470	5.09	0.00413	4.43	<0.00002	218	0.383	195	0.000032	<0.005	0.0558	0.00114	<0.005	0.006	0.00076	0.0161	0.00121	0.00071	0.106	<0.0001	<0.001	0.23	0.000036	68.4	0.0019	0.00071
RSEM-R6W-EOP	7/5/2020 10:25	YA6918	M	C046500	4.87	0.00425	3.25	<0.00002	215	0.376	200	0.000025	<0.005	<0.005	0.00119	<0.005	0.0473	0.00017	0.028	0.00114	0.00041	0.099	<0.0001	<0.001	0.233	0.000395	71.5	0.001	0.00584
RSEM-R6W-EOP	7/6/2020 11:40	YA8349	M	C046846	4.63	0.00437	3.62	<0.00002	198	0.427	208	0.000015	<0.005	<0.005	0.00117	<0.005	0.0842	0.0001	0.0271	0.00111	0.00037	0.095	<0.0001	<0.001	0.222	0.000663	70.3	<0.001	0.00941
RSEM-R6W-EOP	7/7/2020 12:15	YB0050	M	C047206	4.94	0.00468	3.44	<0.00002	224	0.425	235	0.000023	<0.005	<0.005	0.00138	<0.005	0.0655	<0.0001	0.0398	0.00122	0.00037	0.086	<0.0001	<0.001	0.244	0.000573	73.1	<0.001	0.00765
RSEM-R6W-EOP	7/8/2020 12:40	YB2461	M	C047619	4.92	0.00489	3.46	<0.00002	233	0.43	235	0.000022	<0.005	<0.005	0.0015	<0.005	0.0476	<0.0001	0.0422	0.00119	0.00043	0.082	<0.0001	<0.001	0.249	0.000401	72.6	<0.001	0.00555
RSEM-R6W-EOP	7/9/2020 14:20	YB4137	M	C047920	4.73	0.00466	3.64	<0.00002	220	0.414	218	0.000023	<0.005	<0.005	0.00162	<0.005	0.0271	<0.0001	0.0449	0.00121	0.00051	0.086	<0.0001	<0.001	0.233	0.000221	70.3	<0.001	0.00295
RSEM-R6W-EOP	7/10/2020 10:10	YB4117	M	C047917	4.70	0.00461	3.28	<0.00002	222	0.421	222	0.000023	<0.005	<0.005	0.00156	<0.005	0.0217	<0.0001	0.0427	0.00118	0.00056	0.083	<0.0001	<0.001	0.247	0.000193	71.1	<0.001	0.00263
RSEM-R6W-EOP	7/12/2020 14:10	YB7109	M	C048462	4.77	0.00481	3.02	<0.00002	231	0.41	208	0.000019	<0.005	<0.005	0.00168	<0.005	0.0064	<0.0001	0.0466	0.00135	0.0006	0.088	<0.0001	<0.001	0.258	0.000089	68.9	0.0011	0.00114
RSEM-R6W-EOP	7/12/2020 15:00	YB7194	M	C048486	4.75	0.00476	3.06	<0.00002	233	0.414	214	0.00002	<0.005	<0.005	0.00164	<0.005	0.0103	<0.0001	0.0481	0.00128	0.00055	0.089	<0.0001	<0.001	0.257	0.000119	71.6	<0.001	0.00159
RSEM-R6W-EOP	7/13/2020 14:45	YB9220	M	C048875	5.23	0.00527	3.62	<0.00002	245	0.441	225	0.00003	<0.005	<0.005	0.00201	<0.005	0.0058	0.00014	0.0399	0.00158	0.00083	0.089	<0.0001	<0.001	0.267	0.000037	68.9	0.0014	0.00059
RSEM-R6W-EOP	7/14/2020 14:10	YC1072	M	C049344	5.40	0.00509	3.57	<0.00002	251	0.429	228	0.000027	<0.005	<0.005	0.00205	<0.005	0.0054	0.00017	0.039	0.00167	0.00088	0.091	<0.0001	<0.001	0.268	0.000033	70.1	0.0014	0.0004
RSEM-R6W-EOP	7/14/2020 14:20	YC1073	D	C049344	5.46	0.00516	3.66	<0.00002	257	0.439	232	0.000026	<0.005	<0.005	0.00208	<0.005	<0.005	0.00011	0.0372	0.00162	0.0009	0.09	<0.0001	<0.001	0.271	0.000035	69.1	0.0014	0.0004
RSEM-R6W-EOP	7/15/2020 12:55	YC2138	M	C049614	5.37	0.00522	3.58	<0.00002	249	0.433	225	0.000025	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	0.0381	0.00163	0.00097	0.092	<0.0001	<0.001	0.272	0.00003	66.1	0.0014	<0.0002
RSEM-R6W-EOP	7/15/2020 13:05	YC2139	D	C049614	5.47	0.0053	3.5	<0.00002	255	0.439	226	0.000026	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	0.0383	0.00162	0.00097	0.092	<0.0001	<0.001	0.274	0.000028	66.9	0.0014	<0.0002
RSEM-R6W-EOP	7/16/2020 15:40	YC4666	M	C049952	5.34	0.00476	3.42	<0.00002	247	0.445	218	0.000026	<0.005	<0.005	0.00206	<0.005	<0.005	0.00011	0.0388	0.00164	0.00095	0.096	<0.0001	<0.001	0.276	0.000024	66.5	0.0015	0.00027
RSEM-R6W-EOP	7/17/2020 14:05	YC5482	M	C050110	5.27	0.00498	3.47	<0.00002	242	0.416	210	0.000026	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	0.0353	0.00159	0.00098	0.095	<0.0001	<0.001	0.278	0.00002	65.0	0.0013	0.00027
RSEM-R6W-EOP	7/18/2020 13:15	YC7459	M	C050583	5.45	0.0051	3.62	<0.00002	275	0.466	242	0.000024	<0.005	<0.005	0.00193	<0.005	<0.005	0.00055	0.0309	0.00154	0.00091	0.091	<0.0001	<0.001	0.282	0.000016	69.5	0.0011	0.00036
RSEM-R6W-EOP	7/19/2020 13:40	YC7537	M	C050603	5.16	0.00513	3.31	<0.00002	262	0.443	243	0.000024	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	0.0313	0.00152	0.00077	0.088	<0.0001	<0.001	0.279	0.000014	70.3	<0.001	0.00039
RSEM-R6W-EOP	7/20/2020 10:50	YC8543	M	C050811	5.19	0.00568	3.37	<0.00002	269	0.472	248	0.000027	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	0.0291	0.00139	0.00077	0.085	<0.0001	<0.001	0.252	0.000015	71.9	<0.001	0.00043
RSEM-R6W-EOP	7/20/2020 11:00	YC8544	D	C050811	5.22	0.00581	3.34	<0.00002	270	0.477	252	0.000028	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	0.029	0.00135	0.00077	0.085	<0.0001	<0.001	0.257	0.000019	71.5	<0.001	0.00042
RSEM-R6W-EOP	7/21/2020 13:35	YD0794	M	C051251	5.01	0.00543	3.11	<0.00002	256	0.481	241	0.000028	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	0.033	<0.0025	0.00055	0.085	<0.0005	<0.005	0.293	<0.00005	72.4	<0.005	<0.001
RSEM-R6W-EOP	7/21/2020 13:45	YD0795	D	C051251	5.01	0.0055	3.05	<0.00002	257	0.478	242	0.000027	<0.005	<0.005	0.00179	<0.005	<0.005	<0.0001	0.032	<0.0025	0.0006	0.082	<0.0005	<0.005	0.289	<0.00005	69.7	<0.005	<0.001
RSEM-R6W-EOP	7/22/2020 13:40	YD2618	M	C051641	4.83	0.0054	3.05	<0.00002	244	0.481	236	0.000024	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	0.0298	0.00115	0.00064	0.081	<0.0001	<0.001	0.247	0.000012	72.0	<0.001	0.00053
RSEM-R6W-EOP	7/23/2020 12:05	YD4255	M	C051864	4.61	0.00496	2.82	<0.00002	236	0.468	228	0.000024	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0306	0.00117	0.00053	0.08	<0.0001	<0.001	0.265	0.000017	73.7	<0.001	0.00057
RSEM-R6W-EOP	7/24/2020 15:30	YD5910	M	C052038	4.78	0.00515	2.67	<0.00002	261	0.477	241	0.000028	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	0.0296	0.00114	0.00051	0.079	<0.0001	<0.001	0.263	0.000013	72.9	<0.001	0.00052
RSEM-R6W-EOP	7/25/2020 11:15	YD7675	M	C052402	5.01	0.00484	2.6	<0.00002	262	0.492	246	0.000028	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	0.0284	0.00114	0.00052	0.079	<0.0001	<0.001	0.248	0.000013	71.7	<0.001	0.00054
RSEM-R6W-EOP	7/26/2020 14:25	YD7714	M	C052420	4.95	0.00468	2.79	<0.00002	253	0.472	238	0.000026	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	0.0264	0.00113	0.00048	0.079	<0.0001	<0.001	0.245	0.000012	71.0	<0.001	0.00053
RSEM-R6W-EOP	7/27/2020 10:20	YD7768	M	C052432	4.87	0.00461	2.84	<0.00002	258	0.477	242	0.000024	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	0.024	0.00115	0.00049	0.077	<0.0001	<0.001	0.251	0.000011	71.2	<0.001	0.00051
RSEM-R6W-EOP	7/28/2020 12:20	YE2030	M	C053295	5.29	0.00502	2.94	<0.00002	266	0.491	257	0.000027	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	0.0237	0.0011	0.00049	0.075	<0.0002	<0.002	0.255	<0.00002	71.6	<0.002	<0.0004
RSEM-R6W-EOP	7/29/2020 12:20	YE4006	M	C053695	4.72	0.00422	2.63	<0.00002	245	0.448	229	0.000025	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0223	0.0012	0.00055	0.074	<0.0002	<0.002	0.262	<0.00002	70.6	<0.002	<0.0004
RSEM-R6W-EOP	7/30/2020 15:00	YE5557	M	C054021	3.74	0.00124	1.35	<0.00002	20.1	0.28	35.2	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	0.0079	<0.0005	0.00028	0.083	<0.0001	<0.001	0.063	<0.00001	60.4	<0.001	<0.0002
RSEM-R6W-EOP	7/30/2020 16:20	YE5558	M	C054021	5.08	0.00378	2.61	<0.00002	252	0.42	224	0.000025	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	0.0234	0.00123	0.00058	0.074	<0.0001	<0.001	0.269	0.000015	67.9	<0.001	0.00021
RSEM-R6W-EOP	7/31/2020 11:10	YE5651	M	C054023	5.06	0.00363	2.61	<0.00002	246	0.412	216	0.000023	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0234	0.00124	0.0006	0.074	<0.0001	<0.001	0.264	0.000011	66.0	<0.001	<0.0002
RSEM-R6W-EOP	8/1/2020 12:30	YE6666	M	C054219	5.07	0.00348	2.6	<0.00002	246	0.397	213	0.000022	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.025	0.00127	0.00066	0.074	<0.0001	<0.001	0.242	0.000012	65.6	<0.001	0.0003
RSEM-R6W-EOP	8/2/2020 12:50	YE8517	M	C054579	5.08	0.00362	2.5	<0.00002	246	0.413	211	0.000022	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0254	0.00128	0.00064	0.071	<0.0001	<0.001	0.27	<0.00001	62.3	<0.001	0.0002
RSEM-R6W-EOP	8/3/2020 13:10	YE8525	M	C054582	5.18	0.00352	2.57	<0.00002	252	0.402	213	0.000023	<0.005	<0.005	0.00151	<0.005	<0.005	0.00011	0.0261	0.00131	0.00067	0.069	<0.0001	<0.001	0.281	<0.00001	58.8	<0.001	0.0002
RSEM-R6W-EOP	8/4/2020 13:10	YF1645	M	C055153	4.98	0.0032	2.33	<0.00002	239	0.369	203	0.00002	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.0334	0.00132	0.00082	0.07	<0.0001	<0.001	0.261	<0.00001	56.8	0.0012	0.00021
RSEM-R6W-EOP	8/5/2020 12:40	YF2978	M	C055442	5.13	0.00305	2.7	<0.00002	243	0.367	203	0.000019	<0.005	<0.005	0.00152	<0.005	<0.005	0.0001	0.0247	0.00148	0.00074	0.069	<0.0001	<0.001	0.253	<0.00001	55.3	0.0012	<0.0002
RSEM-R6W-EOP	8/6/2020 11:30	YF2969	M	C055440	5.27	0.00301	2.87	<0.00002	248	0.371	200	0.000021	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	0.0264	0.00149	0.00076	0.068	<0.0001	<0.001	0.251	<0.00001	53.8	0.0013	<0.0002
RSEM-R6W-EOP	8/7/2020 12:15	YF4858	M	C055741	5.38	0.00318	2.8	<0.00002	235	0.375	206	0.00002	<0.005	<0.005	0.0019	<0.005	<0.005	0.00013	0.0269	0.0015	0.00095	0.064	<0.0001	<0.001	0.258	<0.00001	50.7	0.0014	<0.0002
RSEM-R6W-EOP	8/8/2020 12:50	YF8357	M	C056281	5.33	0.00276	2.76	<0.00002	243	0.353	203	0.000021	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	0.0284	0.00156	0.00089	0.059	<0.0001	<0.001	0.262	<0.00001	48.6	0.0014	0.0002
RSEM-R6W-EOP	8/9/2020 14:20	YF8362	M	C056282	5.33	0.00269	2.93	<0.00002	247	0.349	203	0.000021	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	0.0288	0.00163	0.00097	0.055	<0.0001	<0.001	0.264	<0.00001	46.3	0.0014	0.0002
RSEM-R6W-EOP	8/10/2020 13:00	YG0106	M	C056587	5.74	0.0028	2.78	<0.00002	268	0.34	211	0.000025	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	0.0286	0.00166	0.00097	0.056	<0.0001	<0.001	0.262	<0.00001	47.2	0.0014	<0.0002
RSEM-R6W-EOP	8/11/2020 13:20	YG2367	M	C056973	5.63	0.00271	3.09	<0.00002	264	0.334	214	0.00002	<0.005	<0.005	0.00234	<0.005	<0.005	<0.0001	0.0255	0.00166	0.00101	0.059	<0.0001	<0.001	0.254	<0.00001	46.7	0.0014	<0.0002
RSEM-R6W-EOP	8/12/2020 17:40	YG4636	M	C057417	5.47	0.00277	3.23	<0.00002	261	0.351	218	0.00002	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	0.0279	0.00169	0.00104	0.06	<0.0001	<0.001	0.269	<0.00001	48.2	0.0014	<0.0002
RSEM-R6W-EOP	8/13/2020 13:40	YG7262	M	C057823	5.84	0.00281	3.18	<0.00002	292	0.366	228	0.000021	<0.005	<0.005	0.00237	<0.005	<0.005	<0.0001	0.0212	0.00158	0.00095	0.054	<0.0001	<0.001	0.251	<0.00001	44.3	0.0012	<0.0002
RSEM-R6W-EOP	8/14/2020 12:55	YG7190	M	C057817	5.44	0.00258	2.71	<0.00002	269	0.351	214	0.000019	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	0.022	0.00159	0.00093	0.056	<0.0001	<0.001	0.279	<0.00001	46.6	0.0012	<0.0002
RSEM-R6W-EOP	8/15/2020 14:55	YH0061	M	C058356	5.24	0.00249	2.43	<0.00002	267	0.324	206	0.000017	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	0.0232	0.00149	0.001	0.059	<0.0001	<0.001	0.299	<0.00001	44.6	0.0012	0.0002
RSEM-R6W-EOP	8/16/2020 11:50	YH0173	M	C058389	5.73	0.0026	2.9	<0.00002	290	0.339	237	0.000019	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.0207	0.00149	0.00098	0.057	<0.0001	<0.001	0.297	0.00001	44.3	0.0011	0.00021
RSEM-R6W-EOP	8/17/2020 9:30	YG9870	M	C058326	5.04	0.00254	2.71	<0.00002	258	0.316	205	0.000037	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	0.0196	0.00145	0.00094	0.055	<0.0001	<0.001	0.285	<0.00001	43.3	0.0011	<0.0002
RSEM-R6W-EOP	8/18/2020 16:20	YH3311	M	C059056	4.93	0.00225	2.55	<0.00002	250	0.284	200	0.000016	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0211	0.00135	0.0009	0.054	<0.0001	<0.001	0.273	<0.00001	42.6	0.001	<0.0002
RSEM-R6W-EOP	8/19/2020 14:50	YH5388	M	C059422	4.82	0.0023	2.57	<0.00002	253	0.263	196	0.000016	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0239	0.00131	0.00081	0.052	<0.0001	<0.001	0.248	<0.00001	40.4	0.0013	<0.0002
RSEM-R6W-EOP	8/20/2020 14:40	YH7342	M	C059760	4.81	0.00227	2.8	<0.00002	251	0.259	184	0.000017	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	0.026	0.00129	0.00082	0.054	<0.0001	<0.001	0.243	<0.00001	39.1	0.0014	<0.0002
RSEM-R6W-EOP	8/21/2020 12:00	YH7340	M	C059759	4.53	0.00215	3.05	<0.00002	226	0.246	160	0.000015	<0.005	<0.005	0.00191	<0.005	<0.005	0.00018	0.0289	0.0012	0.00083	0.062	<0.0001	<0.001	0.221	<0.00001	38.6	0.0014	<0.0002
RSEM-R6W-EOP	8/22/2020 11:20	YI0128	M	C060262	4.13	0.00189	3.67	<0.00002	185	0.22	121	0.000024	<0.005	0.0125	0.00178	<0.005	0.0075	0.00026	0.0215	0.00114	0.00095	0.074	<0.0001	<0.001	0.192	<0.00001	36.7	0.0017	<0.0002
RSEM-R6W-EOP	8/23/2020 14:40	YI0110	M	C060255	4.72	0.00202	3.58	<0.00002	179	0.228	116	0.000018	<0.005	<0.005	0.00177	<0.005	<0.005	0.00015	0.0255	0.00134	0.0011	0.078	<0.0001	<0.001	0.198	<0.00001	36.9	0.0024	<0.0002
RSEM-R6W-EOP	8/24/2020 13:50	YI2199	M	C060702	4.60	0.00197	3.26	<0.00002	178	0.22	111	0.000014	<0.005	<0.005	0.00169	<0.005	<0.005	0.00014	0.0262	0.00138	0.00112	0.076	<0.0001	<0.001	0.216	<0.00001	37.1	0.0022	<0.0002
RSEM-R6W-EOP	8/25/2020 12:30	YI3996	M	C061087	4.77	0.00211	3.73	<0.00002	168	0.246	119	0.000015	<0.005	<0.005	0.00168	<0.005	<0.005	0.00013	0.026	0.00131	0.00106	0.076	<0.0001	<0.001	0.234	<0.00001	38.1	0.0023	<0.0002
RSEM-R6W-EOP	8/26/2020 14:00	YI6264	M	C061565	4.89	0.00255	3.55	<0.00002	188	0.265	130	0.000011	<0.005	<0.005	0.00169	<0.005	<0.005	<0.0001	0.0296	0.00133	0.00101	0.077	<0.0001	<0.001	0.233	<0.00001	42.2	0.0021	<0.0002
RSEM-R6W-EOP	8/27/2020 12:50	YI7774	M	C061827	4.96	0.00295	3.46	<0.00002	202	0.296	148	0.000016	<0.005	<0.005	0.00174	<0.005	<0.005	<0.0001	0.0252	0.00128	0.00094	0.073	<0.0001	<0.001	0.226	<0.00001	46.3	0.0019	<0.0002
RSEM-R6W-EOP	8/28/2020 13:55	YI9494	M	C062013	4.86	0.00317	3.39	<0.00002	191	0.324	151	0.000014	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	0.0275	0.00109	0.00081	0.07	<0.0001	<0.001	0.261	<0.00001	51.5	0.0019	<0.0002
RSEM-R6W-EOP	8/29/2020 10:55	YJ1739	M	C062465	4.85	0.00331	2.62	<0.00002	206	0.298	152	0.000011	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0264	0.00127	0.00095	0.074	<0.0001	<0.001	0.226	0.000012	51.8	0.0018	<0.0002
RSEM-R6W-EOP	8/30/2020 12:00	YJ1570	M	C062426	4.88	0.00339	2.52	<0.00002	207	0.302	154	0.000013	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	0.0265	0.00125	0.00087	0.075	<0.0001	<0.001	0.233	<0.00001	53.1	0.0017	<0.0002
RSEM-R6W-EOP	8/31/2020 17:20	YJ3640	M	C062857	5.01	0.00372	3.33	<0.00002	214	0.364	173	0.000015	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	0.0262	0.00122	0.00083	0.078	<0.0001	<0.001	0.259	<0.00001	57.8	0.0018	<0.0002

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R6W-EOP	9/1/2020 14:20	YJ6691	M	C063433	5.12	0.00411	3.22	<0.00002	211	0.39	183	0.000015	<0.005	<0.005	0.00169	<0.005	<0.005	<0.0001	0.0245	0.00131	0.00083	0.077	<0.0001	<0.001	0.243	<0.00001	60.0	0.0019	<0.0002
RSEM-R6W-EOP	9/2/2020 13:55	YJ7831	M	C063666	5.28	0.00438	3.35	<0.00002	216	0.414	191	0.000016	<0.005	<0.005	0.00179	<0.005	<0.005	<0.0001	0.0261	0.00134	0.00082	0.077	<0.0001	<0.001	0.23	<0.00001	59.6	0.0022	<0.0002
RSEM-R6W-EOP	9/3/2020 14:30	YK0031	M	C064047	5.55	0.00442	3.34	<0.00002	226	0.414	189	0.000018	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	0.0255	0.00141	0.00083	0.077	<0.0001	<0.001	0.253	<0.00001	59.1	0.0025	<0.0002
RSEM-R6W-EOP	9/4/2020 12:00	YK0086	M	C064051	5.42	0.00438	3.16	<0.00002	223	0.407	185	0.000017	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	0.0256	0.00145	0.00088	0.074	<0.0001	<0.001	0.26	<0.00001	59.1	0.0027	<0.0002
RSEM-R6W-EOP	9/5/2020 12:40	YK1346	M	C064288	5.53	0.00456	3.02	<0.00002	230	0.405	193	0.000017	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	0.0273	0.00137	0.00082	0.075	<0.0001	<0.001	0.239	<0.00001	54.8	0.0026	<0.0002
RSEM-R6W-EOP	9/6/2020 11:10	YK2531	M	C064579	5.38	0.00441	3.1	<0.00002	226	0.415	186	0.000017	<0.005	<0.005	0.00187	<0.005	<0.005	<0.0001	0.0265	0.0015	0.00087	0.075	<0.0001	<0.001	0.245	<0.00001	57.8	0.0028	<0.0002
RSEM-R6W-EOP	9/7/2020 10:25	YK2585	M	C064592	5.45	0.00434	2.99	<0.00002	222	0.411	183	0.000018	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	0.0264	0.00152	0.00083	0.077	<0.0001	<0.001	0.242	<0.00001	57.4	0.0029	<0.0002
RSEM-R6W-EOP	9/8/2020 11:00	YK6315	M	C065313	5.43	0.00456	3.31	<0.00002	232	0.354	186	0.000017	<0.005	<0.005	0.00204	<0.005	<0.005	0.00011	0.0242	0.00142	0.00087	0.077	<0.0001	<0.001	0.231	<0.00001	56.4	0.0028	<0.0002
RSEM-R6W-EOP	9/9/2020 14:15	YK6317	M	C065314	5.36	0.00437	3.44	<0.00002	220	0.339	173	0.000015	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	0.0228	0.00152	0.00093	0.078	<0.0001	<0.001	0.22	<0.00001	53.8	0.0028	<0.0002
RSEM-R6W-EOP	9/10/2020 11:50	YK8214	M	C065709	5.30	0.00416	3.56	<0.00002	227	0.339	172	0.000014	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	0.0229	0.00162	0.00099	0.076	<0.0001	<0.001	0.232	<0.00001	50.8	0.0028	<0.0002
RSEM-R6W-EOP	9/10/2020 12:00	YK8215	D	C065709	5.29	0.00432	3.58	<0.00002	228	0.337	172	0.000014	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	0.0231	0.00163	0.00097	0.076	<0.0001	<0.001	0.232	<0.00001	51.3	0.0028	<0.0002
RSEM-R6W-EOP	9/11/2020 11:40	YK8183	M	C065706	5.15	0.00401	3.67	<0.00002	220	0.322	163	0.000013	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.0236	0.00169	0.00106	0.073	<0.0001	<0.001	0.215	<0.00001	47.6	0.0026	<0.0002
RSEM-R6W-EOP	9/12/2020 14:20	YL1186	M	C066169	4.91	0.00371	3.8	<0.00002	217	0.304	154	0.000013	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	0.0231	0.00165	0.00115	0.07	<0.0001	<0.001	0.223	<0.00001	45.3	0.0024	<0.0002
RSEM-R6W-EOP	9/13/2020 12:40	YL1415	M	C066239	4.78	0.00345	3.94	<0.00002	203	0.296	146	0.000015	<0.005	<0.005	0.00231	<0.005	<0.005	0.00012	0.0207	0.0017	0.0011	0.069	<0.0001	<0.001	0.223	<0.00001	44.5	0.0023	<0.0002
RSEM-R6W-EOP	9/14/2020 12:40	YL3785	M	C066659	4.72	0.00329	4.23	<0.00002	203	0.307	146	0.000015	<0.005	<0.005	0.00232	<0.005	<0.005	0.00015	0.02	0.00172	0.00115	0.069	<0.0001	<0.001	0.209	<0.00001	43.0	0.0022	<0.0002
RSEM-R6W-EOP	9/15/2020 15:00	YL6687	M	C067245	4.62	0.0031	4.39	<0.00002	195	0.281	145	0.000018	<0.005	0.0055	0.00242	<0.005	<0.005	0.0002	0.0238	0.00171	0.0011	0.066	<0.0001	<0.001	0.213	0.000015	43.7	0.0022	0.00027
RSEM-R6W-EOP	9/16/2020 15:30	YL8114	M	C067490	4.57	0.00304	4.55	<0.00002	197	0.276	145	0.000016	<0.005	0.007	0.00245	<0.005	<0.005	0.00021	0.0212	0.00174	0.00111	0.067	<0.0001	<0.001	0.211	0.000013	47.6	0.0021	0.00021
RSEM-R6W-EOP	9/17/2020 13:10	YL8049	M	C067474	4.54	0.0031	4.5	<0.00002	196	0.287	145	0.000015	<0.005	0.012	0.00251	<0.005	<0.005	0.00015	0.0205	0.00172	0.00104	0.065	<0.0001	<0.001	0.231	0.000015	48.0	0.0019	<0.0002
RSEM-R6W-EOP	9/18/2020 9:50	YL9985	M	C067838	4.75	0.0035	4.3	<0.00002	209	0.286	154	0.000013	<0.005	<0.005	0.00259	<0.005	<0.005	0.00011	0.0186	0.00164	0.00106	0.058	<0.0001	<0.001	0.221	0.000012	45.4	0.002	<0.0002
RSEM-R6W-EOP	9/19/2020 12:50	YM3344	M	C068349	4.84	0.00374	4.21	<0.00002	212	0.287	158	0.000012	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	0.0187	0.00159	0.00106	0.054	<0.0001	<0.001	0.224	0.00001	44.9	0.002	<0.0002
RSEM-R6W-EOP	9/20/2020 11:40	YM3374	M	C068353	4.79	0.0039	4.13	<0.00002	203	0.28	149	0.000014	<0.005	<0.005	0.00267	<0.005	<0.005	<0.0001	0.0196	0.00148	0.00099	0.055	<0.0001	<0.001	0.223	0.000014	46.0	0.0019	<0.0002
RSEM-R6W-EOP	9/21/2020 12:50	YM6393	M	C068837	4.64	0.00412	3.69	<0.00002	194	0.286	143	0.000012	<0.005	<0.005	0.0026	<0.005	<0.005	<0.0001	0.021	0.00138	0.00095	0.061	<0.0001	<0.001	0.212	0.000013	47.2	0.0017	<0.0002
RSEM-R6W-EOP	9/22/2020 13:55	YM9231	M	C069318	4.66	0.00397	3.72	<0.00002	191	0.278	140	0.000012	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	0.021	0.00134	0.00092	0.062	<0.0001	<0.001	0.217	0.000012	48.0	0.0017	<0.0002
RSEM-R6W-EOP	9/23/2020 15:40	YN0387	M	C069533	4.80	0.00383	4.09	<0.00002	194	0.279	139	0.000012	<0.005	<0.005	0.00268	<0.005	<0.005	0.0001	0.0219	0.0013	0.00091	0.061	<0.0001	<0.001	0.197	<0.00001	47.7	0.0017	<0.0002
RSEM-R6W-EOP	9/24/2020 14:00	YN2679	M	C069910	5.07	0.0037	4.45	<0.00002	199	0.285	146	0.000015	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	0.0215	0.00122	0.00086	0.06	<0.0001	<0.001	0.198	<0.00001	46.4	0.0017	<0.0002
RSEM-R6W-EOP	9/25/2020 13:30	YN2674	M	C069908	4.79	0.00345	4.36	<0.00002	188	0.275	135	0.000013	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	0.0211	0.00119	0.00089	0.061	<0.0001	<0.001	0.194	<0.00001	47.3	0.0018	<0.0002
RSEM-R6W-EOP	9/26/2020 13:10	YN7496	M	C070621	4.75	0.00341	4.24	<0.00002	179	0.273	130	0.000014	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	0.0211	0.00117	0.00081	0.063	<0.0001	<0.001	0.187	<0.00001	47.2	0.0018	<0.0002
RSEM-R6W-EOP	9/27/2020 16:20	YN7530	M	C070629	4.48	0.00308	4.08	<0.00002	165	0.258	120	0.000013	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.0187	0.00112	0.00079	0.064	<0.0001	<0.001	0.179	0.00001	48.8	0.0018	<0.0002
RSEM-R6W-EOP	9/28/2020 9:40	YN7450	M	C070613	4.27	0.00293	4.14	<0.00002	158	0.248	113	0.000012	<0.005	<0.005	0.00243	<0.005	0.0166	0.00011	0.0185	0.00114	0.00083	0.068	<0.0001	<0.001	0.178	0.000013	49.4	0.0018	<0.0002
RSEM-R6W-EOP	9/29/2020 16:10	YO1378	M	C071354	4.28	0.00306	4.05	<0.00002	153	0.251	110	0.000013	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	0.0162	0.00104	0.00081	0.07	<0.0001	<0.001	0.165	<0.00001	48.2	0.0019	<0.0002
RSEM-R6W-EOP	9/30/2020 13:10	YO4161	M	C071825	4.49	0.00292	4.26	<0.00002	164	0.268	117	0.000011	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.0152	0.00099	0.00079	0.068	<0.0001	<0.001	0.167	<0.00001	47.6	0.002	<0.0002
RSEM-R6W-EOP	10/1/2020 12:15	YO6612	M	C072228	4.23	0.00279	4.24	<0.00002	157	0.251	110	0.00001	<0.005	<0.005	0.00244	<0.005	<0.005	<0.0001	0.0145	0.00099	0.00084	0.068	<0.0001	<0.001	0.163	0.000013	48.2	0.0021	<0.0002
RSEM-R6W-EOP	10/2/2020 11:30	YO6595	M	C072223	4.34	0.00284	4.31	<0.00002	159	0.251	111	<0.00001	<0.005	<0.005	0.00237	<0.005	<0.005	<0.0001	0.0137	0.00097	0.00084	0.066	<0.0001	<0.001	0.161	0.000011	47.9	0.0023	<0.0002
RSEM-R6W-EOP	10/3/2020 16:10	YP0035	M	C072771	4.18	0.00274	4.21	<0.00002	152	0.24	106	<0.00001	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	0.0126	0.00102	0.0009	0.065	<0.0001	<0.001	0.165	<0.00001	47.4	0.0025	<0.0002
RSEM-R6W-EOP	10/4/2020 16:20	YP0009	M	C072767	4.22	0.00277	4.14	<0.00002	154	0.244	109	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	0.0125	0.00103	0.00093	0.066	<0.0001	<0.001	0.168	<0.00001	47.5	0.0026	<0.0002
RSEM-R6W-EOP	10/5/2020 17:10	YP2999	M	C073260	4.45	0.003	4.22	<0.00002	165	0.262	113	0.000011	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	0.0116	0.00107	0.00098	0.065	<0.0001	<0.001	0.166	<0.00001	45.9	0.0028	<0.0002
RSEM-R6W-EOP	10/6/2020 15:10	YP5779	M	C073719	4.36	0.00312	4.19	<0.00002	163	0.243	110	<0.00001	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	0.0127	0.00111	0.001	0.064	<0.0001	<0.001	0.162	<0.00001	43.9	0.003	<0.0002
RSEM-R6W-EOP	10/7/2020 14:20	YP7388	M	C074014	4.10	0.00278	3.95	<0.00002	153	0.228	99.7	<0.00001	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	0.0122	0.00114	0.00106	0.065	<0.0001	<0.001	0.142	<0.00001	47.8	0.0032	<0.0002
RSEM-R6W-EOP	10/8/2020 11:30	YP9903	M	C074375	4.32	0.00301	4.31	<0.00002	160	0.254	112	<0.00001	<0.005	<0.005	0.0025	<0.005	<0.005	<0.0001	0.0131	0.00116	0.00111	0.064	<0.0001	<0.001	0.155	<0.00001	46.7	0.0032	<0.0002
RSEM-R6W-EOP	10/9/2020 11:20	YQ0241	M	C074391	4.29	0.00294	3.91	<0.00002	162	0.244	106	<0.00001	<0.005	<0.005	0.00244	<0.005	<0.005	<0.0001	0.0154	0.00116	0.00111	0.063	<0.0001	<0.001	0.166	<0.00001	45.6	0.0033	<0.0002
RSEM-R6W-EOP	10/10/2020 12:10	YQ1628	M	C074557	4.20	0.00289	4.33	<0.00002	152	0.249	106	0.000015	<0.005	0.0089	0.00241	<0.005	<0.005	0.00019	0.0112	0.00119	0.00104	0.081	<0.0001	<0.001	0.145	0.000011	47.9	0.0034	<0.0002
RSEM-R6W-EOP	10/11/2020 11:40	YQ4408	M	C075136	4.21	0.00279	4.13	<0.00002	150	0.27	99.4	0.000011	<0.005	<0.005	0.00236	<0.005	<0.005	0.00011	0.0152	0.00112	0.00092	0.091	<0.0001	<0.001	0.151	0.000012	49.7	0.0034	<0.0002
RSEM-R6W-EOP	10/12/2020 13:50	YQ4367	M	C075125	4.48	0.00294	4.71	<0.00002	158	0.323	106	0.000014	<0.005	0.0072	0.0025	<0.005	<0.005	0.00021	0.0201	0.00117	0.00087	0.084	<0.0001	<0.001	0.157	0.00002	53.9	0.0035	0.00044
RSEM-R6W-EOP	10/13/2020 14:00	YQ8016	M	C075829	4.39	0.00293	4.16	<0.00002	159	0.302	103	0.000012	<0.005	<0.005	0.00246	<0.005	<0.005	<0.0001	0.0224	0.00123	0.00095	0.078	<0.0001	<0.001	0.169	0.000024	50.9	0.0037	0.00035
RSEM-R6W-EOP	10/14/2020 15:00	YQ9243	M	C076027	4.52	0.00324	4.29	<0.00002	166	0.302	109	0.000013	<0.005	<0.005	0.00256	<0.005	<0.005	<0.0001	0.024	0.00125	0.001	0.072	<0.0001	<0.001	0.175	0.000023	49.5	0.004	0.00033
RSEM-R6W-EOP	10/14/2020 15:10	YQ9244	D	C076027	4.64	0.00329	4.31	<0.00002	171	0.308	113	0.000012	<0.005	<0.005	0.0026	<0.005	<0.005	0.00013	0.0241	0.00128	0.001	0.074	<0.0001	<0.001	0.177	0.000023	50.4	0.0039	0.00036
RSEM-R6W-EOP	10/15/2020 11:55	YR1303	M	C076291	4.78	0.0036	4.09	<0.00002	176	0.312	118	0.000014	<0.005	<0.005	0.00267	<0.005	<0.005	0.00013	0.024	0.00131	0.001	0.074	<0.0001	<0.001	0.158	<0.00001	47.7	0.004	0.0004
RSEM-R6W-EOP	10/16/2020 12:10	YR1522	M	C076320	5.07	0.00411	4.22	<0.00002	189	0.325	126	0.000022	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	0.0246	0.00134	0.00103	0.07	<0.0001	<0.001	0.171	<0.00001	45.7	0.0041	0.00039
RSEM-R6W-EOP	10/17/2020 10:30	YR5392	M	C076925	5.33	0.00447	4.36	<0.00002	186	0.321	131	<0.00001	<0.005	<0.005	0.00275	<0.005	<0.005	<0.0001	0.0252	0.00143	0.00107	0.066	<0.0001	<0.001	0.159	<0.00001	48.1	0.0046	0.00036
RSEM-R6W-EOP	10/18/2020 12:55	YR5380	M	C076923	5.60	0.00507	4.4	<0.00002	198	0.336	142	<0.00001	<0.005	<0.005	0.00293	<0.005	<0.005	<0.0001	0.0261	0.00146	0.00115	0.062	<0.0001	<0.001	0.178	<0.00001	47.6	0.0047	0.00031
RSEM-R6W-EOP	10/18/2020 13:05	YR5381	D	C076923	5.58	0.0051	4.46	<0.00002	203	0.334	144	<0.00001	<0.005	<0.005	0.0029	<0.005	<0.005	<0.0001	0.0256	0.00148	0.00113	0.063	<0.0001	<0.001	0.171	<0.00001	48.4	0.0047	0.00031
RSEM-R6W-EOP	10/19/2020 10:20	YR5409	M	C076929	5.75	0.00527	4.56	<0.00002	213	0.337	150	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	0.0237	0.00153	0.00117	0.06	<0.0001	<0.001	0.17	<0.00001	49.0	0.0047	0.00025
RSEM-R6W-EOP	10/20/2020 14:50	YR8829	M	C077551	5.80	0.00539	4.66	<0.00002	215	0.35	157	0.000011	<0.005	<0.005	0.003	<0.005	<0.005	<0.0001	0.0244	0.00155	0.00131	0.06	<0.0001	<0.001	0.19	0.000017	47.9	0.0049	0.00028
RSEM-R6W-EOP	10/21/2020 16:10	YS1501	M	C077998	5.78	0.00546	4.83	<0.00002	219	0.357	163	0.000012	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	0.0261	0.0017	0.0013	0.063	<0.0002	<0.002	0.197	<0.00002	50.1	0.005	<0.0004
RSEM-R6W-EOP	10/22/2020 12:40	YS3855	M	C078323	5.94	0.00548	4.88	<0.00002	221	0.384	168	0.000011	<0.005	<0.005	0.00326	<0.005	<0.005	<0.0001	0.0243	0.00162	0.00137	0.06	<0.0001	<0.001	0.191	0.000015	54.3	0.005	0.00023
RSEM-R6W-EOP	10/23/2020 10:30	YS3574	M	C078301	6.01	0.00546	4.66	<0.00002	225	0.376	169	0.000012	<0.005	<0.005	0.00322	<0.005	<0.005	<0.0001	0.0246	0.00166	0.0014	0.06	<0.0001	<0.001	0.194	0.000016	54.4	0.0051	0.00024
RSEM-R6W-EOP	10/24/2020 15:10	YS7916	M	C078871	6.24	0.00602	4.39	<0.00002	239	0.394	175	<0.00001	<0.005	<0.005	0.00323	<0.005	<0.005	<0.0001	0.0247	0.00171	0.00138	0.058	<0.0001	<0.001	0.203	<0.00001	48.3	0.005	<0.0002
RSEM-R6W-EOP	10/25/2020 13:50	YS7914	M	C078870	6.03	0.00562	4.51	<0.00002	235	0.382	176	<0.00001	<0.005	<0.005	0.00339	<0.005	<0.005	<0.0001	0.0228	0.00162	0.00133	0.053	<0.0001	<0.001	0.189	<0.00001	49.9	0.0049	<0.0002
RSEM-R6W-EOP	10/26/2020 14:45	YT0277	M	C079297	6.20	0.00557	4.43	<0.00002	248	0.38	189	0.000011	<0.005	<0.005	0.00345	<0.005	<0.005	<0.0001	0.0216	0.00165	0.0013	0.054	<0.0001	<0.001	0.191	<0.00001	50.8	0.0046	<0.0002
RSEM-R6W-EOP	10/27/2020 12:40	YT3321	M	C079639	5.77	0.00514	4.71	<0.00002	219	0.352	172	0.000011	<0.005	<0.005	0.00348	<0.005	<0.005	<0.0001	0.0182	0.0015	0.0012	0.053	<0.0001	<0.001	0.162	0.000014	47.6	0.0041	<0.0002
RSEM-R6W-EOP	10/28/2020 14:20	YT5233	M	C079984	5.52	0.00459	4.69	<0.00002	194	0.36	161	0.000012	<0.005	<0.005	0.00342	<0.005	<0.005	<0.0001	0.0154	0.0014	0.00106	0.056	<0.0001	<0.001	0.151	0.000015	50.9	0.0036	<0.0002
RSEM-R6W-EOP	10/29/2020 14:30	YT7961	M	C080439	5.25	0.00448	4.95	<0.00002	179	0.342	154	0.00001	<0.005	<0.005	0.00309	<0.005	<0.005	0.00015	0.0145	0.00144	0.00102	0.051	<0.0001	<0.001	0.158	<0.00001	50.7	0.0037	<0.0002
RSEM-R6W-EOP	10/30/2020 12:10	YT7955	M	C080436	5.01	0.00395	4.56	<0.00002	173	0.331	149	0.00001	<0.005	<0.005	0.00314	<0.005	<0.005	<0.0001	0.0153	0.00139	0.00102	0.047	<0.0001	<0.001	0.152	<0.00001	48.8	0.0036	<0.0002
RSEM-R6W-EOP	10/31/2020 14:40	YU1485	M	C081008	4.98	0.00416	4.78	<0.00002	172	0.328	149	0.00001	<0.005	<0.005	0.00335	<0.005	<0.005	<0.0001	0.0147	0.00126	0.00095	0.042	<0.0001	<0.001	0.137	0.000016	46.0	0.0032	<0.0002
RSEM-R6W-EOP	11/1/2020 13:00	YU1490	M	C081010	4.96	0.00388	4.63	<0.00002	174	0.32	149	<0.00001	<0.005	<0.005	0.0034	<0.005	<0.005	<0.0001	0.0155	0.00127	0.00098	0.04	<0.0001	<0.001	0.138	0.000014	44.5	0.0033	<0.0002
RSEM-R6W-EOP	11/15/2020 13:00	YW2812	M	C084417	5.35	0.00525	5.56	<0.00002	213	0.311	166	0.000012	<0.005	<0.005	0.00374	0.0055	0.0076	<0.0001	0.0216	0.00174	0.00143	0.024	<0.0001	<0.001	0.163	<0.00001	35.3	0.0045	0.0003
RSEM-R6W-EOP	11/16/2020 10:30	YW2814	M	C084418	5.54	0.00518	5.64	<0.00002	219	0.315	168	0.00001	<0.005	<0.005	0.00366	0.0055	0.0076	<0.0001	0.0226	0.00175	0.00143	0.025	<0.0001	<0.001	0.163	0.000011	35.4	0.0045	0.00029
RSEM-R6W-EOP	11/17/2020 13:00	YW6848	M	C085190	5.48	0.00581	5.26	<0.00002	220	0.307	169	0.000011	<0.005	<0.005	0.0036	0.0051	0.0062	<0.0001	0.024	0.00172	0.0015	0.026	<0.0001	<0.001	0.171	<0.00001	34.9	0.0044	0.00029
RSEM-R6W-EOP	11/18/2020 16:10	YW9289	M	C085621	5.60	0.00535	5.51	<0.00002	235	0.334	178	0.000012	<0.005	<0.005	0.00375	0.0054	0.0069	<0.0001	0.0243	0.00175	0.00152	0.026	<0.0001	<0.001	0.168	<0.00001	35.5	0.0045	0.00027

Appendix 3-C: 2020 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	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	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-R6W-EOP	11/19/2020 13:50	YX1120	M	C085951	5.60	0.00534	4.63	<0.00002	243	0.308	176	<0.00001	<0.005	<0.005	0.00359	<0.005	0.0078	<0.0001	0.0239	0.00175	0.00153	0.026	<0.0001	<0.001	0.176	0.00001	35.0	0.0044	0.00029
RSEM-R6W-EOP	11/20/2020 11:40	YX1117	M	C085949	5.76	0.00541	4.87	<0.00002	246	0.31	179	<0.00001	<0.005	<0.005	0.0035	0.0052	0.0073	0.0001	0.0253	0.00176	0.00157	0.026	<0.0001	<0.001	0.172	0.00001	34.3	0.0044	0.00028
RSEM-R6W-EOP	11/21/2020 13:40	YX3970	M	C086434	5.88	0.00501	6.02	<0.00002	257	0.322	186	0.000011	<0.005	<0.005	0.00346	0.0056	0.0071	<0.0001	0.0267	0.00184	0.00164	0.029	<0.0001	<0.001	0.195	<0.00001	36.5	0.0041	0.00029
RSEM-R6W-EOP	11/22/2020 14:05	YX3966	M	C086433	5.92	0.00482	6.18	<0.00002	259	0.312	188	0.000013	<0.005	<0.005	0.00349	0.0056	0.0083	0.0001	0.0275	0.00176	0.00167	0.03	<0.0001	<0.001	0.189	<0.00001	37.5	0.004	0.00028
RSEM-R6W-EOP	11/23/2020 13:40	YX5757	M	C086734	5.90	0.00472	6.26	<0.00002	253	0.306	183	0.000012	<0.005	<0.005	0.00338	0.0056	0.0088	<0.0001	0.0275	0.00177	0.00165	0.03	<0.0001	<0.001	0.192	<0.00001	36.8	0.0041	0.00028
RSEM-R6W-EOP	11/24/2020 14:05	YX7834	M	C087146	6.09	0.00499	6.26	<0.00002	254	0.308	183	<0.00001	<0.005	<0.005	0.00348	0.0057	0.0096	<0.0001	0.0262	0.00179	0.00174	0.029	<0.0001	<0.001	0.181	<0.00001	37.0	0.0041	0.00027
RSEM-R6W-EOP	11/25/2020 14:10	YY0222	M	C087472	5.97	0.00427	5.99	<0.00002	245	0.295	177	<0.00001	<0.005	<0.005	0.00337	0.0056	0.009	0.00014	0.0278	0.00174	0.00163	0.029	<0.0001	<0.001	0.163	<0.00001	34.0	0.0041	0.00025
RSEM-R6W-EOP	11/26/2020 12:10	YY2050	M	C087819	5.56	0.0041	5.75	<0.00002	231	0.278	165	<0.00001	<0.005	<0.005	0.00327	0.0054	0.0103	0.0001	0.027	0.00174	0.00156	0.03	<0.0001	<0.001	0.174	<0.00001	35.4	0.004	0.00024
RSEM-R6W-EOP	11/27/2020 11:30	YY2096	M	C087822	5.64	0.00411	5.89	<0.00002	228	0.277	163	<0.00001	<0.005	<0.005	0.00326	0.0055	0.0098	0.00011	0.0273	0.0017	0.00151	0.029	<0.0001	<0.001	0.179	<0.00001	34.1	0.004	0.00024
RSEM-R6W-EOP	11/28/2020 13:10	YY5269	M	C088400	5.65	0.00388	6.17	<0.00002	231	0.293	165	0.000014	<0.005	<0.005	0.00311	0.0054	0.0098	<0.0001	0.0234	0.00152	0.00142	0.028	<0.0001	<0.001	0.149	<0.00001	31.8	0.0038	0.00024
RSEM-R6W-EOP	11/29/2020 12:45	YY5335	M	C088408	5.52	0.00376	6.08	<0.00002	225	0.286	163	0.000011	<0.005	<0.005	0.00308	0.0054	0.0104	<0.0001	0.0246	0.00156	0.00141	0.025	<0.0001	<0.001	0.149	<0.00001	30.4	0.0038	0.00023
RSEM-R6W-EOP	11/30/2020 14:20	YY7388	M	C088703	5.50	0.00346	5.83	<0.00002	224	0.283	159	<0.00001	<0.005	<0.005	0.00331	0.0056	0.0095	<0.0001	0.027	0.00152	0.00135	0.023	<0.0001	<0.001	0.167	<0.00001	30.1	0.0036	0.00021
RSEM-R6W-EOP	12/1/2020 13:55	YY9248	M	C089096	5.57	0.00332	5.83	<0.00002	225	0.276	161	<0.00001	<0.005	<0.005	0.00325	0.0055	0.0098	<0.0001	0.0224	0.00155	0.00134	0.023	<0.0001	<0.001	0.166	<0.00001	30.2	0.0036	0.00024
RSEM-R6W-EOP	12/2/2020 13:20	YZ1567	M	C089572	5.69	0.00396	5.95	<0.00002	237	0.289	169	<0.00001	<0.005	<0.005	0.00344	0.0057	0.0126	0.00011	0.0264	0.00154	0.0014	0.023	<0.0001	<0.001	0.158	<0.00001	31.9	0.0036	<0.0002
RSEM-R6W-EOP	12/3/2020 12:50	YZ2307	M	C089704	5.98	0.0041	6.07	<0.00002	258	0.311	184	0.00001	<0.005	<0.005	0.00362	0.0059	0.0116	<0.0001	0.0268	0.00156	0.00143	0.022	<0.0001	<0.001	0.176	<0.00001	32.5	0.0036	0.00022
RSEM-R6W-EOP	12/4/2020 13:40	YZ4238	M	C089912	5.63	0.00387	5.67	<0.00002	251	0.301	182	0.00001	<0.005	<0.005	0.00336	0.0057	0.0106	<0.0001	0.0194	0.00153	0.00142	0.021	<0.0001	<0.001	0.175	<0.00001	32.7	0.0037	0.00024
RSEM-R6W-EOP	12/5/2020 13:30	YZ8274	M	C090368	5.77	0.00345	6.28	<0.00002	259	0.331	194	<0.00001	<0.005	<0.005	0.00347	0.0056	0.0104	0.00014	0.0228	0.00148	0.00135	0.021	<0.0001	<0.001	0.188	<0.00001	35.6	0.0036	0.00023
RSEM-R6W-EOP	12/6/2020 13:10	YZ8306	M	C090376	5.96	0.00334	6.16	<0.00002	260	0.343	189	<0.00001	<0.005	<0.005	0.00337	0.0052	0.0098	0.00011	0.0246	0.00157	0.00141	0.022	<0.0001	<0.001	0.189	<0.00001	36.2	0.0042	0.00023
RSEM-R6W-EOP	12/7/2020 10:15	YZ8153	M	C090358	5.96	0.00329	6.19	<0.00002	256	0.333	186	<0.00001	<0.005	<0.005	0.00327	0.0051	0.0102	0.00012	0.0257	0.00163	0.00144	0.023	<0.0001	<0.001	0.187	<0.00001	37.0	0.0044	0.00023
RSEM-R6W-EOP	12/8/2020 15:20	ZA2150	M	C091061	5.91	0.00396	5.42	<0.00002	253	0.319	187	0.000013	<0.005	<0.005	0.00327	0.0051	0.0103	0.00013	0.0214	0.00179	0.00159	0.025	<0.0001	<0.001	0.175	<0.00001	34.1	0.005	0.00026
RSEM-R6W-EOP	12/9/2020 15:40	ZA6285	M	C091815	6.03	0.00375	5.57	<0.00002	260	0.334	187	<0.00001	<0.005	<0.005	0.00334	<0.005	0.0103	0.0001	0.0199	0.00182	0.00155	0.025	<0.0001	<0.001	0.181	<0.00001	33.7	0.005	0.00029
RSEM-R6W-EOP	12/10/2020 14:40	ZA6278	M	C091812	6.26	0.00386	5.57	<0.00002	272	0.335	195	<0.00001	<0.005	<0.005	0.00344	<0.005	0.0105	<0.0001	0.0191	0.00182	0.00153	0.025	<0.0001	<0.001	0.18	<0.00001	34.0	0.005	0.00032
RSEM-R6W-EOP	12/11/2020 23:50	ZA6281	M	C091813	6.23	0.00402	5.39	<0.00002	273	0.334	197	<0.00001	<0.005	<0.005	0.00341	<0.005	0.0105	0.00011	0.0197	0.00184	0.00154	0.025	<0.0001	<0.001	0.187	<0.00001	34.1	0.0048	0.00034
RSEM-R6W-EOP	12/13/2020 15:20	ZA8557	M	C092267	6.10	0.00486	5.1	<0.00002	279	0.351	207	0.000013	<0.005	<0.005	0.0038	<0.005	0.01	0.00012	0.0204	0.00172	0.0014	0.027	<0.0001	<0.001	0.196	0.000012	38.8	0.0041	0.00057
RSEM-R6W-EOP	12/13/2020 17:10	ZA8524	M	C092261	6.08	0.0045	5.43	<0.00002	280	0.329	204	0.000012	<0.005	<0.005	0.00369	0.0052	0.0103	<0.0001	0.0186	0.00177	0.00142	0.025	<0.0001	<0.001	0.185	0.000011	36.5	0.0043	0.00035
RSEM-R6W-EOP	12/14/2020 13:10	ZA8429	M	C092250	6.42	0.00542	5.23	<0.00002	285	0.364	211	0.000013	<0.005	<0.005	0.00384	0.005	0.013	<0.0001	0.0218	0.00187	0.00143	0.029	<0.0001	<0.001	0.185	0.000013	40.1	0.0046	0.00102
RSEM-R6W-EOP	12/15/2020 15:30	ZB1649	M	C092932	6.95	0.00654	5.48	<0.00002	293	0.445	231	0.000014	<0.005	<0.005	0.00389	0.0053	0.0136	<0.0001	0.0216	0.00212	0.00149	0.031	<0.0001	<0.001	0.174	0.000013	42.3	0.0056	0.00115
RSEM-R6W-EOP	12/16/2020 14:20	ZB3422	M	C093364	6.71	0.00687	5.15	<0.00002	286	0.45	215	0.000013	<0.005	<0.005	0.00392	0.0053	0.0126	<0.0001	0.0252	0.00217	0.00152	0.032	<0.0001	<0.001	0.158	0.000012	41.8	0.0057	0.00105
RSEM-R6W-EOP	12/17/2020 14:50	ZB5913	M	C093625	6.67	0.00571	4.98	<0.00002	273	0.427	219	0.000012	<0.005	<0.005	0.00359	0.0052	0.0117	0.00012	0.0226	0.00236	0.00148	0.031	<0.0001	<0.001	0.164	0.000013	42.4	0.006	0.001
RSEM-R6W-EOP	12/18/2020 13:35	ZB5853	M	C093610	6.88	0.00611	5.13	<0.00002	277	0.456	229	0.000012	<0.005	<0.005	0.00377	0.0057	0.013	<0.0001	0.0236	0.00257	0.00161	0.03	<0.0001	<0.001	0.163	0.000013	43.8	0.0063	0.00091
RSEM-R6W-EOP	12/19/2020 13:00	ZB8419	M	C094046	6.79	0.00582	5.53	<0.00002	258	0.416	219	0.000011	<0.005	<0.005	0.00374	0.006	0.0117	<0.0001	0.0271	0.00266	0.00161	0.028	<0.0001	<0.001	0.172	0.000011	44.3	0.0062	0.00073
RSEM-R6W-EOP	12/20/2020 13:05	ZB8515	M	C094070	6.38	0.00525	5.34	<0.00002	237	0.379	202	0.00001	<0.005	<0.005	0.00355	0.0061	0.0134	0.00011	0.0288	0.00279	0.00169	0.026	<0.0001	<0.001	0.16	0.00001	41.3	0.0062	0.0006
RSEM-R6W-EOP	12/21/2020 10:50	ZB8329	M	C094023	6.13	0.00482	5.34	<0.00002	228	0.369	192	0.000011	<0.005	<0.005	0.00355	0.0066	0.0111	<0.0001	0.0284	0.00282	0.00165	0.025	<0.0001	<0.001	0.155	<0.00001	37.7	0.0058	0.00049
RSEM-R6W-EOP	12/22/2020 11:40	ZC0504	M	C094296	5.71	0.00454	4.92	<0.00002	220	0.313	176	0.00001	<0.005	<0.005	0.00326	0.0065	0.0107	<0.0001	0.0238	0.00265	0.0016	0.023	<0.0001	<0.001	0.152	<0.00001	34.2	0.0053	0.00042
RSEM-R6W-EOP	12/23/2020 13:10	ZC1951	M	C094642	5.39	0.00437	5.25	<0.00002	216	0.305	166	<0.00001	<0.005	<0.005	0.00318	0.0068	0.011	<0.0001	0.0214	0.00248	0.00156	0.022	<0.0001	<0.001	0.161	<0.00001	31.5	0.0048	0.00034
RSEM-R6W-EOP	12/24/2020 9:50	ZC3452	M	C094856	4.99	0.004	5.21	<0.00002	206	0.287	155	0.00001	<0.005	<0.005	0.0031	0.0066	0.0109	<0.0001	0.0247	0.00241	0.00151	0.021	<0.0001	<0.001	0.141	<0.00001	31.0	0.0045	0.00031
RSEM-R6W-EOP	12/25/2020 15:10	ZC3694	M	C094909	4.82	0.00364	5.11	<0.00002	198	0.268	143	<0.00001	<0.005	0.0059	0.00298	0.0067	0.0107	<0.0001	0.0229	0.00231	0.00141	0.02	<0.0001	<0.001	0.141	<0.00001	29.2	0.0041	0.00025
RSEM-R6W-EOP	12/26/2020 16:10	ZC3700	M	C094911	4.43	0.00338	5.06	<0.00002	190	0.255	139	<0.00001	<0.005	<0.005	0.0029	0.0065	0.0095	<0.0001	0.022	0.00217	0.00132	0.018	<0.0001	<0.001	0.138	<0.00001	29.1	0.0035	0.00022
RSEM-R6W-EOP	12/27/2020 16:30	ZC4644	M	C095191	4.32	0.00338	4.86	<0.00002	197	0.255	135	0.00001	<0.005	<0.005	0.00296	0.0067	0.0097	<0.0001	0.0228	0.00209	0.00131	0.018	<0.0001	<0.001	0.121	<0.00001	28.6	0.0035	<0.0002
RSEM-R6W-EOP	12/28/2020 9:40	ZC4619	M	C095179	4.55	0.00341	4.98	<0.00002	200	0.273	146	0.000011	<0.005	<0.005	0.00301	0.0069	0.0102	<0.0001	0.0222	0.00204	0.00129	0.018	<0.0001	<0.001	0.125	<0.00001	28.8	0.0033	<0.0002
RSEM-R6W-EOP	12/29/2020 13:45	ZC5603	M	C095537	4.25	0.00361	4.9	<0.00002	201	0.262	143	<0.00001	<0.005	<0.005	0.00299	0.0063	0.0103	<0.0001	0.0175	0.00186	0.00118	0.017	<0.0001	<0.001	0.139	<0.00001	29.9	0.0028	0.00032
RSEM-R6W-EOP	12/30/2020 14:45	ZC6412	M	C100028	4.30	0.0032	4.79	<0.00002	198	0.257	141	<0.00001	<0.005	<0.005	0.00298	0.0067	0.01	<0.0001	0.0202	0.0018	0.00116	0.016	<0.0001	<0.001	0.12	<0.00001	28.0	0.0025	0.00026
RSEM-R6W-EOP	12/31/2020 14:35	ZC6409	M	C100027	4.24	0.0033	4.92	<0.00002	205	0.268	146	<0.00001	<0.005	<0.005	0.003	0.0066	0.011	0.00011	0.0204	0.0017	0.00108	0.017	<0.0001	<0.001	0.128	<0.00001	29.5	0.0024	0.00036
RSEM-R6W-SP	4/22/2020 15:05	XR6358	M	C027799	4.17	0.00173	3.22	<0.00002	89.8	0.151	32.8	0.000013	<0.005	0.0051	0.00109	<0.005	<0.005	<0.0001	0.0623	0.00092	0.00104	0.062	<0.0001	<0.001	0.128	<0.00001	24.8	0.0014	<0.0002
RSEM-R6W-SP	4/26/2020 13:05	XR8993	M	C028429	5.19	0.00217	3.58	<0.00002	104	0.192	38.9	0.000012	<0.005	<0.005	0.00133	<0.005	0.0058	<0.0001	0.0141	0.00105	0.00154	0.075	<0.0001	<0.001	0.129	0.000018	24.4	0.0029	0.00032
West-Buffer-Creek	4/28/2020 17:35	XS1883	M	C029097	3.06	0.00044	1.06	<0.00002	146	0.611	323	0.000016	<0.005	<0.005	0.00044	<0.005	0.205	0.00033	1.75	<0.0005	<0.0001	0.027	0.00049	<0.001	0.168	0.000458	172	<0.001	0.0389

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: 2020 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-WP	8/22/2020 16:15	YI0135	M	C060262																									16
AC_E_HAIRPIN_DITCH	5/18/2020 10:45	XU2634	M	C033728	0.00094	0.016	<0.0002	0.0239	31.5	0.0399	<0.0000019	0.0031	0.0113		3.06	0.00164	4.39	<0.00002	48.9	0.387	74.7	0.000017	<0.005	<0.005	0.00184	<0.005	0.0102	<0.0001	9.7
AC-E-GW-Sump	5/18/2020 15:30	XU2641	M	C033728	0.00068	<0.01	<0.0002	0.226	7.86	0.109	0.0000059	0.0293	0.0147		2.20	0.0177	2.44	<0.00002	529	0.258	267	0.000039	<0.005	<0.005	0.00669	<0.005	<0.005	0.00034	24
AC-E-GW-Sump	6/8/2020 11:20	XX1070	M	C039370	<0.001	<0.02	<0.0004	0.188	2.50	0.0136	0.000002	0.012	0.0047		1.68	0.00835	2.25	<0.00004	410	0.117	186	<0.00002	<0.01	<0.01	0.0035	<0.01	<0.01	<0.0002	15
AC-E-Sump	5/18/2020 11:05	XU2635	M	C033728	0.00234	0.021	<0.0002	0.162	78.4	1.21	<0.0000019	0.0041	0.276		3.57	0.00323	4.42	<0.00002	269	0.696	356	0.000062	<0.005	<0.005	0.00397	<0.005	0.46	<0.0001	4.4
AC-E-Sump	11/2/2020	YU2811	M	C081296	0.00144	<0.01	<0.0002	0.0254	44.3	0.354	0.000021	0.0024	0.052		4.87	0.00287	3.69	<0.00002	32.3	0.446	88.6	0.000014	<0.005	<0.005	0.00331	<0.005	0.079	<0.0001	120
AC-W-Sump	5/19/2020 16:35	XU3589	M	C033944	0.00152	0.04	<0.0002	0.0537	48.9	0.0235	<0.0000019	0.0033	0.0247		4.20	0.00296	2.57	<0.00002	87.8	0.628	110	0.000018	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	1.4
AC-W-Sump	11/4/2020 12:45	YU7150	M	C082156	<0.0005	<0.01	<0.0002	0.0299	51.4	0.0213	<0.0000019	0.0021	0.0198		4.53	0.00554	4.37	<0.00002	58.1	0.532	90.9	0.000013	<0.005	<0.005	0.004	<0.005	<0.005	<0.0001	3.1
AC-W-Sump	11/13/2020 10:50	YV9731	M	C084016	<0.001	<0.02	<0.0004	0.0301	52.1	0.0169	<0.0000019	0.0022	0.0142		4.62	0.00586	4.59	<0.00004	54.1	0.525	80.0	<0.00002	<0.01	<0.01	0.00384	<0.01	<0.01	<0.0002	0.82
Area_21_Sump	7/16/2020 16:50	YC4667	M	C049952	<0.0005	<0.01	<0.0002	0.15	16.4	0.0022	<0.0000019	0.0022	0.0013		2.23	0.00069	5.22	<0.00002	117	0.207	19.6	<0.00001	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	1.3
Area_30_SP	8/22/2020 22:45	YI0134	M	C060262																									2.9
Area_A_N_Ditch	1/8/2020 11:15	XF3038	M	C001783	<0.0005	<0.01	<0.0002	0.0042	19.1	0.101	<0.000002	<0.001	<0.001		1.31	0.00026	4.93	<0.00002	4.62	0.182	11.9	<0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	0.60
Area_A_N_Ditch	2/6/2020 14:40	XI8762	M	C008772	<0.0005	<0.01	<0.0002	0.0037	20.4	0.0619	<0.000002	<0.001	<0.001		1.15	0.00021	4.68	<0.00002	5.53	0.2	10.9	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	11
Area_A_N_Ditch	3/11/2020 11:30	XN7889	M	C018851	0.00116	<0.01	<0.0002	0.0029	8.74	0.0592	<0.0000019	0.0031	0.0014		2.30	0.00029	2.14	<0.00002	6.04	0.151	7.1	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	24
Area_A_N_Ditch	4/3/2020 12:15	XP9114	M	C023756	0.00052	0.013	<0.0002	0.0033	16.5	0.156	<0.0000019	0.0015	0.0013		1.91	0.00023	3.8	<0.00002	6.34	0.177	9.2	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	2.3
Area_A_N_Ditch	5/7/2020 13:45	XT2579	M	C031444	0.0006	<0.01	<0.0002	0.0049	25.6	0.0132	<0.0000019	0.0013	0.0013		1.53	0.00041	3.7	<0.00002	6.59	0.238	26.2	<0.00001	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	3.5
Area_A_N_Ditch	5/29/2020 12:00	XV5616	M	C036525	0.00056	<0.01	<0.0002	0.0106	29.3	<0.001	<0.0000019	0.0021	0.0015		2.28	0.00023	1.01	<0.00002	14.7	0.278	25.3	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	0.98
Area_A_N_Ditch	6/5/2020 13:55	XW9906	M	C039108	<0.0005	<0.01	<0.0002	0.0041	21.2	0.0119	<0.0000019	<0.001	<0.001		1.26	0.00026	3.42	<0.00002	5.45	0.209	13.7	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	1.9
Area_A_N_Ditch	7/9/2020 14:45	YB4140	M	C047920	<0.0005	<0.01	<0.0002	0.0034	15.7	0.0057	<0.0000019	<0.001	<0.001		1.14	0.00032	3.58	<0.00002	3.86	0.175	10.1	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	1.5
Crusher-FeedPitPond2	3/13/2020 13:45	XN9533	M	C019176	0.00089	<0.01	<0.0002	0.0191	46.6	0.281	<0.0000019	0.0034	0.0033		3.89	0.00049	2.66	<0.00002	25.2	0.466	44.0	<0.00001	<0.005	<0.005	0.00403	<0.005	<0.005	0.0001	12
DIC_Sump	5/2/2020 10:10	XS7458	M	C030328	<0.0005	<0.01	<0.0002	0.0026	7.09	0.0071	0.0000023	0.0022	<0.001		0.903	0.00089	0.907	<0.00002	6.82	0.104	25.2	<0.00001	<0.005	<0.005	0.00071	<0.005	<0.005	<0.0001	23
DIC_Sump	5/13/2020 14:10	XT8156	M	C032775	<0.0005	0.016	<0.0002	0.0053	23.8	0.276	<0.0000019	0.0015	0.0011		1.14	0.00035	2.76	<0.00002	18.0	0.246	90.9	<0.00001	<0.005	<0.005	0.0016	<0.005	<0.005	0.00022	17
DIC_Sump	7/11/2020	YB7198	M	C048486																									110
DIC-DIP	8/19/2020 12:45	YH3196	M	C059023	0.0007	<0.01	<0.0002	0.0022	6.72	0.0022	<0.0000019	0.0012	0.0014		0.652	0.00051	2.08	<0.00002	5.00	0.182	8.5	<0.00001	<0.005	<0.005	0.00054	<0.005	<0.005	<0.0001	7.1
DIC-DIP	9/5/2020 10:35	YK1343	M	C064288	0.00094	<0.01	<0.0002	0.0031	7.23	0.0137	<0.0000019	0.0019	<0.001		0.868	0.00074	2.71	<0.00002	6.13	0.174	15.8	<0.00001	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	21
DIC-DIP	9/10/2020 14:45	YK8217	M	C065709	0.00085	<0.01	<0.0002	0.0032	8.05	0.0059	<0.000019	0.0035	<0.001		1.40	0.00092	3.84	<0.00002	9.42	0.191	25.8	<0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	40
DIC-DIP	9/21/2020 16:50	YM6398	M	C068837	0.00058	<0.01	<0.0002	<0.002	6.68	0.0015	<0.0000019	<0.001	<0.001		0.444	0.00033	2.13	<0.00002	1.56	0.12	5.6	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	5.5
DIC-DIP	9/23/2020 16:30	YN0389	M	C069533	0.0006	<0.01	<0.0002	<0.002	6.64	0.0017	<0.0000019	<0.001	<0.001		0.438	0.00031	2.12	<0.00002	1.57	0.117	5.5	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	7.5
DIC-DIP	9/27/2020 11:30	YN7523	M	C070629	0.0006	0.01	<0.0002	<0.002	6.76	0.0021	<0.0000019	0.001	<0.001		0.439	0.0003	2.2	<0.00002	1.58	0.123	5.6	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	3.3
DIC-DIP	10/2/2020 12:30	YO6601	M	C072223	0.00057	<0.01	<0.0002	<0.002	7.64	0.0017	<0.0000019	0.0011	<0.001		0.463	0.00038	2.04	<0.00002	1.66	0.132	6.3	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	4.7
DIC-DIP	10/9/2020 11:30	YQ0193	M	C074387	0.00057	<0.01	<0.0002	<0.002	6.56	<0.001	<0.0000019	<0.001	<0.001		0.448	0.00026	2.06	<0.00002	1.50	0.109	4.8	<0.00001	<0.005	<0.005	0.00044	<0.005	<0.005	<0.0001	4.5
DIP-Seep	8/12/2020 13:30	YG4639	M	C057419	<0.0025	<0.05	<0.001	0.221	130	0.537	<0.000019	0.0119	0.026		19.0	0.00149	7.31	<0.0001	1440	1.9	1280	<0.00005	<0.025	<0.025	0.00503	<0.025	<0.025	<0.0005	37
DOC_S_Sump	1/8/2020 15:15	XF3044	M	C001783	<0.0005	<0.01	<0.0002	0.0446	19.4	0.0208	<0.000002	0.0023	0.0041		1.61	0.00241	3.01	<0.00002	160	0.461	108	0.000012	<0.005	<0.005	0.00092	<0.005	0.0066	<0.0001	1.3
DOC_S_Sump	2/6/2020 13:30	XI8761	M	C008772	<0.0005	<0.01	<0.0002	0.0363	16.8	0.0168	<0.000002	0.0025	0.0027		1.25	0.00175	2.69	<0.00002	144	0.428	74.6	<0.00001	<0.005	<0.005	0.00081	<0.005	<0.005	<0.0001	0.31
DOC_S_Sump	6/6/2020 12:30	XX0128	M	C039138	0.0093	0.065	<0.0004	0.0956	<0.10	<0.002	<0.000019	0.0561	<0.002		61.5	0.00449	19.3	<0.00004	599	0.343	326	<0.00002	<0.01	<0.01	<0.0002	0.023	<0.01	<0.0002	150
DOC-DOP	8/19/2020 12:15	YH3195	M	C059023	0.00065	<0.01	<0.0002	0.0027	6.66	0.0072	<0.0000019	0.0012	<0.001		0.731	0.00041	2.17	<0.00002	7.89	0.125	9.3	<0.00001	<0.005	<0.005	0.00049	<0.005	<0.005	<0.0001	11
DOC-DOP	9/5/2020 10:10	YK1342	M	C064288	0.00079	<0.01	<0.0002	0.0025	6.42	0.0017	<0.0000019	0.0012	<0.001		0.759	0.00044	2.36	<0.00002	6.92	0.132	9.1	<0.00001	<0.005	<0.005	0.00054	<0.005	<0.005	<0.0001	36
DOC-DOP	9/11/2020 9:00	YK8184	M	C065706	0.00074	<0.01	<0.0002	<0.002	6.70	<0.001	<0.000019	0.0016	<0.001		0.731	0.00044	2.65	<0.00002	5.55	0.131	8.4	<0.00001	<0.005	<0.005	0.00059	<0.005	<0.005	<0.0001	79
DOC-DOP	9/11/2020 9:10	YK8185	D	C065706	0.00077	<0.01	<0.0002	<0.002	6.68	<0.001	<0.000019	0.0016	<0.001		0.790	0.00047	2.56	<0.00002	5.57	0.132	8.5	<0.00001	<0.005	<0.005	0.00061	<0.005	<0.005	<0.0001	78
DOC-DOP	9/21/2020 16:20	YM6396	M	C068837	0.00062	<0.01	<0.0002	<0.002	6.48	0.0014	0.0000022	0.001	<0.001		0.486	0.00032	2.14	<0.00002	1.64	0.117	5.5	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	15
DOC-DOP	9/23/2020 15:55	YN0388	M	C069533	0.00069	<0.01	<0.0002	<0.002	6.53	0.0018	<0.000019	0.0011	<0.001		0.496	0.00033	2.21	<0.00002	1.77	0.118	5.7	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	46
DOC-DOP	9/27/2020 12:55	YN7526	M	C070629	0.00063	<0.01	<0.0002	<0.002	6.91	0.0023	<0.0000019	0.001	<0.001		0.471	0.00031	2.26	<0.00002	1.71	0.128	6.0	<0.00001	<0.005	<0.005	0.00049	<0.005	<0.005	<0.0001	13
DOC-DOP	10/2/2020 12:10	YO6600	M	C072223	0.00056	0.01	<0.0002	<0.002	7.47	0.0023	<0.0000019	0.0011	<0.001		0.462	0.00037	1.98	<0.00002	1.67	0.13	6.2	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	7.4
DOC-DOP	10/9/2020 11:00	YQ0194	M	C074387	0.00058	<0.01	<0.0002	<0.002	6.48	<0.001	<0.0000019	<0.001	<0.001		0.450	0.00028	2.02	<0.00002	1.48	0.112	5.1	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	4.9
DOP_BT_East	1/8/2020 15:40	XF3045	M	C001783	<0.001	<0.02	<0.0004	0.154	131	0.23	<0.000002	0.0045	0.0253		6.11	0.00246	5.85	<0.00004	616	1.58	697	<0.00002	<0.01	<0.01	0.00363	<0.01	0.02	0.0005	21
DOP-Seep	8/12/2020 13:00	YG4638	M	C057419	0.0042	<0.05	<0.001	0.319	130	0.0467	<0.000019	0.0156	0.0155		28.7	0.00189	9.16	<0.0001	1800	0.343	1300	<0.00005	<0.025	<0.025	0.00153	<0.025	<0.025	<0.0005	160
East-Buffer-Creek	4/28/2020 17:15	XS1882	M	C029097	0.00205	7.11	<0.0002	0.0344	61.2	2.29	<0.0000019	<0.001	0.114		3.25	0.0006	1.15	0.000025	158	0.709	359	0.00003	<0.005	<0.005	0.00038	<0.005	0.242	<0.0001	22
GC-Debris-US	5/7/2020 15:00	XT2582	M	C031444																									>4000
GC-Debris-US	5/28/2020 17:15	XV7333	M	C036873																									>4000
GC-Debris-US	6/2/2020 14:00	XW3136	M	C037913																									>4000
GC-Debris-US	6/18/2020 12:30	XY6291	M	C042383																									>4000
GC-Debris-US	7/11/2020 18:00	YB7197	M	C048486																									>4000
GC-Debris-US	8/1/2020 13:15	YE6671	M	C054219																									1700
GC-Debris-US	8/22/2020 14:45	YI0133	M	C060262																									930
GC-Debris-US	9/13/2020 16:30	YL1417	M	C066239																									110
GC-Debris-US	10/4/2020 13:20	YP0011	M	C072767																									2.1
GC-Debris-US	11/1/2020 14:50	YU1491	M	C081010																									1500
L3-DC-DS	4/19/2020 17:35	XR2522	M	C026927																									84
L3-DC-DS	6/18/2020 17:30	XY6289	M	C042383																									44
L3-DC-US	4/19/2020 17:30	XR2521	M	C026927																									76
L3-DC-US	6/18/2020 18:00	XY6292	M	C042383																									33
LBCD_Trench	4/20/2020 15:20	XR3419	M	C027096	0.00051	0.011	<0.0002	0.107	16.7	0.0017	<0.0000019	0.0424	0.0012		11.2	0.012	5.68	<0.00002	586	0.403	345	<0.00001	<0.005	<0.005	0.00237	<0.005	<0.005	0.0002	14
LBCD-Sump-BT	1/4/2020 13:00	XE9882	M	C000877	<0.0005	<0.01	<0.0002	0.0109	27.7	0.132	<0.000002	<0.001	0.0023		1.12	0.00086	2.63	<0.00002	44.8	0.375	87.8	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	0.61
LBCD-Sump-BT	1/7/2020 15:40	XF1935	M	C001464	<0.0005	<0.01	<0.0002	0.0115	27.0	0.0877	<0.000002	<0.001	0.0018		1.08	0.00075	2.89	<0.00002	42.9	0.403	89.6	<0.00001	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	0.45
LBCD-Sump-BT	1/14/2020 13:35	XF8103	M	C002891	<0.0005	<0.01	<0.0002	0.0109	25.5	0.0949	0.0000042	<0.001	0.002		1.06	0.00075	2.84	<0.00002	44.5	0.364	78.7	<0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	0.58
LBCD-Sump-BT	1/22/2020 14:00	XG7455	M	C004860	<0.0005	<0.01	<0.0002	0.0102	22.9	0.0766	<0.000002	<0.001	0.0028		1.06	0.00065	2.67	<0.00002	43.8	0.311	62.2	<0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	0.27
LBCD-Sump-BT	1/28/2020 14:40	XH5363	M	C006197	<0.0005	<0.01	<0.0002	0.0092	21.6	0.0634	<0.000002	<0.001	0.0017		0.996	0.00078	2.43	<0.00002	43.3	0.311	59.6	<0.00001	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.16
LBCD-Sump-BT	2/5/2020 14:45	XI6890	M	C008469	<0.0005	<0.01	<0.0002	0.0082	22.9	0.0597	<0.000002	<0.001	0.0014		1.10	0.00085	2.4	<0.00002	47.5	0.313	61.6	<0.00001	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.28
LBCD-Sump-BT	2/11/2020 12:30	XJ6275	M	C010122	<0.0005	<0.01	<0.0002	0.0108	21.4	0.045	<0.0000019	<0.001	0.001		1.07	0.00139	2.7	<0.00002	44.3	0.328	57.3	<0.00001	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	2.7

Appendix 3-C: 2020 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
LBCD-Sump-BT	2/14/2020 9:50	XJ9481	M	C010793	0.00055	<0.01	<0.0002	0.0473	58.2	0.0754	<0.0000019	0.0039	0.0037		4.67	0.00233	6.35	<0.00002	222	0.679	233	<0.00001	<0.005	<0.005	0.00294	<0.005	<0.005	0.0002	3.7
LBCD-Sump-BT	2/18/2020 14:20	XK4686	M	C011881	<0.0005	<0.01	<0.0002	0.022	25.8	0.101	<0.0000019	0.0015	0.0025		1.58	0.0013	3.79	<0.00002	77.5	0.382	88.2	<0.00001	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	0.54
LBCD-Sump-BT	2/25/2020 13:40	XL5027	M	C014003	<0.0005	<0.01	<0.0002	0.0166	25.1	0.0597	<0.0000019	0.0017	0.0025		1.56	0.00194	3.16	<0.00002	63.0	0.366	74.9	<0.00001	0.0237	<0.005	0.00179	<0.005	<0.005	<0.0001	1.4
LBCD-Sump-BT	3/5/2020 16:20	XN0423	M	C017276	<0.0005	<0.01	<0.0002	0.0196	21.9	0.0436	<0.0000019	0.0027	0.002		1.64	0.00344	3.28	<0.00002	65.5	0.298	72.6	<0.00001	<0.005	<0.005	0.00181	<0.005	<0.005	<0.0001	13
LBCD-Sump-BT	3/11/2020 14:55	XN7894	M	C018851	<0.0005	<0.01	<0.0002	0.0177	21.2	0.0498	<0.0000019	0.0027	0.0024		1.77	0.00265	3.15	<0.00002	63.6	0.364	70.7	<0.00001	0.0064	<0.005	0.0021	<0.005	<0.005	<0.0001	18
LBCD-Sump-BT	3/17/2020 13:45	XO3911	M	C020169	<0.0005	<0.01	<0.0002	0.0214	24.9	0.0813	<0.0000019	0.0018	0.0028		1.42	0.00221	3.35	<0.00002	80.5	0.34	73.7	<0.00001	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	1.4
LBCD-Sump-BT	3/27/2020 13:00	XP2506	M	C022160	<0.0005	<0.01	<0.0002	0.0099	19.2	0.0193	<0.0000019	0.0014	0.0021		1.21	0.00298	2.52	<0.00002	44.0	0.286	46.7	<0.00001	0.0058	<0.005	0.00271	<0.005	<0.005	<0.0001	1.1
LBCD-Sump-BT	3/31/2020 13:15	XP6327	M	C023153	0.00077	<0.01	<0.0002	0.0161	23.1	0.0338	<0.0000019	0.002	0.0023		1.45	0.00252	1.89	<0.00002	59.7	0.293	54.8	<0.00001	0.0152	<0.005	0.00261	<0.005	<0.005	<0.0001	5.4
LBCD-Sump-BT	4/10/2020 13:05	XQ5871	M	C025257	0.00071	<0.01	<0.0002	0.0338	12.7	<0.001	0.0000022	0.0129	<0.001		9.99	0.00565	6	<0.00002	172	0.187	109	<0.00001	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	51
LBCD-Sump-BT	4/15/2020 14:55	XQ9342	M	C026226	0.00082	<0.01	<0.0002	0.027	8.19	<0.001	<0.0000019	0.0136	<0.001		9.72	0.0057	5.24	<0.00002	152	0.15	75.9	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	67
LBCD-Sump-BT	4/29/2020 13:05	XS3521	M	C029452	0.0005	<0.01	<0.0002	0.0798	19.8	0.0016	<0.0000019	0.0259	0.0022		6.83	0.00901	4.11	<0.00002	442	0.37	239	<0.00001	0.0074	<0.005	0.00327	<0.005	<0.005	<0.0001	8.2
LBCD-Sump-BT	5/7/2020 14:00	XT2578	M	C031444	0.00068	<0.01	<0.0002	0.108	21.8	0.0015	0.000002	0.0248	0.0019		4.56	0.00664	3.82	<0.00002	495	0.44	252	<0.00001	0.0062	<0.005	0.00319	<0.005	<0.005	<0.0001	89
LBCD-Sump-BT	5/19/2020 14:35	XU3586	M	C033944	0.00102	<0.01	<0.0002	0.144	22.2	<0.001	<0.0000019	0.0465	0.0016		5.41	0.0124	3.22	0.000029	774	0.523	417	0.000018	0.0102	<0.005	0.00384	<0.005	<0.005	0.00016	25
LBCD-Sump-BT	5/30/2020 17:30	XV8358	M	C037043	0.00103	<0.01	<0.0002	0.0434	15.2	0.0102	0.0000039	0.0281	0.0014		7.33	0.0041	4.36	<0.00002	228	0.241	79.1	<0.00001	<0.005	<0.005	0.00215	0.0054	<0.005	<0.0001	8.4
LBCD-Sump-BT	6/13/2020 15:30	XX9602	M	C040986	0.00055	<0.01	<0.0002	0.0873	29.6	0.0264	<0.0000019	0.0124	0.003		3.29	0.0104	3.51	<0.00002	382	0.596	264	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	13
LBCD-Sump-BT	6/20/2020 13:00	XY9025	M	C042884	<0.0005	<0.01	<0.0002	0.0677	32.0	0.0357	<0.0000019	0.0081	0.0165		6.84	0.0243	3.5	<0.00002	267	0.547	246	0.000015	<0.005	<0.005	0.00388	<0.005	<0.005	<0.0001	4.3
LBCD-Sump-BT	6/27/2020 19:45	XZ9073	M	C044897	0.00057	<0.01	<0.0002	0.0276	31.3	0.0016	<0.0000019	0.0023	0.0051		2.46	0.0101	2.83	<0.00002	85.0	0.481	123	0.000012	<0.005	<0.005	0.00368	<0.005	<0.005	<0.0001	5.8
LBCD-Sump-BT	6/30/2020 15:45	YA2742	M	C045692	<0.0025	<0.05	<0.001	0.251	82.4	1.26	<0.000019	0.0101	0.262		8.36	0.0323	3.72	<0.0001	884	1.14	741	<0.00005	<0.025	<0.025	0.00838	<0.025	0.706	<0.0005	680
LBCD-Sump-BT	8/1/2020 13:00	YE6669	M	C054219	0.00137	<0.01	<0.0002	0.0749	51.3	0.0184	<0.0000019	0.0045	0.02		5.68	0.00948	0.98	<0.00002	300	0.725	296	0.000018	<0.005	<0.005	0.00591	<0.005	0.009	<0.0001	2.3
LBCD-Sump-BT	11/4/2020 11:30	YU7149	M	C082156	0.00251	<0.01	<0.0002	0.0535	22.2	<0.001	<0.0000019	0.0165	0.0026		5.46	0.00856	4.59	<0.00002	288	0.41	204	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	28
LBCD-Sump-BT	11/10/2020 10:40	YV4534	M	C083245	0.00134	<0.01	<0.0002	0.0601	40.4	0.0227	0.0000025	0.009	0.008		3.93	0.00534	4.45	<0.00002	266	0.747	233	0.000012	<0.005	<0.005	0.00469	<0.005	<0.005	<0.0001	62
LBCD-Sump-BT	11/25/2020 11:30	YY0220	M	C087472	<0.0005	<0.01	<0.0002	0.0283	44.7	0.0117	<0.0000019	0.0016	0.0074		2.36	0.00367	4.47	<0.00002	98.6	0.655	163	0.000012	<0.005	<0.005	0.00488	<0.005	<0.005	<0.0001	0.48
LBEX_B1	2/23/2020 14:00	XL1346	M	C013192	0.00085	<0.01	<0.0002	0.0087	37.3	0.0539	<0.0000019	0.0124	0.0018		3.97	0.00339	1.76	<0.00002	38.1	0.339	82.3	<0.00001	<0.005	<0.005	0.00546	<0.005	<0.005	0.00044	18
LBEX_B1	4/8/2020 15:40	XQ4593	M	C024938	0.00107	0.072	<0.0002	0.0068	34.7	0.113	0.0005	0.009	0.0031		4.35	0.00657	1.92	<0.00002	21.0	0.538	94.7	0.000051	<0.005	<0.005	0.00593	<0.005	<0.005	<0.0001	>4000
LBEX_B1	5/14/2020 14:10	XU0102	M	C033161	0.00097	<0.01	<0.0002	0.0435	81.4	0.0082	<0.0000019	0.0045	0.0024		5.41	0.00503	4.43	<0.00002	119	0.582	148	0.000025	<0.005	<0.005	0.00931	<0.005	<0.005	0.00018	11
LBEX_B1	6/8/2020 16:45	XX1071	M	C039370	0.0015	<0.02	<0.0004	0.0435	75.3	2.73	0.00093	0.0051	0.155		6.13	0.0278	1.41	<0.00004	36.9	0.973	318	0.000033	<0.01	<0.01	0.00711	<0.01	0.06	<0.0002	>4000
LBEX_B1	7/1/2020 16:10	YA2711	M	C045689	0.00128	<0.01	<0.0002	0.0083	35.6	0.21	<0.00019	0.0091	0.002		4.41	0.00433	1.93	<0.00002	28.5	0.501	119	0.000013	<0.005	<0.005	0.00399	<0.005	<0.005	<0.0001	>4000
LBEX_B1	10/22/2020 14:15	YS3858	M	C078323	0.00126	<0.01	<0.0002	0.0373	86.0	0.0178	<0.0000019	0.0023	0.0026		5.58	0.00604	5.25	<0.00002	122	0.751	131	0.000016	<0.005	<0.005	0.00912	<0.005	<0.005	0.00018	6.5
LBEX_Bench_0	5/19/2020 16:30	XU3832	M	C034012	<0.0005	<0.01	<0.0002	0.137	115	0.314	<0.0000019	0.0154	0.0239		5.22	0.002	3.27	<0.00002	274	1.59	385	0.000019	<0.005	<0.005	0.0315	<0.005	<0.005	<0.0001	1.0
LBGC-OUT	3/2/2020 20:20	XM6323	M	C016408																									39
LBGC-OUT	3/3/2020 13:00	XM6550	M	C016468																									
LBGC-OUT	3/4/2020 17:30	XM7999	M	C016826																									
LBGC-OUT	3/5/2020 16:40	XN0422	M	C017276																									
LBGC-OUT	3/26/2020 18:00	XP2435	M	C022151																									1800
LBGC-OUT	3/27/2020 0:45	XP2507	M	C022160																									650
LBGC-OUT	4/19/2020 17:00	XR2520	M	C026927																									>4000
LBGC-OUT	5/4/2020 15:20	XS8358	M	C030506																									>4000
LBGC-OUT	5/5/2020 13:45	XT0144	M	C030949																									>4000
LBGC-OUT	5/6/2020 17:00	XT1607	M	C031246																									>4000
LBGC-OUT	5/7/2020 14:30	XT2581	M	C031444																									>4000
LBGC-OUT	5/8/2020 12:30	XT2573	M	C031442																									>4000
LBGC-OUT	5/9/2020 15:00	XT4492	M	C031859																									>4000
LBGC-OUT	5/10/2020 16:10	XT4531	M	C031867																									>4000
LBGC-OUT	5/11/2020 13:30	XT5202	M	C032074																									>4000
LBGC-OUT	5/18/2020 14:15	XU2595	M	C033718																									>4000
LBGC-OUT	5/28/2020 16:45	XV7332	M	C036873																									>4000
LBGC-OUT	6/2/2020 13:50	XW3135	M	C037913																									>4000
LBGC-OUT	6/18/2020 12:10	XY6290	M	C042383																									>4000
LBGC-OUT	7/11/2020 17:45	YB7196	M	C048486																									>4000
LBGC-OUT	8/1/2020 13:05	YE6670	M	C054219																									1800
LBGC-OUT	8/22/2020 14:30	YI0132	M	C060262																									110
LBGC-OUT	9/13/2020 16:20	YL1416	M	C066239																									35
LBGC-OUT	10/4/2020 13:30	YP0010	M	C072767																									0.25
LBGC-OUT	11/1/2020 15:10	YU1492	M	C081010																									51
LBL3C-1.65	3/26/2020 18:30	XP2436	M	C022151																									3400
Mustard-Creek	8/10/2020 13:35	YG0107	M	C056587	<0.0005	0.218	<0.0002	0.0187	29.2	0.535	<0.0000019	<0.001	0.016		4.98	0.0003	3.31	<0.00002	60.9	0.318	116	<0.00001	<0.005	<0.005	0.00028	<0.005	0.0378	<0.0001	12
PR_DIC	8/13/2020 19:50	YG7226	M	C057822	0.00061	0.013	<0.0002	<0.002	6.04	0.0021	<0.0000019	<0.001	<0.001		0.409	0.0003	2.23	<0.00002	1.53	0.104	4.8	<0.00001	<0.005	<0.005	0.00041	<0.005	<0.005	<0.0001	7.4
PR_DIC	8/14/2020 9:50	YG7191	M	C057817	0.0006	0.012	<0.0002	<0.002	5.96	0.0021	<0.0000019	<0.001	<0.001		0.408	0.00028	2.22	<0.00002	1.39	0.105	4.4	<0.00001	<0.005	<0.005	0.00041	<0.005	<0.005	<0.0001	5.8
PR_DIC	8/15/2020 10:15	YH0056	M	C058356	0.00063	0.012	<0.0002	<0.002	5.83	0.0014	<0.0000019	<0.001	<0.001		0.405	0.00031	2.11	<0.00002	1.35	0.105	4.9	<0.00001	<0.005	<0.005	0.00039	<0.005	<0.005	<0.0001	5.1
PR_DIC	8/28/2020 15:40	YI9495	M	C062013	0.00067	0.016	<0.0002	<0.002	6.76	0.0021	<0.0000019	<0.001	<0.001		0.428	0.0003	2.18	<0.00002	1.61	0.106	4.9	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	7.7
PR_DIC	8/29/2020 12:50	YJ1741	M	C062465	0.00064	0.015	<0.0002	<0.002	6.17	0.0018	<0.0000019	<0.001	<0.001		0.436	0.00031	2.11	<0.00002	1.48	0.11	5.1	<0.00001	<0.005	<0.005	0.00042	<0.005	<0.005	<0.0001	4.2
PR_DIC_DS	9/21/2020 18:15	YM6400	M	C068837	0.00057	<0.01	<0.0002	<0.002	6.46	0.0012	<0.0000019	<0.001	<0.001		0.430	0.00033	2.1	<0.00002	1.48	0.115	5.4	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	12
PR_DIC_DS	9/27/2020 12:05	YN7524	M	C070629	0.00056	<0.01	<0.0002	<0.002	6.88	0.0022	<0.0000019	0.001	<0.001		0.438	0.00032	2.24	<0.00002	1.54	0.123	5.7	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	6.4
PR_DIC_DS	10/2/2020 9:40	YO6598	M	C072223	0.00055	0.01	<0.0002	<0.002	7.38	0.0017	<0.0000019	0.0011	<0.001		0.459	0.00038	1.99	<0.00002	1.70	0.129	6.1	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	4.5
PR_DIC_US	9/21/2020 17:45	YM6399	M	C068837	0.00067	0.014	<0.0002	<0.002	6.64	0.0019	<0.000019	<0.001	<0.001		0.443	0.00032	2.13	<0.00002	1.49	0.119	5.6	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	55
PR_DIC_US	9/27/2020 11:10	YN7522	M	C070629	0.00058	0.01	<0.0002	<0.002	6.75	0.0019	<0.0000019	0.0011	<0.001		0.439	0.0003	2.19	<0.00002	1.65	0.122	5.9	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	5.2
PR_DIC_US	10/2/2020 9:50	YO6599	M	C072223	0.00057	0.013	<0.0002	<0.002	7.62	0.0025	<0.0000019	0.0011	<0.001		0.465	0.00039	1.97	<0.00002	1.76	0.13	6.4	<0.00001	<0.005	<0.005	0.00052	<0.005	<0.005	<0.0001	7.7
PR_DOC	8/14/2020 16:45	YG8152	M	C057967	0.00063	0.015	<0.0002	<0.002	5.96	0.0061	<0.0000019	<0.001	<0.001		0.407	0.00029	1.97	<0.00002	1.35	0.096	4.4	<0.00001	<0.005	<0.005	0.0004	<0.005	<0.005	<0.0001	30
PR_DOC	8/15/2020 10:55	YH0057	M	C058356	0.00064	0.013	<0.0002	<0.002	5.94	0.005	<0.0000019	<0.001	<0.001		0.408	0.0003	2.09	<0.00002	1.38	0.109	4.7	<0.00001	<0.005	<0.005	0.00042	<0.005	<0.005	<0.0001	23

Appendix 3-C: 2020 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
PR_DOC	8/16/2020 12:15	YH0174	M	C058389	0.00065	0.012	<0.0002	<0.002	6.12	0.0047	<0.0000019	<0.001	<0.001		0.417	0.00028	2.09	<0.00002	1.69	0.108	5.2	<0.00001	<0.005	<0.005	0.00039	<0.005	<0.005	<0.0001	11
PR_DOC	8/31/2020 16:10	YJ3637	M	C062857	0.00062	0.011	<0.0002	<0.002	6.25	0.0015	<0.0000019	<0.001	<0.001		0.411	0.0003	2.2	<0.00002	1.42	0.107	4.7	<0.00001	<0.005	<0.005	0.00044	<0.005	<0.005	<0.0001	5.6
PR_DOC	9/1/2020 14:30	YJ6692	M	C063433	0.00058	0.011	<0.0002	<0.002	6.27	0.0017	<0.0000019	<0.001	<0.001		0.426	0.0003	2.04	<0.00002	1.79	0.108	5.0	<0.00001	<0.005	<0.005	0.00043	<0.005	<0.005	<0.0001	2.3
PR_DOC	9/5/2020 9:40	YK1341	M	C064288	0.00061	0.011	<0.0002	<0.002	6.40	0.003	<0.0000019	<0.001	<0.001		0.423	0.00032	2.1	<0.00002	1.53	0.111	5.2	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	10
PR_DOC	9/7/2020 9:10	YK2583	M	C064592	0.00089	0.011	<0.0002	<0.002	6.86	0.0025	<0.0000019	0.001	<0.001		0.451	0.00034	2.09	<0.00002	1.60	0.116	5.6	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	5.9
PR_DOC_DS	9/21/2020 16:05	YM6395	M	C068837	0.00064	<0.01	<0.0002	<0.002	6.61	0.0014	0.0000019	0.001	<0.001		0.452	0.00031	2.1	<0.00002	1.53	0.121	5.5	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	14
PR_DOC_DS	9/27/2020 13:15	YN7527	M	C070629	0.0006	<0.01	<0.0002	<0.002	6.82	0.0021	<0.0000019	0.001	<0.001		0.446	0.00033	2.22	<0.00002	1.58	0.121	5.9	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	11
PR_DOC_DS	10/2/2020 9:20	YO6596	M	C072223	0.00057	0.01	<0.0002	<0.002	7.52	0.0026	0.0000019	0.0011	<0.001		0.459	0.00038	2.03	<0.00002	1.68	0.129	6.2	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	6.6
PR_DOC_US	9/21/2020 16:50	YM6397	M	C068837	0.00075	0.01	<0.0002	<0.002	6.57	0.0018	<0.000019	0.001	<0.001		0.452	0.00031	2.16	<0.00002	1.52	0.116	5.4	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	33
PR_DOC_US	9/27/2020 12:30	YN7525	M	C070629	0.00059	<0.01	<0.0002	<0.002	6.80	0.0023	<0.0000019	0.001	<0.001		0.445	0.00034	2.17	<0.00002	1.55	0.123	5.9	<0.00001	<0.005	<0.005	0.00048	<0.005	<0.005	<0.0001	10
PR_DOC_US	10/2/2020 9:30	YO6597	M	C072223	0.00056	0.011	<0.0002	<0.002	7.60	0.002	<0.0000019	0.0011	<0.001		0.474	0.00035	2.02	<0.00002	1.75	0.128	6.2	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	8.8
QAQC_Curing_Tanks	1/10/2020 11:10	XF5146	M	C002216	0.0788	0.027	<0.0004	0.185	3.75	<0.002	<0.000002	0.132	<0.002		463	0.0132	12	<0.00004	694	0.021	196	<0.00002	<0.01	<0.01	0.00824	0.054	0.078	0.00133	3.3
QAQC_Curing_Tanks	2/17/2020 14:00	XK3292	M	C011572	0.0829	<0.05	<0.001	0.218	4.33	<0.005	<0.0000019	0.118	<0.005		473	0.0181	9.63	<0.0001	757	0.016	191	<0.00005	<0.025	<0.025	0.0084	0.043	0.083	0.00196	6.2
QAQC_Curing_Tanks	3/28/2020 12:30	XP3715	M	C022531	0.0411	0.033	<0.0002	0.0627	5.23	0.0012	<0.0000019	0.0309	<0.001		142	0.00354	7.27	<0.00002	209	0.028	58.3	0.000011	<0.005	<0.005	0.00114	0.0109	0.0501	0.00012	6.5
QAQC_Curing_Tanks	5/10/2020 15:20	XT4530	M	C031867	0.0721	0.057	<0.0002	0.108	6.38	0.0013	<0.0000019	0.0456	<0.001		247	0.00455	7.23	<0.00002	382	0.024	93.3	<0.00001	<0.005	<0.005	0.002	0.0157	0.0521	0.00021	5.4
QAQC_Sink	1/10/2020 11:00	XF5145	M	C002216	0.934	<0.01	<0.0002	0.0056	10.8	<0.001	<0.000002	0.0011	<0.001		0.822	0.00022	3.34	<0.00002	4.41	0.171	13.8	<0.00001	<0.005	<0.005	0.00069	<0.005	0.0814	0.0004	0.12
QAQC_Sink	2/17/2020 13:40	XK3291	M	C011572	0.496	<0.01	<0.0002	0.0053	11.3	<0.001	<0.0000019	0.0011	<0.001		0.826	0.00026	2.99	<0.00002	4.78	0.189	15.1	<0.00001	<0.005	<0.005	0.00072	<0.005	0.0346	0.00025	<0.10
QAQC_Sink	3/28/2020 12:20	XP3714	M	C022531	0.241	<0.01	<0.0002	0.0042	11.2	<0.001	<0.0000019	<0.001	<0.001		0.716	0.0003	2.79	<0.00002	4.47	0.183	12.9	<0.00001	<0.005	<0.005	0.0007	<0.005	0.0118	0.00011	0.18
QAQC_Sink	5/10/2020 15:10	XT4529	M	C031867	0.196	<0.01	<0.0002	0.0033	15.0	<0.001	<0.0000019	0.0011	<0.001		0.861	0.00028	2.74	<0.00002	6.81	0.192	19.2	<0.00001	<0.005	<0.005	0.0009	<0.005	0.0133	<0.0001	0.25
RBAC-SUMP	5/11/2020 10:30	XT5199	M	C032074	0.00216	0.209	<0.0002	0.242	81.9	1.66	0.0000057	0.0063	0.238		4.37	0.003	4.37	<0.00002	393	0.863	429	<0.00001	0.0112	<0.005	0.00409	<0.005	0.32	<0.0001	59
RBAC-SUMP	11/24/2020 14:30	YX7836	M	C087146	0.00054	<0.01	<0.0002	0.191	16.9	0.0349	<0.0000019	0.0043	0.0105		3.04	0.00163	4.98	<0.00002	195	0.281	59.3	<0.00001	<0.005	<0.005	0.00202	<0.005	<0.005	0.0001	2.8
RB-Core-Trench-Sump	6/13/2020 13:15	XX9597	M	C040986	0.00454	0.038	<0.0002	0.0744	1.64	<0.001	<0.00019	0.0604	0.0014		9.88	0.0175	8.13	<0.00002	361	0.099	156	0.00001	0.0104	<0.005	0.00337	0.0176	<0.005	0.0002	990
RB-Core-Trench-Sump	6/20/2020 15:10	XY9031	M	C042884	0.0016	<0.02	<0.0004	0.0879	0.86	<0.002	0.000038	0.0304	<0.002		5.51	0.0175	6.57	<0.00004	475	0.111	175	<0.00002	0.011	<0.01	0.00293	<0.01	<0.01	<0.0002	2200
RB-R5B-ACDC	1/8/2020 12:15	XF3039	M	C001783	<0.0005	<0.01	<0.0002	0.0185	42.0	0.0035	<0.000002	0.0016	<0.001		5.38	0.00393	5.56	<0.00002	28.5	0.346	50.2	<0.00001	<0.005	<0.005	0.00358	<0.005	<0.005	<0.0001	1.0
RB-R5B-ACDC	2/5/2020 12:00	XI6884	M	C008469	<0.0005	<0.01	<0.0002	0.0132	38.6	0.0022	<0.000002	0.002	<0.001		4.65	0.00406	4.61	<0.00002	29.3	0.349	39.6	<0.00001	<0.005	<0.005	0.00342	<0.005	<0.005	<0.0001	1.4
RB-R5B-ACDC	3/9/2020 13:15	XN3893	M	C018020	<0.0005	<0.01	<0.0002	0.0166	38.2	0.004	<0.0000019	0.0017	0.0019		4.52	0.00406	4.77	<0.00002	28.6	0.361	41.9	<0.00001	<0.005	<0.005	0.00363	<0.005	<0.005	<0.0001	7.7
RB-R5B-ACDC	4/2/2020 11:40	XP7674	M	C023465	<0.0005	<0.01	<0.0002	0.0121	32.4	<0.001	<0.0000019	0.0015	<0.001		3.77	0.00298	4.97	<0.00002	21.4	0.273	33.2	<0.00001	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	3.8
RB-R5B-ACDC	5/9/2020 12:00	XT4487	M	C031859	<0.0005	<0.01	<0.0002	0.027	44.9	0.0021	<0.0000019	0.0017	0.0033		5.15	0.00288	5.45	<0.00002	37.5	0.404	77.9	<0.00001	<0.005	<0.005	0.00348	<0.005	<0.005	<0.0001	0.56
RB-R5B-ACDC	6/5/2020 14:40	XW9907	M	C039108	<0.0005	<0.01	<0.0002	0.021	37.9	<0.001	<0.0000019	0.0013	0.0013		4.78	0.00288	5.19	<0.00002	22.2	0.338	49.6	<0.00001	<0.005	<0.005	0.00301	<0.005	<0.005	<0.0001	0.31
RB-R5B-ACDC	7/2/2020 15:40	YA4187	M	C045984	0.00053	<0.01	<0.0002	0.0215	26.9	0.0688	<0.00019	0.0021	0.0174		3.18	0.0017	4.39	<0.00002	17.9	0.28	55.9	0.000012	<0.005	<0.005	0.00159	<0.005	0.0098	<0.0001	1100
RB-R5B-ACDC	7/10/2020 11:00	YB4120	M	C047917	<0.0005	<0.01	<0.0002	0.0147	29.7	0.0018	<0.0000019	0.0017	0.0021		4.07	0.00182	5.27	<0.00002	17.5	0.318	38.0	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	1.0
RB-R5B-ACDC	7/15/2020 10:50	YC2135	M	C049614	<0.0005	<0.01	<0.0002	0.0141	27.9	0.0049	<0.0000019	0.0017	0.0029		3.86	0.00145	5.07	<0.00002	19.5	0.316	34.2	0.000015	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	2.4
RB-R5B-ACDC	7/21/2020 14:55	YD0799	M	C051251	0.00059	<0.01	<0.0002	0.0175	27.2	0.0507	<0.00019	0.0021	0.0028		4.19	0.00147	4.64	<0.00002	21.5	0.335	39.7	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	1600
RB-R5B-ACDC	9/2/2020 14:45	YJ7832	M	C063666	<0.0005	<0.01	<0.0002	0.0153	28.7	0.0012	<0.0000019	0.0021	0.0014		4.49	0.00209	4.43	<0.00002	20.1	0.335	35.8	<0.00001	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	0.44
RCC-NE-Sump-BT	1/4/2020 15:15	XE9886	M	C000877	<0.0005	<0.01	<0.0002	0.0464	17.8	0.0196	<0.000002	0.0289	0.0016		8.57	0.00227	5.19	<0.00002	233	0.266	65.9	<0.00001	<0.005	<0.005	0.00187	0.0054	<0.005	<0.0001	17
RCC-NE-Sump-BT	1/7/2020 14:15	XF1933	M	C001464	0.00103	<0.01	<0.0002	0.0331	9.07	0.0019	<0.000002	0.0253	0.0011		9.50	0.00147	11.5	<0.00002	149	0.202	44.5	<0.00001	0.0062	<0.005	0.0009	0.0059	<0.005	<0.0001	13
RCC-NE-Sump-BT	1/14/2020 12:20	XF8101	M	C002891	<0.0005	<0.01	<0.0002	0.0368	16.1	0.0124	<0.000002	0.0157	<0.001		4.75	0.00157	4.99	<0.00002	173	0.238	52.1	<0.00001	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	6.4
RCC-NE-Sump-BT	1/24/2020 10:30	XG9571	M	C005174	<0.0005	<0.01	<0.0002	0.0368	17.3	0.0074	<0.000002	0.0175	<0.001		6.45	0.00204	4.89	<0.00002	194	0.233	56.9	<0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	0.00013	4.6
RCC-NE-Sump-BT	1/28/2020 13:30	XH5361	M	C006197	<0.0005	<0.01	<0.0002	0.037	16.2	0.0139	<0.000002	0.0172	0.0011		6.29	0.00192	4.96	<0.00002	201	0.258	60.3	<0.00001	<0.005	<0.005	0.00184	<0.005	0.0081	0.0001	3.7
RCC-NE-Sump-BT	2/5/2020 13:35	XI6888	M	C008469	<0.0005	<0.01	<0.0002	0.0379	17.1	0.0103	<0.000002	0.0212	<0.001		8.13	0.00223	4.79	<0.00002	243	0.239	70.2	<0.00001	<0.005	<0.005	0.00187	<0.005	0.0053	0.00011	10
RCC-NE-Sump-BT	2/11/2020 14:00	XJ6274	M	C010122	0.00065	<0.01	<0.0002	0.0447	14.9	0.0376	<0.0000019	0.0219	<0.001		7.09	0.00271	6.02	<0.00002	208	0.26	59.5	<0.00001	<0.005	<0.005	0.00157	<0.005	<0.005	0.00013	100
RCC-NE-Sump-BT	2/18/2020 13:15	XK4685	M	C011881	0.00139	0.167	<0.0002	0.0394	11.3	0.0264	<0.0000019	0.0249	0.0012		10.2	0.00154	8.72	<0.00002	187	0.227	47.8	<0.00001	0.006	<0.005	0.00133	0.0061	0.0114	0.00055	30
RCC-NE-Sump-BT	2/25/2020 12:15	XL5025	M	C014003	<0.0005	<0.01	<0.0002	0.04	16.5	0.0146	<0.0000019	0.0188	0.0012		6.12	0.00276	5.61	<0.00002	214	0.282	66.1	<0.00001	<0.005	<0.005	0.00173	<0.005	0.0073	<0.0001	9.6
RCC-NE-Sump-BT	3/4/2020 14:30	XM8006	M	C016829	0.00202	0.013	<0.0002	0.0388	10.8	0.0104	<0.0000019	0.0295	0.0014		10.7	0.00259	8.87	<0.00002	188	0.226	54.4	<0.00001	<0.005	<0.005	0.00138	0.0077	0.0091	0.00018	23
RCC-NE-Sump-BT	3/10/2020 11:50	XN6092	M	C018396	0.00081	0.083	<0.0002	0.0311	11.6	0.0124	<0.0000019	0.0192	0.0013		7.48	0.00151	6.68	<0.00002	158	0.238	44.0	<0.00001	<0.005	<0.005	0.00134	<0.005	0.0149	0.00019	15
RCC-NE-Sump-BT	3/17/2020 12:35	XO3909	M	C020169	0.00055	0.014	<0.0002	0.0417	14.4	0.0106	<0.0000019	0.0299	0.0011		9.22	0.00211	6.34	<0.00002	215	0.212	57.0	<0.00001	<0.005	<0.005	0.00164	0.0058	0.0101	<0.0001	15
RCC-NE-Sump-BT	3/27/2020 0:20	XP2505	M	C022160	<0.0005	<0.01	<0.0002	0.0116	12.5	0.0217	<0.0000019	0.0019	<0.001		1.17	0.00115	3.09	<0.00002	51.9	0.23	15.8	<0.00001	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	35
RCC-NE-Sump-BT	3/31/2020 12:30	XP6326	M	C023153	<0.0005	<0.01	<0.0002	0.0152	16.7	0.0217	<0.0000019	0.0018	<0.001		1.22	0.00102	3.73	<0.00002	61.1	0.24	20.3	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	2.5
RCC-NE-Sump-BT	4/7/2020 12:30	XQ3416	M	C024753	<0.0005	<0.01	<0.0002	0.0141	15.4	0.0171	<0.0000019	0.0017	<0.001		1.14	0.00111	3.33	<0.00002	61.9	0.245	17.2	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	5.5
RCC-NE-Sump-BT	4/15/2020 13:40	XQ9340	M	C026226	0.00088	0.021	<0.0002	0.0315	12.6	0.0122	0.000057	0.0178	0.0016		6.25	0.00411	4.66	<0.00002	153	0.212	53.7	<0.00001	<0.005	<0.005	0.00206	0.0053	0.0145	0.00013	710
RCC-NE-Sump-BT	4/24/2020 11:55	XR7270	M	C028014	0.00102	0.033	<0.0002	0.0405	14.8	0.0276	0.0000029	0.0198	0.0022		5.65	0.00391	4.48	<0.00002	197	0.228	86.4	0.000012	<0.005	<0.005	0.0021	<0.005	0.0068	0.00026	41
RCC-NE-Sump-BT	4/28/2020 13:15	XS2089	M	C029151	0.00092	<0.01	<0.0002	0.0416	13.2	0.0176	0.0000045	0.0203	0.002		6.11	0.00391	4.4	<0.00002	203	0.202	76.3	<0.00001	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	13
RCC-NE-Sump-BT	5/6/2020 16:50	XT1605	M	C031246	0.00121	0.015	<0.0002	0.0547	17.0	0.0164	0.0000033	0.0269	0.0018		6.24	0.00322	4.38	<0.00002	230	0.27	78.6	<0.00001	<0.005	<0.005	0.00258	0.0056	<0.005	0.00046	20
RCC-NE-Sump-BT	5/13/2020 12:40	XT8152	M	C032775	0.0007	<0.01	<0.0002	0.0462	14.5	<0.001	<0.0000019	0.0242	0.001		5.75	0.00297	4.39	<0.00002	185	0.206	72.0	0.000012	<0.005	<0.005	0.00205	<0.005	<0.005	0.00025	8.6
RCC-NE-Sump-BT	5/19/2020 13:15	XU3583	M	C033944	0.00127	<0.01	<0.0002	0.0457	14.7	0.0133	<0.0000019	0.036	0.0014		8.24	0.0041	4.96	<0.00002	232	0.252	81.4	0.000015	<0.005	<0.005	0.00255	0.0073	0.0053	0.00044	5.5
RCC-NE-Sump-BT	5/30/2020 14:30	XV8355	M	C037043	<0.001	<0.02	<0.0004	0.0917	27.0	<0.002	0.0000019	0.0122	0.0028		2.85	0.00442	3.27	<0.00004	411	0.492	229	<0.00002	<0.01	<0.01	0.00201	<0.01	<0.01	<0.0002	5.8
RCC-NE-Sump-BT	6/10/2020 13:50	XX4756	M	C040036	0.00139	<0.01	<0.0002	0.0529	10.0	<0.001	<0.000019	0.038	<0.001		11.8	0.00588	5.25	<0.00002	250	0.185	94.8	0.000014	0.0052	<0.005	0.00211	0.0088	<0.005	<0.0001	68
RCC-NE-Sump-BT	6/20/2020 14:45	XY9029	M	C042884	<0.0005	<0.01	<0.0002	0.0337	19.9	0.0611	<0.0000019	0.0032	0.0044		2.39	0.00217	3.36	<0.00002	91.8	0.456	69.5	0.000013	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	1.7
RCC-NE-Sump-BT	6/25/2020 16:00	XZ5985	M	C044346	0.00146	0.012	<0.0002	0.009	9.80	0.0016	<0.000019	0.0028	0.0011		1.82	0.00089	2.72	<0.00002	26.6	0.194	12.2	<0.00001	<0.005	<0.005	0.00074	<0.005	<0.005	<0.0001	29
RCC-NE-Sump-BT	6/30/2020 13:10	YA2737	M	C045692	0.00099	<0.01	<0.0002	0.0247	13.7	0.0616	<0.000019	0.0038	0.0025		2.91	0.00153	3.49	<0.00002	74.2	0.36	36.6	0.000011	<0.005	<0.005	0.00131	<0.005	<0.005	0.00012	36
RCC-NE-Sump-BT	7/9/2020 15:10	YB4141	M	C047920	<0.0005	<0.01	<0.0002	0.0336	21.2	0.0372	<0.0000019	0.0028	0.0059		2.31	0.00202	3.62	<0.00002	71.4	0.499	64.5	<0.00001	<0.005	<0.005	0.00171	<0.005	<0.005	<0.0001	2.7
RCC-NE-Sump-BT	7/14/2020 13:00	YC1071	M	C049344	0.0023	<0.01	<0.0002	0.049	11.1	0.048	<0.00019	0.0139	0.0027		7.08	0.00147	4.21	<0.00002	146	0.345	85.0	0.000018	<0.005	<0.005	0.00154	<0.005	<0.005	0.00017	95
RCC-NE-Sump-BT	7/23/2020 14:50	YD4257	M	C051864	0.00061	0.114	<0.0002	0.0407	18.0	0.0768	<0.0000019	0.0027	0.0037		2.61	0.00163	3.25	<0.00002	79.4	0.602	55.6	0.000016	<0.005	<0.005	0.00147	<0.005	0.0106	<0.0001	3.2
RCC-NE-Sump-BT	8/1/2020 12:00	YE6668	M	C054219	0.00057	0.054	<0.0002	0.0356	17.4	<0.001	<0.0000019	0.0032	0.002		2.86	0.00172	2.93	<0.00002	85.6	0.546	50.5	0.000014	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	3.3
RCC-NE-Sump-BT	8/13/2020 12:25	YG7259	M	C057823	0.00061	0.022	<0.0002	0.0321	16.3	<0.001	<0.0000019	0.0036	0.0018		2.67	0.00161	2.64	<0.00002	83.3	0.493	49.1	0.000013	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	3.1
RCC-NE-Sump-BT	8/22/2020 12:00	YI0131	M	C060262	0.00219	<0.01	<0.0002	0.0422	7.02	<0.001	<0.00019	0.0207	0.0015		9.78	0.0021	5.33	<0.00002	107	0.296	74.5	0.000018	<0.005	<0.005	0.00131	0.0057	<0.005	<0.0001	910
RCC-Zula-Ditch	4/7/2020 12:20	XQ3415	M	C024753	0.00055	0.02	<0.0002	0.0444	14.9	0.0042	0.0000078	0.0236	0.0019		7.81	0.00329	5.31	<0.00002	213	0.214	72.9	<0.00001	<0.005	<0.005	0.00186	0.0054	<0.005	<0.0001	48
RCC-Zula-Ditch	4/23/2020 14:30	XR7183	M	C027994	0.00157	<0.01	<0.0002	0.0507	14.6	0.0316	<0.000019	0.0239	0.0027		7.83	0.00474	5.15	<0.00002	232	0.224	95.2	0.000017	<0.005	<0.005	0.00249	0.006	0.0054	0.00011	65
RCC-Zula-Ditch	4/28/2020 12:55	XS2088	M	C029151	0.001	<0.01	<0.0002	0.056	14.1	<0.001	0.000002	0.0231	0.0014		7.84	0.00514	5.26	<0.00002	262	0.205	99.2	<0.00001	<0.005	<0.005	0.00234	0.0064	<0.005	0.00015	19

Appendix 3-C: 2020 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
RCC-Zula-Ditch	5/6/2020 16:10	XT1604	M	C031246	0.00123	<0.01	<0.0002	0.0482	15.1	<0.001	0.000008	0.0277	0.0012		6.68	0.00388	4.49	<0.00002	254	0.2	101	<0.00001	<0.005	<0.005	0.00243	0.0067	<0.005	<0.0001	39
RCC-Zula-Ditch	5/13/2020 12:25	XT8151	M	C032775	0.00101	<0.01	<0.0002	0.0593	15.7	<0.001	<0.0000019	0.0299	<0.001		7.42	0.00355	5.13	<0.00002	242	0.2	93.2	0.000017	<0.005	<0.005	0.00257	0.006	<0.005	0.00033	9.0
RCC-Zula-Ditch	5/19/2020 12:55	XU3582	M	C033944	0.0013	<0.01	<0.0002	0.0532	15.6	<0.001	0.0000031	0.0402	0.0011		9.49	0.00521	5.6	<0.00002	273	0.222	107	<0.00001	<0.005	<0.005	0.00296	0.009	<0.005	0.00021	11
RSEM-L5E-EOP	4/13/2020 10:30	XQ5693	M	C025217	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	0.0000021	<0.001	<0.001		<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	22
RSEM-L5E-EOP	4/14/2020 10:45	XQ8324	M	C025913	0.00192	<0.01	<0.0002	0.0065	24.5	0.164	<0.0000019	0.0057	0.0031		3.89	0.0051	1.33	<0.00002	27.2	0.284	62.9	<0.00001	<0.005	<0.005	0.00332	<0.005	<0.005	<0.0001	24
RSEM-L5E-EOP	4/14/2020 10:55	XQ8325	D	C025913	0.00177	<0.01	<0.0002	0.0064	23.6	0.159	<0.0000019	0.0052	0.0031		3.79	0.00481	1.26	<0.00002	26.6	0.273	59.6	<0.00001	<0.005	<0.005	0.00339	<0.005	<0.005	<0.0001	25
RSEM-L5E-EOP	4/15/2020 18:00	XQ9343	M	C026226	0.00212	<0.01	<0.0002	0.006	21.7	0.158	<0.0000019	0.005	0.0033		3.73	0.00357	1.27	<0.00002	24.1	0.263	52.3	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	48
RSEM-L5E-EOP	4/16/2020 14:35	XR0410	M	C026516	0.00199	0.01	<0.0002	0.006	20.1	0.139	0.00003	0.0046	0.0031		3.35	0.00363	1.32	<0.00002	21.1	0.244	51.2	0.000014	<0.005	<0.005	0.00293	<0.005	<0.005	<0.0001	66
RSEM-L5E-EOP	4/17/2020 12:50	XR0399	M	C026514	0.00199	<0.01	<0.0002	0.0056	18.1	0.12	<0.000019	0.0042	0.0027		3.16	0.00302	1.3	<0.00002	18.7	0.228	44.1	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	0.00011	78
RSEM-L5E-EOP	4/18/2020 13:10	XR2303	M	C026869	0.00223	0.014	<0.0002	0.0049	17.7	0.108	<0.0000019	0.0042	0.0026		3.07	0.00244	1.17	<0.00002	17.7	0.216	42.2	0.000016	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	33
RSEM-L5E-EOP	4/19/2020 16:30	XR2518	M	C026927	0.00214	0.016	<0.0002	0.0055	17.1	0.107	<0.000019	0.0044	0.0027		3.00	0.00249	1.17	<0.00002	17.5	0.213	39.8	<0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	31
RSEM-L5E-EOP	4/20/2020 14:20	XR3422	M	C027099	0.00254	0.283	0.00039	0.0051	16.0	0.109	<0.0000019	0.0037	0.003		2.65	0.00271	1.26	<0.00002	16.1	0.189	39.4	<0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	0.0001	26
RSEM-L5E-EOP	4/20/2020 14:30	XR3423	D	C027099	0.00273	0.326	0.0004	0.0052	17.6	0.125	<0.0000019	0.0034	0.0034		2.99	0.00262	1.3	<0.00002	18.1	0.223	43.6	0.000015	<0.005	<0.005	0.00251	<0.005	<0.005	0.00013	27
RSEM-L5E-EOP	4/21/2020 13:10	XR4954	M	C027465	0.00205	0.027	<0.0002	0.0037	19.0	0.111	0.0000028	0.0052	0.0024		3.06	0.0026	1.1	<0.00002	21.4	0.205	47.8	<0.00001	<0.005	<0.005	0.00242	<0.005	0.0057	<0.0001	26
RSEM-L5E-EOP	4/22/2020 13:50	XR6357	M	C027799	0.00179	<0.01	<0.0002	0.0046	20.5	0.122	0.0000024	0.0068	0.0026		3.23	0.00249	1.26	<0.00002	23.2	0.232	48.3	<0.00001	<0.005	<0.005	0.00286	<0.005	0.0089	<0.0001	18
RSEM-L5E-EOP	4/23/2020 11:40	XR7179	M	C027994	0.00177	0.019	<0.0002	0.0058	18.6	0.104	0.0000023	0.004	0.003		3.04	0.00229	1.26	<0.00002	21.1	0.22	42.2	0.000013	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	11
RSEM-L5E-EOP	4/23/2020 11:50	XR7180	D	C027994	0.00205	0.017	<0.0002	0.0064	20.9	0.116	<0.0000019	0.0045	0.0032		3.42	0.00246	1.38	<0.00002	22.6	0.249	46.3	0.000012	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	13
RSEM-L5E-EOP	4/24/2020 13:30	XR7271	M	C028014	0.00166	<0.01	<0.0002	0.0056	17.6	0.0997	<0.0000019	0.0042	0.0029		2.76	0.00223	1.21	<0.00002	19.8	0.196	42.0	0.000016	<0.005	<0.005	0.00265	<0.005	<0.005	0.00014	10
RSEM-L5E-EOP	4/25/2020 13:30	XR8897	M	C028412	0.00193	0.015	<0.0002	0.0057	18.2	0.0876	<0.0000019	0.0044	0.0028		3.14	0.00266	1.38	<0.00002	21.9	0.232	46.9	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	4.2
RSEM-L5E-EOP	4/26/2020 14:15	XR8995	M	C028429	0.00181	<0.01	<0.0002	0.0062	18.4	0.0859	<0.0000019	0.0041	0.0028		2.99	0.00248	1.62	<0.00002	22.0	0.216	43.7	<0.00001	<0.005	0.0063	0.00252	<0.005	<0.005	<0.0001	3.5
RSEM-L5E-EOP	4/27/2020 9:55	XS0056	M	C028666	<0.0005	<0.01	<0.0002	<0.002	20.9	0.0183	<0.0000019	<0.001	<0.001		3.23	0.0005	1.49	<0.00002	4.86	0.246	10.3	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	3.4
RSEM-L5E-EOP	4/27/2020 10:05	XS0057	D	C028666	<0.0005	<0.01	<0.0002	<0.002	21.7	0.0184	<0.0000019	<0.001	<0.001		3.44	0.00332	1.55	<0.00002	4.94	0.26	10.1	<0.00001	<0.005	<0.005	0.00322	<0.005	<0.005	<0.0001	4.1
RSEM-L5E-EOP	4/28/2020 15:05	XS2091	M	C029151	0.00166	<0.01	<0.0002	0.0066	20.0	0.0711	0.000003	0.0045	0.0026		3.07	0.00262	1.29	<0.00002	23.9	0.223	47.7	<0.00001	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	7.5
RSEM-L5E-EOP	4/29/2020 13:50	XS3522	M	C029452	0.00196	0.04	<0.0002	0.0083	25.3	0.0719	<0.0000019	0.0049	0.0027		3.55	0.00295	1.43	<0.00002	27.8	0.284	61.7	<0.00001	<0.005	<0.005	0.00348	<0.005	<0.005	<0.0001	6.4
RSEM-L5E-EOP	4/30/2020 14:10	XS4885	M	C029734	0.00142	<0.01	<0.0002	0.0083	22.1	0.037	<0.0000019	0.0044	0.0024		3.12	0.00271	1.24	<0.00002	27.2	0.244	53.4	0.00002	<0.005	<0.005	0.0029	<0.005	<0.005	<0.0001	3.1
RSEM-L5E-EOP	5/1/2020 13:20	XS5999	M	C029956	0.00202	<0.01	<0.0002	0.0093	25.2	0.0635	<0.0000019	0.0052	0.0033		3.64	0.0032	1.4	<0.00002	30.9	0.285	56.2	<0.00001	<0.005	<0.005	0.00352	<0.005	<0.005	<0.0001	4.0
RSEM-L5E-EOP	5/3/2020 9:15	XS7393	M	C030307	0.0017	<0.01	<0.0002	0.0094	24.9	0.0418	<0.0000019	0.0052	0.0026		3.36	0.00272	1.25	<0.00002	30.8	0.268	57.7	<0.00001	<0.005	<0.005	0.00324	<0.005	<0.005	<0.0001	6.9
RSEM-L5E-EOP	5/4/2020 15:30	XS8357	M	C030506	0.00165	<0.01	<0.0002	0.0098	27.8	0.028	<0.0000019	0.0049	0.0026		3.77	0.00272	1.46	<0.00002	32.9	0.305	64.9	0.000016	<0.005	<0.005	0.00336	<0.005	<0.005	<0.0001	6.8
RSEM-L5E-EOP	5/5/2020 13:15	XT0142	M	C030949	0.00154	0.02	<0.0002	0.0101	29.9	0.0262	<0.0000019	0.0076	0.0027		3.69	0.00298	1.58	<0.00002	33.4	0.321	71.9	0.000011	<0.005	<0.005	0.0036	<0.005	<0.005	<0.0001	4.5
RSEM-L5E-EOP	5/6/2020 17:15	XT1606	M	C031246	0.00139	<0.01	<0.0002	0.0108	28.4	0.0243	<0.0000019	0.0051	0.0024		2.85	0.00229	1.71	<0.00002	28.5	0.302	76.0	<0.00001	<0.005	<0.005	0.00378	<0.005	<0.005	<0.0001	2.7
RSEM-L5E-EOP	5/7/2020 14:35	XT2580	M	C031444	0.0009	0.011	<0.0002	0.0105	30.1	0.0352	<0.0000019	0.0038	0.0015		2.62	0.00163	2.04	<0.00002	32.2	0.315	99.0	<0.00001	<0.005	<0.005	0.00319	<0.005	<0.005	<0.0001	4.3
RSEM-L5E-EOP	5/8/2020 12:20	XT2571	M	C031442	0.00107	<0.01	<0.0002	0.0098	29.6	0.0337	<0.0000019	0.0041	0.0021		2.83	0.00172	1.83	<0.00002	28.2	0.338	75.2	0.000021	<0.005	<0.005	0.00341	<0.005	<0.005	<0.0001	3.8
RSEM-L5E-EOP	5/9/2020 14:10	XT4491	M	C031859	0.00072	0.075	<0.0002	0.008	29.9	0.0273	<0.0000019	0.0034	0.0015		2.38	0.00131	2.1	<0.00002	28.5	0.296	101	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	0.00043	6.2
RSEM-L5E-EOP	5/10/2020 12:00	XT4526	M	C031867	0.00061	0.012	<0.0002	0.0085	30.7	0.059	<0.0000019	0.0031	0.0014		2.20	0.0011	2.03	<0.00002	30.9	0.318	96.3	<0.00001	<0.005	<0.005	0.00297	<0.005	<0.005	<0.0001	5.5
RSEM-L5E-EOP	5/11/2020 11:45	XT5201	M	C032074	0.00064	<0.01	<0.0002	0.0089	33.2	0.103	<0.0000019	0.003	0.0013		2.15	0.00099	2.47	<0.00002	32.2	0.357	117	<0.00001	<0.005	<0.005	0.00313	<0.005	<0.005	<0.0001	5.4
RSEM-L5E-EOP	5/12/2020 14:45	XT7073	M	C032509	0.00056	0.02	<0.0002	0.0087	34.8	0.0207	<0.0000019	0.0026	0.0016		2.11	0.00081	2.75	<0.00002	33.2	0.36	120	<0.00001	<0.005	<0.005	0.00336	<0.005	<0.005	<0.0001	7.7
RSEM-L5E-EOP	5/13/2020 14:45	XT8157	M	C032775	<0.0005	0.017	<0.0002	0.0077	30.8	0.224	<0.0000019	0.0019	0.0017		1.58	0.00046	2.8	<0.00002	24.0	0.327	115	0.000013	<0.005	<0.005	0.00259	<0.005	<0.005	<0.0001	24
RSEM-L5E-EOP	5/14/2020 13:40	XU0101	M	C033161	<0.0005	<0.01	<0.0002	0.0048	30.7	0.306	<0.0000019	0.0021	0.0015		1.42	0.00038	2.9	<0.00002	23.9	0.345	117	0.000021	<0.005	<0.005	0.00275	<0.005	<0.005	0.00024	9.0
RSEM-L5E-EOP	5/15/2020 10:15	XU0133	M	C033173	<0.0005	<0.01	<0.0002	0.0042	30.8	0.375	<0.0000019	0.002	0.0018		1.38	0.00037	2.89	<0.00002	23.4	0.348	111	0.000016	<0.005	<0.005	0.00247	<0.005	0.0056	<0.0001	5.1
RSEM-L5E-EOP	5/16/2020 14:40	XU2653	M	C033733	<0.0005	<0.01	<0.0002	0.0036	31.2	0.412	<0.0000019	0.002	0.0015		1.37	0.00038	2.76	<0.00002	23.1	0.344	118	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	1.8
RSEM-L5E-EOP	5/17/2020 13:10	XU2519	M	C033704	<0.0005	<0.01	<0.0002	0.0036	30.0	0.397	<0.0000019	0.0019	0.0014		1.26	0.00045	2.76	<0.00002	22.3	0.335	116	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	0.00019	1.6
RSEM-L5E-EOP	5/18/2020 14:35	XU2640	M	C033728	<0.0005	<0.01	<0.0002	0.0035	30.6	0.351	<0.0000019	0.0038	0.0014		1.32	0.00034	2.64	<0.00002	22.6	0.332	113	0.00001	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	0.95
RSEM-L5E-EOP	5/19/2020 15:30	XU3588	M	C033944	<0.0005	<0.01	<0.0002	0.0031	32.9	0.293	<0.0000019	0.004	0.0015		1.49	0.00037	2.64	<0.00002	24.6	0.369	114	0.000018	<0.005	<0.005	0.00248	<0.005	<0.005	0.00034	3.0
RSEM-L5E-EOP	5/20/2020 14:05	XU5561	M	C034306	<0.0005	<0.01	<0.0002	0.0059	29.4	0.205	<0.0000019	0.0017	0.0014		1.34	0.00048	2.33	<0.00002	24.7	0.31	104	<0.00001	<0.005	<0.005	0.00212	<0.005	<0.005	0.00013	0.87
RSEM-L5E-EOP	5/21/2020 16:00	XU7001	M	C034623	<0.0005	0.012	<0.0002	0.008	21.5	0.155	<0.0000019	0.0011	0.0012		1.10	0.00035	2.25	<0.00002	16.6	0.246	61.3	<0.00001	<0.005	<0.005	0.00154	<0.005	<0.005	<0.0001	3.0
RSEM-L5E-EOP	5/22/2020 17:05	XU8404	M	C034984	<0.0005	<0.01	<0.0002	0.0052	26.1	0.187	<0.0000019	0.0018	0.0013		1.31	0.00044	2.07	<0.00002	20.7	0.281	98.5	<0.00001	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	3.0
RSEM-L5E-EOP	5/23/2020 15:40	XU8589	M	C034993	<0.0005	<0.01	<0.0002	0.0059	27.7	0.0506	<0.0000019	0.0019	0.0013		1.61	0.00059	2.26	<0.00002	21.4	0.329	104	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	3.2
RSEM-L5E-EOP	5/24/2020 13:45	XU8649	M	C035010	<0.0005	<0.01	<0.0002	0.0061	27.7	0.0413	<0.0000019	0.0019	0.0012		1.61	0.00066	2.18	<0.00002	21.7	0.324	104	<0.00001	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	5.3
RSEM-L5E-EOP	6/9/2020 12:30	XX3622	M	C039793	0.00128	<0.01	<0.0002	0.0176	40.6	0.272	0.0000088	0.0042	0.0091		4.91	0.00536	1.57	<0.00002	34.1	0.459	142	0.000013	<0.005	<0.005	0.00395	<0.005	<0.005	<0.0001	45
RSEM-L5E-EOP	6/10/2020 11:55	XX4750	M	C040036	0.00133	<0.01	<0.0002	0.0171	39.5	0.267	<0.0000019	0.0041	0.0099		5.09	0.00544	1.54	<0.00002	32.8	0.475	140	0.000014	<0.005	<0.005	0.00406	<0.005	<0.005	<0.0001	11
RSEM-L5E-EOP	6/10/2020 12:05	XX4751	D	C040036	0.00138	<0.01	<0.0002	0.0165	40.3	0.273	<0.0000019	0.0041	0.0101		5.19	0.00546	1.53	<0.00002	33.3	0.461	142	0.000015	<0.005	<0.005	0.00406	<0.005	<0.005	<0.0001	13
RSEM-L5E-EOP	6/11/2020 14:35	XX7043	M	C040416	0.00155	<0.01	<0.0002	0.0184	42.6	0.25	<0.0000019	0.0043	0.01		5.53	0.00547	1.5	<0.00002	35.1	0.509	144	0.000015	<0.005	<0.005	0.00434	<0.005	<0.005	<0.0001	2.3
RSEM-L5E-EOP	6/12/2020 14:55	XX9584	M	C040980	0.00149	<0.01	<0.0002	0.0184	41.9	0.23	<0.0000019	0.0043	0.0096		5.57	0.00566	1.47	<0.00002	35.0	0.506	142	0.000016	<0.005	<0.005	0.00436	<0.005	<0.005	<0.0001	1.1
RSEM-L5E-EOP	6/13/2020 16:15	XX9603	M	C040986	0.00144	<0.01	<0.0002	0.0175	40.0	0.173	0.0000028	0.0041	0.0085		5.35	0.00547	1.3	<0.00002	32.9	0.489	137	0.000016	<0.005	<0.005	0.0044	<0.005	<0.005	<0.0001	1.7
RSEM-L5E-EOP	6/14/2020 13:00	XX9643	M	C040993	0.00166	<0.01	<0.0002	0.0181	40.7	0.173	0.000005	0.0044	0.0086		5.77	0.00559	1.25	<0.00002	36.2	0.504	138	0.000016	<0.005	<0.005	0.00434	<0.005	<0.005	<0.0001	10
RSEM-L5E-EOP	6/14/2020 13:10	XX9644	D	C040993	0.00167	<0.01	<0.0002	0.0179	40.9	0.178	0.000005	0.0044	0.0086		5.97	0.00546	1.3	<0.00002	36.8	0.489	141	0.000016	<0.005	<0.005	0.00432	<0.005	<0.005	<0.0001	15
RSEM-L5E-EOP	6/15/2020 19:45	XY1608	M	C041415	0.00145	0.011	<0.0002	0.0281	50.6	0.96	0.0000023	0.0051	0.0732		5.22	0.012	1.37	<0.00002	33.0	0.629	193	0.000019	<0.005	<0.005	0.0049	<0.005	0.0559	<0.0001	13
RSEM-L5E-EOP	6/16/2020 12:40	XY1512	M	C041388	0.00154	<0.01	<0.0002	0.0423	58.0	1.44	<0.0000019	0.0053	0.101		5.45	0.0149	1.75	<0.00002	36.8	0.766	239	0.000024	<0.005	<0.005	0.00532	<0.005	0.0535	<0.0001	3.8
RSEM-L5E-EOP	6/17/2020 17:30	XY6281	M	C042380	0.00126	<0.01	<0.0002	0.0375	56.3	1.11	<0.0000019	0.006	0.0769		5.59	0.0159	1.62	<0.00002	53.1	0.754	231	0.000022	<0.005	<0.005	0.00504	<0.005	0.0385	<0.0001	2.3
RSEM-L5E-EOP	6/18/2020 16:50	XY6288	M	C042383	0.00116	<0.01	<0.0002	0.0365	57.2	0.955	<0.0000019	0.0067	0.0666		5.75	0.0173	1.6	<0.00002	71.6	0.735	245	0.000022	<0.005	<0.005	0.00512	<0.005	0.0271	<0.0001	1.4
RSEM-L5E-EOP	6/19/2020 10:45	XY6267	M	C042375	0.00147	<0.01	<0.0002	0.0337	53.6	0.68	<0.000019	0.0082	0.0398		7.13	0.0148	2.23	<0.00002	90.1	0.697	231	0.000022	<0.005	<0.005	0.00516	<0.005	0.0101	<0.0001	23
RSEM-L5E-EOP	6/20/2020 12:45	XY9024	M	C042884	0.00234	0.011	<0.0002	0.0206	34.7	0.303	<0.000019	0.0062	0.0172		5.92	0.00878	2.48	<0.00002	57.7	0.438	137	0.00002	<0.005	<0.005	0.0038	<0.005	<0.005	0.00016	39
RSEM-L5E-EOP	6/21/2020 11:00	XY9117	M	C042904	0.00276	0.024	<0.0002	0.0168	29.0	0.155	0.0000067	0.0061	0.0107		5.79	0.00526	2.56	<0.00002	40.4	0.364	104	0.00002	<0.005	<0.005	0.00339	<0.005	<0.005	0.00024	55
RSEM-L5E-EOP	6/22/2020 17:10	XZ0409	M	C043197	0.00285	0.013	<0.0002	0.0146	27.8	0.115	<0.000019	0.005	0.0094		5.50	0.00486	2.47	<0.00002	37.7	0.349	96.0	0.000018	<0.005	<0.005	0.00322	<0.005	<0.005	0.0002	17
RSEM-L5E-EOP	6/23/2020 17:30	XZ2253	M	C043604	0.00279	<0.01	<0.0002	0.0144	28.7	0.117	<0.000019	0.0052	0.0093		5.59	0.00486	2.52	<0.00002	38.6	0.375	100	0.000022	<0.005	<0.005	0.00337	<0.005	<0.005	0.00012	14
RSEM-L5E-EOP	6/24/2020 11:40	XZ5346	M	C044267	0.0027	<0.01	<0.0002	0.0173	30.9	0.125	0.00002	0.0054	0.0103		5.78	0.00565	2.38	<0.00002	44.6	0.384	111	0.000021	<0.005	<0.005	0.00371	<0.005	<0.005	0.00018	19
RSEM-L5E-EOP	6/24/2020 11:50	XZ5347	D	C044267	0.00267	<0.01	<0.0002	0.0172	30.8	0.135	0.000019	0.0055	0.0104		5.67	0.00571	2.41	<0.00002	44.7	0.395	111	0.000021	<0.005	<0.005	0.00368	<0.005	<0.005	0.00016	18
RSEM-L5E-EOP	6/25/2020 18:10	XZ5988	M	C044346	0.00233	<0.01	<0.0002	0.0211	36.8	0.217	0.000004	0.0066	0.0149		6.37	0.00821	2.26	<0.00002	60.8	0.469	145	0.000024	<0.005	<0.005	0.00418	<0.005	<0.005	0.0002	20
RSEM-L5E-EOP	7/2/2020 16:30	YA4192	M	C045985	0.00218	<0.01	<0.0002	0.0248	40.4	0.415	<0.0000019	0.0056	0.0181		5.03	0.00659	1.3	<0.00002	46.9	0.511	154	0.000017	<0.005	<0.005	0.00476	<0.005	<0.005	<0.0001	8.1

Appendix 3-C: 2020 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-EOP	7/3/2020 11:00	YA5151	M	C046179	0.00138	<0.01	<0.0002	0.0129	35.0	0.163	<0.0000019	0.0069	0.0052		4.07	0.00621	1.36	<0.00002	26.4	0.471	130	0.000015	<0.005	<0.005	0.00447	<0.005	<0.005	<0.0001	77
RSEM-L5E-EOP	7/3/2020 11:10	YA5152	D	C046179	0.00138	<0.01	<0.0002	0.0129	34.2	0.156	<0.0000019	0.007	0.005		3.99	0.00613	1.35	<0.00002	25.5	0.474	126	0.000016	<0.005	<0.005	0.0044	<0.005	<0.005	<0.0001	83
RSEM-L5E-EOP	7/4/2020 16:05	YA6737	M	C046470	0.00136	<0.01	<0.0002	0.0185	41.3	0.425	<0.000019	0.0064	0.0174		3.99	0.00983	1.86	<0.00002	35.2	0.463	146	0.000017	<0.005	<0.005	0.00463	<0.005	<0.005	<0.0001	48
RSEM-L5E-EOP	7/5/2020 13:10	YA6922	M	C046500	0.00131	<0.01	<0.0002	0.0447	52.5	0.829	<0.000019	0.0075	0.043		5.49	0.0155	2.19	<0.00002	137	0.633	266	0.000025	<0.005	<0.005	0.00482	<0.005	0.0126	<0.0001	37
RSEM-L5E-EOP	7/6/2020 13:25	YA8351	M	C046846	0.00132	<0.01	<0.0002	0.038	49.7	0.612	<0.000019	0.0085	0.0286		5.15	0.0149	2.1	<0.00002	130	0.602	231	0.00002	<0.005	<0.005	0.00543	<0.005	<0.005	<0.0001	22
RSEM-L5E-EOP	7/7/2020 16:20	YB0053	M	C047206	0.00132	<0.01	<0.0002	0.0457	50.1	0.634	<0.0000019	0.0087	0.0302		5.55	0.017	2.36	<0.00002	138	0.618	257	0.000027	<0.005	<0.005	0.00547	<0.005	0.0063	<0.0001	14
RSEM-L5E-EOP	7/22/2020 12:30	YD2615	M	C051641	<0.001	<0.02	<0.0004	0.0572	29.0	0.0063	<0.0000019	0.01	<0.002		7.02	0.0288	0.918	<0.00004	226	1.04	387	<0.00002	<0.01	<0.01	0.00074	<0.01	<0.01	<0.0002	1.6
RSEM-L5E-EOP	7/22/2020 12:40	YD2616	D	C051641	<0.001	<0.02	<0.0004	0.054	27.8	0.006	<0.0000019	0.0095	<0.002		6.72	0.0275	0.876	<0.00004	217	1	370	<0.00002	<0.01	<0.01	0.00071	<0.01	<0.01	<0.0002	1.5
RSEM-L5E-EOP	7/23/2020 11:05	YD4252	M	C051864	<0.001	<0.02	<0.0004	0.0588	17.2	<0.002	<0.0000019	0.0097	<0.002		7.10	0.0262	0.759	<0.00004	232	1.06	381	<0.00002	<0.01	<0.01	<0.0002	<0.01	<0.01	<0.0002	1.1
RSEM-L5E-EOP	7/23/2020 11:15	YD4253	D	C051864	<0.001	<0.02	<0.0004	0.0597	17.3	<0.002	<0.0000019	0.0097	<0.002		7.02	0.0265	0.759	<0.00004	231	1.07	378	<0.00002	<0.01	<0.01	<0.0002	<0.01	<0.01	<0.0002	1.1
RSEM-L5E-EOP	7/24/2020 11:35	YD5907	M	C052038	<0.001	<0.02	<0.0004	0.0604	16.8	0.0029	<0.0000019	0.0095	<0.002		7.02	0.0266	0.741	<0.00004	239	1.05	384	<0.00002	<0.01	<0.01	0.0002	<0.01	<0.01	<0.0002	1.1
RSEM-L5E-EOP	7/25/2020 10:30	YD7672	M	C052402	<0.0025	<0.05	<0.001	0.056	18.7	<0.005	<0.0000019	0.0096	<0.005		7.13	0.0255	0.841	<0.0001	249	0.996	382	<0.00005	<0.025	<0.025	<0.0005	<0.025	<0.025	<0.0005	0.73
RSEM-L5E-EOP	7/25/2020 10:40	YD7673	D	C052402	<0.0025	<0.05	<0.001	0.058	18.6	<0.005	<0.0000019	0.0095	<0.005		7.09	0.0258	0.855	<0.0001	246	1	382	<0.00005	<0.025	<0.025	<0.0005	<0.025	<0.025	<0.0005	0.71
RSEM-L5E-EOP	7/26/2020 11:05	YD7710	M	C052420	<0.001	<0.02	<0.0004	0.0526	18.0	<0.002	<0.0000019	0.01	<0.002		6.81	0.0256	0.728	<0.00004	240	0.993	379	<0.00002	<0.01	<0.01	0.00033	<0.01	<0.01	<0.0002	0.93
RSEM-L5E-EOP	7/27/2020 11:00	YD7770	M	C052432	<0.0025	<0.05	<0.001	0.058	19.2	<0.005	<0.0000019	0.0098	<0.005		6.94	0.0257	0.785	<0.0001	245	0.982	379	<0.00005	<0.025	<0.025	<0.0005	<0.025	<0.025	<0.0005	2.1
RSEM-L5E-EOP	7/29/2020 13:00	YE4005	M	C053695	<0.001	<0.02	<0.0004	0.0528	19.6	0.005	<0.0000019	0.0092	<0.002		6.83	0.0259	0.85	<0.00004	232	1.06	396	<0.00002	<0.01	<0.01	0.00048	<0.01	<0.01	<0.0002	1.5
RSEM-L5E-EOP	7/30/2020 17:00	YE5559	M	C054021	<0.001	<0.02	<0.0004	0.0621	35.8	<0.002	<0.0000019	0.0096	<0.002		7.18	0.0242	1.07	<0.00004	234	1.07	396	0.000026	<0.01	<0.01	0.00128	<0.01	<0.01	<0.0002	1.5
RSEM-L5E-EOP	8/29/2020 13:25	YJ1742	M	C062465	0.00185	<0.01	<0.0002	0.0163	59.9	0.0073	<0.0000019	0.0098	0.0022		6.49	0.0167	1.05	<0.00002	73.5	0.918	267	0.000016	0.0091	<0.005	0.0065	<0.005	<0.005	<0.0001	5.4
RSEM-L5E-EOP	8/30/2020 10:45	YJ1568	M	C062426	0.00178	<0.01	<0.0002	0.0162	58.9	0.0046	<0.0000019	0.0098	0.0021		6.36	0.0176	1	<0.00002	74.8	0.906	279	0.000017	0.0087	<0.005	0.00639	<0.005	<0.005	<0.0001	6.8
RSEM-L5E-EOP	8/31/2020 11:45	YJ3636	M	C062857	0.00165	<0.01	<0.0002	0.0201	68.5	<0.001	<0.0000019	0.0097	0.0021		6.71	0.0153	0.945	<0.00002	89.8	0.948	303	0.000017	0.0086	<0.005	0.00688	<0.005	<0.005	<0.0001	6.6
RSEM-L5E-EOP	9/1/2020 10:25	YJ6688	M	C063433	0.00154	<0.01	<0.0002	0.0217	69.0	0.01	<0.0000019	0.0095	0.0022		6.60	0.0136	0.859	<0.00002	98.2	0.947	307	0.000016	0.008	<0.005	0.00692	<0.005	<0.005	<0.0001	6.8
RSEM-L5E-EOP	9/2/2020 12:10	YJ7828	M	C063666	0.00148	<0.01	<0.0002	0.0189	69.2	<0.001	<0.0000019	0.0094	0.0023		6.63	0.0134	0.786	<0.00002	101	0.908	299	0.000016	0.0077	<0.005	0.00724	<0.005	<0.005	<0.0001	9.1
RSEM-L5E-EOP	9/2/2020 12:20	YJ7829	D	C063666	0.00149	<0.01	<0.0002	0.0189	68.2	<0.001	<0.0000019	0.0095	0.0022		6.57	0.0136	0.777	<0.00002	101	0.9	297	0.000017	0.0076	<0.005	0.00719	<0.005	<0.005	<0.0001	9.2
RSEM-L5E-EOP	9/3/2020 13:35	YK0029	M	C064047	0.00148	<0.01	<0.0002	0.0227	72.1	<0.001	<0.0000019	0.0099	0.0023		6.75	0.0132	0.753	<0.00002	102	0.971	308	0.000019	0.0075	<0.005	0.00734	<0.005	<0.005	<0.0001	7.0
RSEM-L5E-SP	2/29/2020 14:30	XM2365	M	C015500	0.00137	<0.01	<0.0002	0.0052	27.0	0.0882	<0.0000019	0.0078	0.0025		4.08	0.00614	1.18	<0.00002	18.8	0.263	90.0	<0.00001	<0.005	<0.005	0.00367	<0.005	0.0058	<0.0001	10
RSEM-L5E-SP	5/2/2020 10:45	XS7459	M	C030328	0.00165	<0.01	<0.0002	0.0084	22.3	0.0489	<0.0000019	0.0046	0.003		3.42	0.00261	1.25	<0.00002	27.0	0.27	52.5	0.000012	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	3.8
RSEM-L5E-SP	5/25/2020 10:30	XU8667	M	C035018	<0.0005	<0.01	<0.0002	0.0065	28.0	0.0684	<0.0000019	0.002	0.0013		1.64	0.00075	2.14	<0.00002	23.5	0.329	105	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	2.0
RSEM-L5E-SP	5/26/2020 16:30	XV2884	M	C035941	<0.0005	<0.01	<0.0002	0.0056	28.5	0.0567	<0.0000019	0.002	0.0013		1.63	0.00073	1.82	<0.00002	22.5	0.319	98.5	<0.00001	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	0.35
RSEM-L5E-SP	5/27/2020 14:30	XV4566	M	C036323	<0.0005	<0.01	<0.0002	0.0057	28.6	0.0634	<0.0000019	0.002	0.0013		1.65	0.00081	1.77	<0.00002	23.3	0.332	98.9	<0.00001	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	1.6
RSEM-L5E-SP	5/30/2020 17:45	XV8357	M	C037043	<0.0005	<0.01	<0.0002	0.0069	29.7	0.0336	<0.0000019	0.0023	0.0014		1.67	0.00112	1.57	<0.00002	24.4	0.308	106	<0.00001	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	1.3
RSEM-L5E-SP	7/21/2020 11:47	YC8397	M	C050753	<0.001	<0.02	<0.0004	0.0473	32.9	0.0093	<0.0000019	0.0115	<0.002		6.74	0.0208	0.99	<0.00004	189	0.883	344	<0.00002	<0.01	<0.01	0.00219	<0.01	<0.01	<0.0002	8.7
RSEM-L5E-SP	8/28/2020 16:20	YI9496	M	C062013	0.00192	<0.01	<0.0002	0.0161	61.7	0.013	<0.0000019	0.01	0.0022		6.56	0.0168	1.06	<0.00002	79.8	0.921	289	0.000014	0.0084	<0.005	0.00644	<0.005	<0.005	<0.0001	5.5
RSEM-L5W-EOP	4/19/2020 16:45	XR2519	M	C026927	0.00083	<0.01	<0.0002	0.0231	15.6	0.0038	<0.0000019	0.0126	0.0019		5.85	0.0056	2.99	<0.00002	137	0.195	103	0.000012	<0.005	<0.005	0.00209	<0.005	0.0069	<0.0001	18
RSEM-L5W-EOP	4/19/2020 19:30	XR3421	M	C027098	0.00092	<0.01	<0.0002	0.0263	16.2	0.0129	<0.0000019	0.0125	0.0023		6.26	0.00642	3.29	<0.00002	152	0.218	117	0.000014	<0.005	<0.005	0.00215	<0.005	0.0054	<0.0001	14
RSEM-L5W-EOP	7/4/2020 16:15	YA6738	M	C046470	0.00104	<0.01	<0.0002	0.0127	30.5	0.0211	<0.000019	0.0063	0.0014		3.89	0.0105	1.42	<0.00002	76.7	0.362	153	0.000012	<0.005	<0.005	0.00324	<0.005	<0.005	<0.0001	6.8
RSEM-L5W-EOP	7/5/2020 13:20	YA6923	M	C046500	0.00103	<0.01	<0.0002	0.0119	30.6	0.0171	<0.0000019	0.0062	0.0015		3.91	0.01	1.54	<0.00002	73.8	0.368	152	0.00001	<0.005	<0.005	0.00343	<0.005	<0.005	<0.0001	2.0
RSEM-L5W-EOP	7/7/2020 16:30	YB0054	M	C047206	0.00076	<0.01	<0.0002	0.0152	32.2	0.0069	<0.0000019	0.0066	0.0014		3.95	0.0102	1.64	<0.00002	73.8	0.388	160	0.000013	<0.005	<0.005	0.00375	<0.005	<0.005	<0.0001	14
RSEM-L5W-EOP	7/8/2020 16:00	YB2463	M	C047619	0.00078	<0.01	<0.0002	0.0142	33.4	0.0012	<0.000019	0.0064	0.0012		3.99	0.0106	1.63	<0.00002	76.4	0.383	164	0.000011	<0.005	<0.005	0.00391	<0.005	<0.005	<0.0001	10
RSEM-L5W-SP	7/3/2020 11:20	YA5153	M	C046179	0.00087	<0.01	<0.0002	0.0162	34.5	0.006	<0.0000019	0.007	0.0013		4.21	0.0138	1.4	<0.00002	99.8	0.423	189	0.000011	<0.005	<0.005	0.00382	<0.005	<0.005	<0.0001	29
RSEM-L6-EOP	6/17/2020 17:45	XY6278	M	C042380	0.00098	<0.01	<0.0002	0.011	23.1	0.0082	<0.0000019	0.008	0.0017		4.21	0.00311	1.05	<0.00002	51.3	0.377	92.0	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	3.1
RSEM-L6-EOP	6/18/2020 13:00	XY6287	M	C042383	0.00098	<0.01	<0.0002	0.0124	23.1	0.0116	<0.0000019	0.0082	0.0022		4.26	0.00379	1.2	<0.00002	55.7	0.402	97.9	0.000012	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	1.7
RSEM-L6-EOP	6/19/2020 11:00	XY6268	M	C042375	0.00098	<0.01	<0.0002	0.0135	24.2	0.0117	<0.0000019	0.0083	0.0031		4.44	0.00405	1.27	<0.00002	59.7	0.404	104	0.000011	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	1.6
RSEM-L6-EOP	6/20/2020 13:40	XY9026	M	C042884	0.00101	<0.01	<0.0002	0.0139	23.3	0.0078	<0.0000019	0.0079	0.0027		4.21	0.0044	1.32	<0.00002	62.2	0.379	101	0.000011	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	1.2
RSEM-L6-EOP	6/21/2020 11:45	XY9121	M	C042904	0.00095	<0.01	<0.0002	0.0188	26.0	0.0087	<0.0000019	0.0085	0.0036		4.59	0.00533	1.5	<0.00002	72.9	0.412	118	0.000014	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	1.7
RSEM-L6-EOP	6/22/2020 16:30	XZ0406	M	C043197	0.001	<0.01	<0.0002	0.0209	26.7	0.016	<0.0000019	0.0085	0.0045		4.91	0.00679	1.55	<0.00002	86.1	0.433	129	0.000014	<0.005	<0.005	0.00287	<0.005	0.0069	<0.0001	1.2
RSEM-L6-EOP	6/23/2020 14:00	XZ2252	M	C043604	0.00094	<0.01	<0.0002	0.0223	28.8	0.0251	<0.0000019	0.0085	0.0045		5.01	0.0068	1.58	<0.00002	88.1	0.471	136	0.000016	<0.005	<0.005	0.00309	<0.005	0.0136	<0.0001	1.7
RSEM-L6-EOP	6/27/2020 19:15	XZ9070	M	C044897	0.00085	<0.01	<0.0002	0.0233	27.5	<0.001	<0.0000019	0.0088	0.004		5.10	0.00743	1.12	<0.00002	98.6	0.437	135	0.000014	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	1.7
RSEM-L6-EOP	6/27/2020 19:25	XZ9071	D	C044897	0.00086	<0.01	<0.0002	0.0232	27.7	<0.001	<0.0000019	0.0088	0.004		5.13	0.00751	1.1	<0.00002	98.5	0.441	137	0.000015	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	1.8
RSEM-L6-SP	5/29/2020 12:15	XV5617	M	C036525	0.00111	<0.01	<0.0002	0.0077	24.3	<0.001	<0.0000019	0.008	0.001		3.87	0.00222	0.18	<0.00002	45.8	0.36	90.6	0.000012	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	1.5
RSEM-L6-SP	6/16/2020 10:25	XY1503	M	C041388	0.00105	<0.01	<0.0002	0.0099	22.8	0.0106	0.000003	0.0079	0.0012		3.99	0.00249	0.966	<0.00002	44.4	0.378	91.7	0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	6.0
RSEM-L6-SP	6/25/2020 17:30	XZ5987	M	C044346	0.00096	<0.01	<0.0002	0.0223	26.3	0.0049	<0.0000019	0.0089	0.0038		4.94	0.00703	1.22	<0.00002	89.0	0.439	127	0.000014	<0.005	<0.005	0.00286	<0.005	<0.005	<0.0001	2.2
RSEM-L6-SP	7/5/2020 9:25	YA6828	M	C046487	0.00076	<0.01	<0.0002	0.0324	29.9	0.111	<0.0000019	0.0084	0.0049		5.31	0.00562	2.55	<0.00002	136	0.441	167	0.000016	<0.005	<0.005	0.00318	<0.005	<0.005	<0.0001	3.0
RSEM-R5a-A-EOP	6/30/2020 11:55	YA2735	M	C045692	0.00141	<0.01	<0.0002	0.0354	10.7	<0.001	<0.000019	0.007	0.0017		3.53	0.00538	1.16	<0.00002	167	0.31	132	<0.00001	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	24
RSEM-R5a-A-EOP	7/4/2020 13:35	YA6734	M	C046470	0.001	<0.01	<0.0002	0.0312	9.85	0.0159	<0.000019	0.0061	0.0017		2.89	0.00567	1.74	<0.00002	150	0.259	125	<0.00001	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	80
RSEM-R5a-A-EOP	7/5/2020 11:45	YA6921	M	C046500	0.00112	0.013	<0.0002	0.0518	11.8	0.0265	<0.000019	0.0075	0.0038		3.31	0.00642	1.85	<0.00002	251	0.351	181	0.000013	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	44
RSEM-R5A-A-SP	3/29/2020 13:50	XP3927	M	C022584	0.00159	<0.01	<0.0002	0.0038	3.75	0.0244	<0.0000019	0.0042	0.0018		2.23	0.00163	1.21	<0.00002	19.3	0.101	13.8	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	86
RSEM-R5A-A-SP	4/12/2020 11:25	XQ6089	M	C025305	0.00067	0.01	<0.0002	<0.002	4.99	0.0122	0.0000037	0.0018	<0.001		1.13	0.00151	1.23	<0.00002	12.0	0.086	14.8	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	93
RSEM-R5A-A-SP	6/16/2020 11:35	XY1508	M	C041388	0.00124	<0.01	<0.0002	0.0126	7.29	0.0118	<0.000019	0.0058	0.0014		2.80	0.00362	1.48	<0.00002	66.4	0.185	62.5	<0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	55
RSEM-R5A-B-SP	3/29/2020 14:00	XP3928	M	C022584	0.00124	<0.01	<0.0002	0.0034	2.89	0.0173	<0.0000019	0.0052	0.0015		2.12	0.0023	1.09	<0.00002	22.6	0.083	16.0	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	110
RSEM-R5A-B-SP	4/12/2020 11:35	XQ6090	M	C025305	0.0011	0.038	<0.0002	0.0037	3.20	0.0128	0.000055	0.0062	<0.001		1.82	0.00317	1.45	<0.00002	33.4	0.09	24.2	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	1300
RSEM-R5A-B-SP	6/16/2020 11:45	XY1509	M	C041388	0.00113	<0.01	<0.0002	0.0108	7.43	0.0134	<0.000019	0.0058	0.0015		2.39	0.005	1.67	<0.00002	64.1	0.154	65.6	<0.00001	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	43
RSEM-R5A-B-SP	7/3/2020 14:20	YA5154	M	C046179	0.00094	<0.01	<0.0002	0.0129	5.40	0.0017	<0.0000019	0.0047	<0.001		2.01	0.00382	1.37	<0.00002	73.3	0.137	60.2	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	220
RSEM-R5A-C-SP	3/29/2020 14:30	XP3929	M	C022584	0.00086	<0.01	<0.0002	0.0041	4.70	0.0195	<0.0000019	0.0062	0.0011		1.93	0.00289	0.838	<0.00002	46.4	0.098	42.6	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	32
RSEM-R5A-C-SP	4/12/2020 12:15	XQ6091	M	C025305	0.00114	0.042	<0.0002	0.0049	3.86	0.0145	0.000045	0.0078	0.0011		1.98	0.00466	1.56	<0.00002	42.3	0.092	33.7	0.000011	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	850
RSEM-R5A-C-SP	6/16/2020 12:00	XY1510	M	C041388	<0.0025	<0.05	<0.001	0.12	19.9	0.123	<0.000019	0.0069	0.0115		3.84	0.00674	2.54	<0.0001	544	0.607	370	<0.00005	<0.025	<0.025	0.00431	<0.025	<0.025	<0.0005	64
RSEM-R5A-D-SP	3/29/2020 14:40	XP3930	M	C022584	0.00131	0.284	<0.0002	0.003	3.28	0.0255	<0.0000019	0.0045	0.0016		1.95	0.00188	1.96	<0.00002	26.0	0.076	21.4	0.000011	<0.005	0.0135	0.00095	<0.005	<0.005	0.0004	76
RSEM-R5A-D-SP	4/12/2020 12:25	XQ6092	M	C025305	0.00109	0.031	<0.0002	0.0053	3.80	0.014	0.000035	0.0073	0.001		2.01	0.00517	1.49	<0.00002	44.3	0.097	34.4	<0.00001	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	800
RSEM-R5A-D-SP	6/16/2020 12:10	XY1511	M	C041388	<0.0025	<0.05	<0.001	0.078	17.1	0.0232	<0.000019	0.0056	0.0051		3.13	0.00688	2.23	<0.0001	363	0.417	262	<0.00005	<0.025	<0.025	0.00346	<0.025	<0.025	<0.0005	24
RSEM-R5B-EOP	1/1/2020 13:10	XE7142	M	C000229	0.00075	<0.01	<0.0002	0.0823	37.9	0.007	<0.000002	0.0062	0.008		4.52	0.00289	5.32	<0.00002	170	0.294	123	0.000011	<0.005	<0.005	0.0033	<0.005	<0.005	<0.0001	3.4

Appendix 3-C: 2020 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-EOP	1/1/2020 13:20	XE7143	D	C000229	0.00078	<0.01	<0.0002	0.0793	38.8	0.0072	<0.000002	0.0061	0.008		4.63	0.00286	5.39	<0.00002	174	0.289	124	0.000011	<0.005	<0.005	0.0032	<0.005	<0.005	<0.0001	1.0
RSEM-R5B-EOP	1/2/2020 11:20	XE7177	M	C000238	0.00076	<0.01	<0.0002	0.0769	38.9	0.0071	<0.000002	0.0061	0.0077		4.54	0.00293	5.18	<0.00002	168	0.289	118	<0.00001	<0.005	<0.005	0.00323	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/2/2020 11:30	XE7178	D	C000238	0.00076	<0.01	<0.0002	0.0775	38.7	0.007	<0.000002	0.006	0.0077		4.59	0.00301	5.11	<0.00002	165	0.293	118	0.00001	<0.005	<0.005	0.00325	<0.005	<0.005	<0.0001	1.2
RSEM-R5B-EOP	1/3/2020 12:40	XE8695	M	C000625	0.00074	<0.01	<0.0002	0.0717	39.0	0.0075	<0.000002	0.0062	0.0075		4.71	0.00284	5.3	<0.00002	161	0.316	118	<0.00001	<0.005	<0.005	0.00329	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	1/3/2020 12:50	XE8696	D	C000625	0.00074	<0.01	<0.0002	0.0692	38.0	0.0073	<0.000002	0.0061	0.0073		4.59	0.00288	5.22	<0.00002	158	0.318	114	<0.00001	<0.005	<0.005	0.00325	<0.005	<0.005	<0.0001	1.2
RSEM-R5B-EOP	1/4/2020 14:20	XE9883	M	C000877	0.00061	<0.01	<0.0002	0.0647	39.4	0.0062	<0.000002	0.0053	0.0063		4.57	0.00303	4.9	<0.00002	132	0.306	93.1	<0.00001	<0.005	<0.005	0.00322	<0.005	<0.005	<0.0001	1.0
RSEM-R5B-EOP	1/4/2020 14:30	XE9884	D	C000877	0.00063	<0.01	<0.0002	0.0647	39.3	0.0062	<0.000002	0.0053	0.0062		4.59	0.00308	4.91	<0.00002	135	0.306	93.7	<0.00001	<0.005	<0.005	0.0032	<0.005	<0.005	<0.0001	0.91
RSEM-R5B-EOP	1/5/2020 13:10	XE9854	M	C000870	0.00057	<0.01	<0.0002	0.0632	36.7	0.0056	<0.000002	0.0053	0.0051		4.52	0.00302	4.74	<0.00002	129	0.298	87.8	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	0.96
RSEM-R5B-EOP	1/5/2020 13:20	XE9855	D	C000870	0.00058	<0.01	<0.0002	0.0605	36.8	0.0055	<0.000002	0.0053	0.0052		4.57	0.00304	4.74	<0.00002	128	0.301	87.5	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	1/6/2020 12:50	XF0705	M	C001127	0.00057	<0.01	<0.0002	0.062	32.0	0.005	<0.000002	0.0055	0.0045		4.42	0.00306	4.66	<0.00002	130	0.294	87.6	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	1.0
RSEM-R5B-EOP	1/6/2020 13:00	XF0706	D	C001127	0.00061	<0.01	<0.0002	0.0653	32.5	0.0053	<0.000002	0.0056	0.0049		4.51	0.00295	4.96	<0.00002	132	0.312	90.1	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.87
RSEM-R5B-EOP	1/7/2020 13:40	XF1930	M	C001464	0.00058	<0.01	<0.0002	0.0766	31.0	0.0045	<0.000002	0.0059	0.0049		4.38	0.00265	5.39	<0.00002	139	0.302	93.0	<0.00001	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	0.77
RSEM-R5B-EOP	1/7/2020 13:50	XF1931	D	C001464	0.00058	<0.01	<0.0002	0.0779	30.6	0.0044	<0.000002	0.006	0.0049		4.44	0.00264	5.48	<0.00002	137	0.304	93.7	<0.00001	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	0.72
RSEM-R5B-EOP	1/8/2020 13:30	XF3040	M	C001783	0.00066	<0.01	<0.0002	0.0786	30.7	0.0056	<0.000002	0.0059	0.0054		4.76	0.00254	5.25	<0.00002	149	0.246	109	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	0.75
RSEM-R5B-EOP	1/8/2020 13:40	XF3041	D	C001783	0.00062	<0.01	<0.0002	0.0817	32.0	0.0056	<0.000002	0.0059	0.0056		4.88	0.00249	5.19	<0.00002	153	0.24	107	<0.00001	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	0.81
RSEM-R5B-EOP	1/9/2020 11:50	XF4215	M	C002074	0.00065	<0.01	<0.0002	0.0804	29.7	0.005	0.0000037	0.0064	0.0054		4.38	0.00265	5.12	<0.00002	158	0.269	98.3	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	0.84
RSEM-R5B-EOP	1/9/2020 12:00	XF4216	D	C002074	0.00064	<0.01	<0.0002	0.0813	30.2	0.0051	<0.000002	0.0064	0.0055		4.41	0.0026	5.29	<0.00002	157	0.258	99.5	<0.00001	<0.005	<0.005	0.00282	<0.005	<0.005	<0.0001	0.77
RSEM-R5B-EOP	1/10/2020 14:00	XF5143	M	C002216	0.00062	<0.01	<0.0002	0.0947	29.5	0.0052	<0.000002	0.0068	0.006		4.87	0.00264	5.56	<0.00002	159	0.227	109	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	0.91
RSEM-R5B-EOP	1/10/2020 14:10	XF5144	D	C002216	0.0006	<0.01	<0.0002	0.0934	28.3	0.005	<0.000002	0.0067	0.0058		4.50	0.00253	5.53	<0.00002	154	0.223	104	0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.96
RSEM-R5B-EOP	1/11/2020 11:40	XF5746	M	C002384	0.00065	<0.01	<0.0002	0.0839	30.1	0.0044	0.0000034	0.0071	0.0061		4.36	0.00274	5.01	<0.00002	175	0.24	99.2	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	0.85
RSEM-R5B-EOP	1/11/2020 11:50	XF5747	D	C002384	0.00065	<0.01	<0.0002	0.0834	30.4	0.0044	<0.000002	0.007	0.0061		4.31	0.0029	4.91	<0.00002	175	0.239	98.2	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	0.98
RSEM-R5B-EOP	1/12/2020 12:40	XF5773	M	C002394	0.00065	<0.01	<0.0002	0.0815	30.2	0.0043	<0.000002	0.0072	0.0062		4.30	0.00265	4.8	<0.00002	177	0.234	97.7	<0.00001	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	0.93
RSEM-R5B-EOP	1/12/2020 12:50	XF5774	D	C002394	0.00065	<0.01	<0.0002	0.0786	29.9	0.0044	<0.000002	0.0071	0.0061		4.26	0.00268	4.82	<0.00002	177	0.229	96.0	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	0.99
RSEM-R5B-EOP	1/13/2020 11:25	XF7158	M	C002657	0.00066	<0.01	<0.0002	0.0773	30.0	0.0043	<0.000002	0.0074	0.0062		4.34	0.00276	4.78	<0.00002	178	0.233	97.2	0.000019	<0.005	<0.005	0.00293	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	1/13/2020 11:35	XF7159	D	C002657	0.00067	<0.01	<0.0002	0.079	30.8	0.0043	0.0000023	0.0073	0.0062		4.25	0.00272	4.78	<0.00002	178	0.233	98.7	0.000014	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	1/14/2020 11:40	XF8098	M	C002891	0.00067	<0.01	<0.0002	0.0824	29.9	0.0047	<0.000002	0.0073	0.006		4.27	0.00263	5.41	<0.00002	168	0.243	98.3	<0.00001	<0.005	<0.005	0.00301	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/14/2020 11:50	XF8099	D	C002891	0.0007	<0.01	<0.0002	0.0809	30.2	0.0048	<0.000002	0.0073	0.0061		4.39	0.00267	5.33	<0.00002	176	0.247	103	<0.00001	<0.005	<0.005	0.00303	<0.005	<0.005	<0.0001	1.2
RSEM-R5B-EOP	1/15/2020 12:35	XF9569	M	C003144	0.0007	<0.01	<0.0002	0.0648	32.1	0.005	<0.000002	0.0076	0.0062		4.25	0.00243	4.46	<0.00002	176	0.213	95.5	<0.00001	<0.005	<0.005	0.00317	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/15/2020 12:45	XF9570	D	C003144	0.00057	<0.01	<0.0002	0.0645	31.6	0.005	<0.000002	0.0076	0.0063		4.31	0.00252	4.56	<0.00002	175	0.21	95.4	<0.00001	<0.005	<0.005	0.00317	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/16/2020 13:00	XG0615	M	C003413	0.00064	<0.01	<0.0002	0.0697	27.3	0.0043	<0.000002	0.0083	0.0057		4.13	0.00254	4.51	<0.00002	164	0.229	93.7	<0.00001	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/16/2020 13:10	XG0616	D	C003413	0.00064	<0.01	<0.0002	0.0697	27.9	0.0043	<0.000002	0.0081	0.0057		4.14	0.00276	4.52	<0.00002	166	0.229	92.1	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/17/2020 12:25	XG0614	M	C003412	0.00069	<0.01	<0.0002	0.0683	27.6	0.005	<0.000002	0.0099	0.0058		4.36	0.00278	4.52	<0.00002	175	0.232	96.1	<0.00001	<0.005	<0.005	0.00283	<0.005	<0.005	<0.0001	2.4
RSEM-R5B-EOP	1/18/2020 11:40	XG2772	M	C003851	0.00076	<0.01	<0.0002	0.0737	28.9	0.0051	0.0000032	0.0122	0.006		4.68	0.0033	4.96	<0.00002	190	0.243	106	<0.00001	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/19/2020 14:45	XG2756	M	C003847	0.00083	<0.01	<0.0002	0.0725	29.0	0.0057	<0.000002	0.0143	0.006		5.01	0.00348	4.96	<0.00002	206	0.255	112	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	1/20/2020 11:50	XG2705	M	C003843	0.00086	<0.01	<0.0002	0.0749	28.5	0.0063	<0.000002	0.0161	0.0061		5.18	0.00361	5.04	<0.00002	217	0.249	115	0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/21/2020 14:10	XG5825	M	C004470	0.00091	<0.01	<0.0002	0.0779	29.5	0.007	<0.000002	0.0166	0.0064		5.42	0.0036	5.22	<0.00002	232	0.249	122	<0.00001	<0.005	<0.005	0.0031	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	1/21/2020 14:20	XG5826	D	C004470	0.00091	<0.01	<0.0002	0.0749	29.5	0.0069	<0.000002	0.0167	0.0062		5.47	0.00349	5.18	<0.00002	227	0.248	120	<0.00001	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	1/22/2020 15:50	XG7452	M	C004860	0.00086	<0.01	<0.0002	0.0732	28.6	0.0067	<0.000002	0.0166	0.0059		5.32	0.00327	5.05	<0.00002	228	0.24	115	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	2.3
RSEM-R5B-EOP	1/22/2020 16:00	XG7453	D	C004860	0.00084	<0.01	<0.0002	0.0711	28.8	0.0067	<0.000002	0.0165	0.0059		5.28	0.00351	4.99	<0.00002	228	0.241	115	<0.00001	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/23/2020 15:20	XG9563	M	C005172	0.00088	<0.01	<0.0002	0.0736	30.1	0.0068	<0.000002	0.0178	0.0063		5.46	0.00386	5.29	<0.00002	242	0.253	122	<0.00001	<0.005	<0.005	0.00307	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/23/2020 15:30	XG9564	D	C005172	0.00089	<0.01	<0.0002	0.0731	29.6	0.0067	<0.000002	0.0177	0.0061		5.56	0.00397	5.12	<0.00002	241	0.252	122	0.00001	<0.005	<0.005	0.00307	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/24/2020 11:10	XG9569	M	C005174	0.00088	<0.01	<0.0002	0.0721	29.7	0.0068	<0.000002	0.0182	0.0061		5.52	0.0038	5.08	<0.00002	241	0.255	120	<0.00001	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/24/2020 11:20	XG9570	D	C005174	0.00089	<0.01	<0.0002	0.0721	29.8	0.0068	<0.000002	0.0177	0.006		5.40	0.00406	4.89	<0.00002	239	0.249	121	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/25/2020 12:00	XH2064	M	C005631	0.00092	<0.01	<0.0002	0.0741	27.2	0.0076	<0.000002	0.0178	0.0059		5.39	0.00401	5.39	<0.00002	222	0.273	122	<0.00001	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	1/25/2020 12:10	XH2062	D	C005631	0.00089	<0.01	<0.0002	0.0737	27.0	0.0074	<0.000002	0.018	0.006		5.31	0.00394	5.48	<0.00002	218	0.278	122	<0.00001	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	1/26/2020 13:40	XH2025	M	C005623	0.00097	<0.01	<0.0002	0.075	27.2	0.0086	0.0000035	0.0185	0.006		5.41	0.00397	5.56	<0.00002	219	0.281	123	<0.00001	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	1/26/2020 13:50	XH2026	D	C005623	0.0009	<0.01	<0.0002	0.0754	26.1	0.0082	<0.000002	0.0182	0.0057		5.27	0.00408	5.63	<0.00002	217	0.276	122	<0.00001	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/27/2020 14:10	XH3887	M	C005941	0.00099	<0.01	<0.0002	0.0737	28.5	0.0074	<0.000002	0.0167	0.0055		5.27	0.00298	4.99	<0.00002	215	0.26	115	<0.00001	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/27/2020 14:20	XH3888	D	C005941	0.00087	<0.01	<0.0002	0.0723	28.6	0.0071	<0.000002	0.0167	0.0054		5.28	0.00302	5.1	<0.00002	212	0.264	116	<0.00001	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	1/28/2020 12:45	XH5358	M	C006197	0.00082	<0.01	<0.0002	0.0567	30.6	0.0074	<0.000002	0.0141	0.0054		5.07	0.00376	4.79	<0.00002	183	0.274	102	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/28/2020 12:55	XH5359	D	C006197	0.00084	<0.01	<0.0002	0.0554	30.4	0.0073	<0.000002	0.0142	0.0054		5.13	0.0039	4.72	<0.00002	180	0.267	101	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	1.9
RSEM-R5B-EOP	1/29/2020 11:40	XH6910	M	C006592	0.00076	<0.01	<0.0002	0.0558	32.9	0.0082	<0.000002	0.0123	0.0046		5.20	0.00385	5.21	<0.00002	153	0.313	89.7	<0.00001	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	1/29/2020 11:50	XH6911	D	C006592	0.00082	<0.01	<0.0002	0.0547	33.3	0.0084	<0.000002	0.0124	0.0048		5.26	0.00386	5.49	<0.00002	156	0.317	90.6	<0.00001	<0.005	<0.005	0.00319	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/30/2020 13:15	XH8746	M	C006955	0.00073	<0.01	<0.0002	0.0443	31.0	0.0111	<0.000002	0.0122	0.0043		5.16	0.00385	5.25	<0.00002	145	0.317	83.2	<0.00001	<0.005	<0.005	0.00324	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	1/30/2020 13:25	XH8747	D	C006955	0.00066	<0.01	<0.0002	0.0478	30.8	0.011	<0.000002	0.012	0.0042		5.12	0.00375	5.13	<0.00002	143	0.309	84.2	<0.00001	<0.005	<0.005	0.00319	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	1/31/2020 13:05	XH9849	M	C007079	0.00076	<0.01	<0.0002	0.0506	31.1	0.0125	<0.000002	0.0126	0.0042		5.22	0.00402	5.28	<0.00002	155	0.31	87.0	<0.00001	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	1/31/2020 13:15	XH9850	D	C007079	0.00076	<0.01	<0.0002	0.052	31.3	0.0124	<0.000002	0.0126	0.0044		5.21	0.00396	5.39	<0.00002	156	0.309	87.1	<0.00001	<0.005	<0.005	0.003	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	2/1/2020 11:30	XI1802	M	C007448	0.0007	<0.01	<0.0002	0.0553	29.9	0.0123	<0.000002	0.0126	0.0043		5.10	0.00335	5.01	<0.00002	176	0.279	92.6	<0.00001	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	2/1/2020 11:45	XI1803	D	C007448	0.00072	<0.01	<0.0002	0.0535	29.2	0.012	<0.000002	0.0124	0.0042		5.04	0.00331	4.94	<0.00002	172	0.268	90.0	<0.00001	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	2/2/2020 13:50	XI1832	M	C007454	0.00068	<0.01	<0.0002	0.061	29.7	0.0115	<0.000002	0.0129	0.0045		5.10	0.00326	5.19	<0.00002	191	0.263	99.1	<0.00001	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	2/2/2020 14:00	XI1833	D	C007454	0.0007	<0.01	<0.0002	0.0597	29.1	0.0113	<0.000002	0.0128	0.0045		5.05	0.00323	5.12	<0.00002	189	0.259	97.5	<0.00001	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	2/3/2020 12:20	XI3479	M	C007820	0.00054	<0.01	<0.0002	0.0665	27.8	0.011	<0.000002	0.0151	0.0032		5.11	0.00474	5.57	<0.00002	196	0.272	110	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	2/3/2020 12:30	XI3480	D	C007820	0.00056	<0.01	<0.0002	0.0666	28.0	0.0113	<0.000002	0.0151	0.0033		5.32	0.00349	5.84	<0.00002	200	0.277	113	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	2/4/2020 11:50	XI3460	M	C007815	0.00058	<0.01	<0.0002	0.0691	27.9	0.0111	<0.000002	0.015	0.0033		5.18	0.00475	5.39	<0.00002	205	0.261	115	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	2/4/2020 12:00	XI3461	D	C007815	0.00058	<0.01	<0.0002	0.0708	27.9	0.011	<0.000002	0.0154	0.0034		5.18	0.00514	5.64	<0.00002	203	0.272	114	<0.00001	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	2/5/2020 12:55	XI6885	M	C008469	0.00066	<0.01	<0.0002	0.0596	28.2	0.0102	<0.000002	0.0133	0.0051		5.24	0.00324	4.48	<0.00002	221	0.233	109	<0.00001	<0.005	<0.005	0.00289	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	2/5/2020 13:05	XI6886	D	C008469	0.00065	<0.01	<0.0002	0.0565	27.4	0.0101	<0.000002	0.0134	0.0051		5.10	0.00323	4.37	<0.00002	219	0.233	107	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	2/6/2020 12:00	XI8757	M	C008772	0.00078	0.025	<0.0002	0.0765	28.6	0.0083	<0.000002	0.0152	0.0038		5.25	0.00483	5.49	<0.00002	227	0.252	122	0.000016	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	2/6/2020 12:10	XI8758	D	C008772	0.00107	<0.01	<0.0002	0.071	26.9	0.0095	<0.000002	0.013	0.0054		4.90	0.00347	5.09	<0.00002	212	0.231	108	0.000023	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	1.5

Appendix 3-C: 2020 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-EOP	2/7/2020 12:10	XI8782	M	C008775	0.00084	<0.01	<0.0002	0.0697	27.4	0.0087	<0.000002	0.013	0.0054		4.91	0.00351	5.14	<0.00002	220	0.235	112	0.000011	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	2/8/2020 11:50	XJ1670	M	C009232	0.0008	<0.01	<0.0002	0.067	27.6	0.0116	<0.000002	0.0129	0.0053		5.03	0.00308	5.38	<0.00002	215	0.251	114	<0.00001	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	2.4
RSEM-R5B-EOP	2/8/2020 12:00	XJ1671	D	C009232	0.00074	<0.01	<0.0002	0.0693	26.9	0.0111	<0.000002	0.0126	0.0054		4.77	0.00307	5.28	<0.00002	212	0.239	112	<0.00001	<0.005	<0.005	0.0029	<0.005	<0.005	<0.0001	2.3
RSEM-R5B-EOP	2/9/2020 13:10	XJ1690	M	C009242	0.00076	<0.01	<0.0002	0.0656	27.4	0.0162	<0.000002	0.0119	0.006		4.71	0.00281	5.25	<0.00002	207	0.252	112	<0.00001	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	2/9/2020 13:20	XJ1691	D	C009242	0.00076	<0.01	<0.0002	0.0654	27.3	0.0161	<0.000002	0.0117	0.006		4.77	0.00273	5.08	<0.00002	205	0.245	108	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	2/10/2020 11:10	XJ1714	M	C009249	0.00072	<0.01	<0.0002	0.064	26.7	0.0161	<0.000002	0.0109	0.0059		4.44	0.00278	5.06	<0.00002	195	0.239	104	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	2.8
RSEM-R5B-EOP	2/10/2020 11:20	XJ1715	D	C009249	0.00073	<0.01	<0.0002	0.0649	28.0	0.0172	<0.000002	0.0114	0.0061		4.74	0.00273	5.04	<0.00002	205	0.249	111	<0.00001	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	2/11/2020 15:30	XJ6272	M	C010122	0.00054	<0.01	<0.0002	0.078	29.2	0.0132	<0.0000019	0.0122	0.0035		4.92	0.00381	5.21	<0.00002	212	0.265	113	<0.00001	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	3.3
RSEM-R5B-EOP	2/11/2020 15:40	XJ6273	D	C010122	0.00052	<0.01	<0.0002	0.0769	28.2	0.0128	<0.0000019	0.0121	0.0035		4.73	0.00385	5.31	<0.00002	204	0.267	109	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	3.3
RSEM-R5B-EOP	2/12/2020 15:20	XJ8072	M	C010503	0.00072	<0.01	<0.0002	0.0688	29.2	0.0019	<0.0000019	0.0106	0.0058		4.66	0.00278	4.9	<0.00002	206	0.236	106	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	4.5
RSEM-R5B-EOP	2/12/2020 15:30	XJ8073	D	C010503	0.0007	<0.01	<0.0002	0.0705	29.2	0.0042	<0.0000019	0.0104	0.0057		4.61	0.00277	5.02	<0.00002	200	0.235	106	<0.00001	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	4.2
RSEM-R5B-EOP	2/13/2020 14:20	XJ9468	M	C010790	0.00071	<0.01	<0.0002	0.0648	27.6	0.0114	<0.0000019	0.0107	0.0056		4.52	0.0027	4.87	<0.00002	193	0.227	102	<0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	4.3
RSEM-R5B-EOP	2/13/2020 14:30	XJ9469	D	C010790	0.00073	<0.01	<0.0002	0.0667	28.2	0.0101	<0.0000019	0.0107	0.0057		4.60	0.00272	4.97	<0.00002	198	0.234	106	<0.00001	<0.005	<0.005	0.00275	<0.005	<0.005	<0.0001	3.9
RSEM-R5B-EOP	2/14/2020 11:30	XJ9493	M	C010796	0.00077	<0.01	<0.0002	0.0657	28.0	0.0119	<0.0000019	0.0105	0.0056		4.67	0.00269	4.96	<0.00002	199	0.234	106	<0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	4.8
RSEM-R5B-EOP	2/14/2020 11:40	XJ9494	D	C010796	0.00073	<0.01	<0.0002	0.0668	28.4	0.0106	<0.0000019	0.0106	0.0057		4.68	0.0027	4.81	<0.00002	201	0.235	107	0.00001	<0.005	<0.005	0.00275	<0.005	<0.005	<0.0001	4.4
RSEM-R5B-EOP	2/15/2020 12:10	XK0372	M	C011012	0.00085	<0.01	<0.0002	0.0692	30.6	0.0142	<0.0000019	0.0106	0.0062		5.11	0.00288	4.9	<0.00002	220	0.253	115	<0.00001	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	3.7
RSEM-R5B-EOP	2/15/2020 12:20	XK0373	D	C011012	0.00079	<0.01	<0.0002	0.0679	28.4	0.0134	<0.0000019	0.0105	0.0057		4.76	0.00277	4.98	<0.00002	205	0.243	107	<0.00001	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	3.7
RSEM-R5B-EOP	2/16/2020 14:00	XK3308	M	C011578	0.00082	<0.01	<0.0002	0.0691	26.5	0.0128	<0.0000019	0.011	0.0049		4.98	0.00268	5.49	<0.00002	192	0.249	103	<0.00001	<0.005	<0.005	0.0027	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	2/16/2020 14:10	XK3307	D	C011578	0.00084	<0.01	<0.0002	0.0729	27.1	0.0126	<0.0000019	0.0114	0.005		5.13	0.0026	5.49	<0.00002	197	0.255	106	<0.00001	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	2.7
RSEM-R5B-EOP	2/17/2020 16:20	XK3289	M	C011572	0.00092	<0.01	<0.0002	0.0714	25.8	0.0136	<0.0000019	0.0118	0.0047		5.29	0.00267	5.95	<0.00002	201	0.245	108	<0.00001	<0.005	<0.005	0.00265	<0.005	<0.005	<0.0001	3.2
RSEM-R5B-EOP	2/17/2020 16:30	XK3290	D	C011572	0.001	<0.01	<0.0002	0.0706	26.6	0.0136	<0.0000019	0.0121	0.0047		5.47	0.00256	5.88	<0.00002	208	0.245	109	<0.00001	<0.005	<0.005	0.00265	<0.005	<0.005	<0.0001	3.2
RSEM-R5B-EOP	2/18/2020 12:40	XK4682	M	C011881	0.00102	<0.01	<0.0002	0.0673	26.0	0.0125	<0.0000019	0.0132	0.0047		5.96	0.00251	6.25	<0.00002	215	0.237	113	<0.00001	<0.005	<0.005	0.00263	<0.005	<0.005	0.00011	2.8
RSEM-R5B-EOP	2/18/2020 12:50	XK4683	D	C011881	0.001	<0.01	<0.0002	0.0673	25.2	0.0122	<0.0000019	0.013	0.0047		5.71	0.00251	6.22	<0.00002	209	0.229	109	<0.00001	<0.005	<0.005	0.00255	<0.005	<0.005	<0.0001	2.8
RSEM-R5B-EOP	2/19/2020 11:35	XK5999	M	C012192	0.00105	<0.01	<0.0002	0.0702	26.5	0.0056	<0.0000019	0.0143	0.005		6.15	0.00252	6.28	<0.00002	225	0.249	114	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	3.3
RSEM-R5B-EOP	2/19/2020 11:45	XK6000	D	C012192	0.00108	<0.01	<0.0002	0.0711	27.2	0.0064	<0.0000019	0.0147	0.0051		6.31	0.00282	6.7	<0.00002	228	0.254	115	<0.00001	<0.005	<0.005	0.00279	<0.005	<0.005	0.0001	3.0
RSEM-R5B-EOP	2/20/2020 12:30	XK7909	M	C012680	0.001	0.01	<0.0002	0.0705	26.7	0.01	<0.0000019	0.0142	0.0057		6.10	0.0027	6.46	<0.00002	227	0.246	117	0.000011	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	2/20/2020 12:40	XK7910	D	C012680	0.00098	0.01	<0.0002	0.0681	26.1	0.0098	<0.0000019	0.014	0.0056		5.82	0.00269	6.22	<0.00002	217	0.243	111	<0.00001	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	2/21/2020 11:40	XK7931	M	C012683	0.00088	<0.01	<0.0002	0.0684	27.0	0.0083	<0.0000019	0.0135	0.0065		5.86	0.00271	6.22	<0.00002	215	0.248	113	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	2/21/2020 11:50	XK7932	D	C012683	0.00088	<0.01	<0.0002	0.0664	27.0	0.0083	<0.0000019	0.0135	0.0065		5.83	0.00256	5.97	<0.00002	218	0.245	110	<0.00001	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	2/23/2020 11:40	XL1342	M	C013192	0.00072	<0.01	<0.0002	0.0588	27.8	0.0074	0.0000021	0.0119	0.0079		5.55	0.00255	5.5	<0.00002	203	0.234	107	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	2/23/2020 11:50	XL1343	D	C013192	0.00078	<0.01	<0.0002	0.0627	28.2	0.0077	0.0000021	0.0122	0.008		5.75	0.00262	5.77	<0.00002	208	0.25	109	<0.00001	<0.005	<0.005	0.00297	<0.005	<0.005	0.00019	1.3
RSEM-R5B-EOP	2/24/2020 11:35	XL1317	M	C013183	0.00088	<0.01	<0.0002	0.0672	29.8	0.0074	<0.0000019	0.0113	0.0082		5.59	0.00253	5.78	<0.00002	205	0.236	111	0.000017	<0.005	<0.005	0.00293	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	2/25/2020 11:00	XL5022	M	C014003	0.00097	<0.01	<0.0002	0.0637	29.1	0.0054	<0.0000019	0.0117	0.0086		5.71	0.00299	5.84	<0.00002	206	0.257	117	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	1.9
RSEM-R5B-EOP	2/25/2020 11:10	XL5023	D	C014003	0.00094	<0.01	<0.0002	0.0649	30.1	0.0059	<0.0000019	0.0117	0.0091		5.85	0.00296	5.8	<0.00002	217	0.251	121	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	2/26/2020 10:50	XL6611	M	C014425	0.00086	<0.01	<0.0002	0.067	28.7	<0.001	<0.0000019	0.011	0.0087		5.84	0.00266	5.58	<0.00002	198	0.212	116	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	1.9
RSEM-R5B-EOP	2/26/2020 11:00	XL6612	D	C014425	0.00097	<0.01	<0.0002	0.0665	29.2	<0.001	<0.0000019	0.0111	0.009		5.93	0.00271	5.39	<0.00002	198	0.216	121	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	2/27/2020 11:35	XL6657	M	C014448	0.00071	<0.01	<0.0002	0.0624	27.7	<0.001	<0.0000019	0.0106	0.0083		5.73	0.00264	5.25	<0.00002	182	0.222	112	<0.00001	<0.005	<0.005	0.00286	<0.005	<0.005	<0.0001	2.6
RSEM-R5B-EOP	2/28/2020 12:00	XL8820	M	C014870	0.00092	<0.01	<0.0002	0.0649	29.7	0.0104	<0.0000019	0.0108	0.0091		6.11	0.00276	5.34	<0.00002	198	0.215	123	<0.00001	<0.005	<0.005	0.00283	<0.005	<0.005	0.00018	2.7
RSEM-R5B-EOP	2/29/2020 12:25	XM2598	M	C015563	0.00084	<0.01	<0.0002	0.0575	26.6	0.0136	<0.0000019	0.012	0.0086		5.68	0.00277	5.11	<0.00002	178	0.272	109	0.000011	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	3.6
RSEM-R5B-EOP	3/1/2020 10:55	XM2630	M	C015569	0.00097	<0.01	<0.0002	0.0546	27.5	0.012	<0.0000019	0.0119	0.0081		5.79	0.00282	4.82	<0.00002	187	0.247	110	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	4.0
RSEM-R5B-EOP	3/2/2020 19:30	XM6322	M	C016408	0.00112	<0.01	<0.0002	0.0551	27.9	<0.001	<0.0000019	0.0124	0.0066		6.27	0.00289	5.13	<0.00002	188	0.26	118	<0.00001	<0.005	<0.005	0.00303	<0.005	<0.005	<0.0001	4.3
RSEM-R5B-EOP	3/3/2020 11:50	XM6548	M	C016468	0.00113	<0.01	<0.0002	0.0547	27.9	<0.001	<0.0000019	0.0133	0.0064		6.14	0.00292	4.95	<0.00002	191	0.282	121	<0.00001	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	5.0
RSEM-R5B-EOP	3/3/2020 12:00	XM6549	D	C016468	0.00121	<0.01	<0.0002	0.0549	28.0	<0.001	<0.0000019	0.0134	0.0068		6.20	0.00302	5.04	<0.00002	194	0.274	121	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	5.1
RSEM-R5B-EOP	3/4/2020 16:20	XM8004	M	C016829	0.0012	<0.01	<0.0002	0.054	27.6	<0.001	<0.0000019	0.0141	0.0061		6.50	0.00299	5.04	<0.00002	197	0.28	122	<0.00001	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	5.1
RSEM-R5B-EOP	3/4/2020 16:30	XM8005	D	C016829	0.00119	<0.01	<0.0002	0.0531	27.4	<0.001	<0.0000019	0.0138	0.0061		6.42	0.00295	4.92	<0.00002	196	0.274	121	<0.00001	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	5.0
RSEM-R5B-EOP	3/5/2020 15:20	XN0420	M	C017276	0.00125	<0.01	<0.0002	0.0493	24.9	0.0043	<0.0000019	0.0137	0.0054		6.07	0.00285	4.85	<0.00002	188	0.255	115	<0.00001	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	5.7
RSEM-R5B-EOP	3/5/2020 15:30	XN0421	D	C017276	0.00126	<0.01	<0.0002	0.0506	25.3	0.0055	<0.0000019	0.0139	0.0056		6.14	0.00279	4.68	<0.00002	190	0.261	116	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	5.8
RSEM-R5B-EOP	3/6/2020 11:20	XN0417	M	C017275	0.00106	<0.01	<0.0002	0.0473	24.0	0.009	<0.0000019	0.0141	0.0052		6.39	0.00297	4.97	<0.00002	192	0.26	114	<0.00001	<0.005	<0.005	0.0027	<0.005	<0.005	<0.0001	4.5
RSEM-R5B-EOP	3/6/2020 11:30	XN0416	D	C017275	0.00106	<0.01	<0.0002	0.0493	24.3	0.0059	<0.0000019	0.0141	0.0053		6.50	0.00294	4.92	<0.00002	195	0.266	116	<0.00001	<0.005	<0.005	0.00276	<0.005	<0.005	<0.0001	4.6
RSEM-R5B-EOP	3/7/2020 11:20	XN3072	M	C017820	0.00115	<0.01	<0.0002	0.049	23.3	0.0076	<0.0000019	0.0139	0.0047		6.45	0.00298	5.13	<0.00002	189	0.254	114	<0.00001	<0.005	<0.005	0.00275	<0.005	<0.005	<0.0001	3.6
RSEM-R5B-EOP	3/7/2020 11:30	XN3073	D	C017820	0.00118	<0.01	<0.0002	0.0496	23.4	0.0044	<0.0000019	0.0139	0.0045		6.50	0.00288	5.17	<0.00002	192	0.257	114	<0.00001	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	3.9
RSEM-R5B-EOP	3/8/2020 11:30	XN2025	M	C017627	0.00133	<0.01	<0.0002	0.0479	22.5	0.0044	<0.0000019	0.0145	0.004		6.89	0.00301	5.52	<0.00002	188	0.258	111	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	4.9
RSEM-R5B-EOP	3/8/2020 11:40	XN2026	D	C017627	0.00173	<0.01	<0.0002	0.0478	22.3	0.006	<0.0000019	0.0146	0.0039		6.69	0.00308	5.66	<0.00002	185	0.259	110	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	5.5
RSEM-R5B-EOP	3/9/2020 14:40	XN3894	M	C018020	0.0015	0.016	<0.0002	0.0479	23.4	0.0099	<0.0000019	0.0151	0.0037		6.96	0.00319	6.12	<0.00002	185	0.266	107	<0.00001	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	4.0
RSEM-R5B-EOP	3/9/2020 14:50	XN3895	D	C018020	0.0014	0.016	<0.0002	0.0459	22.7	0.0097	<0.0000019	0.0144	0.0036		6.81	0.00304	5.85	<0.00002	178	0.258	104	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	0.0001	3.8
RSEM-R5B-EOP	3/10/2020 11:05	XN6088	M	C018396	0.00136	<0.01	<0.0002	0.0403	23.5	0.0085	<0.0000019	0.0138	0.0036		7.03	0.00297	5.62	<0.00002	174	0.262	102	<0.00001	<0.005	<0.005	0.00255	<0.005	<0.005	<0.0001	4.0
RSEM-R5B-EOP	3/11/2020 13:10	XN7890	M	C018851	0.00101	<0.01	<0.0002	0.0371	21.5	0.0021	<0.0000019	0.0116	0.0033		5.71	0.00254	5.39	<0.00002	146	0.246	84.9	<0.00001	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	6.4
RSEM-R5B-EOP	3/12/2020 10:55	XN8893	M	C019027	0.00109	<0.01	<0.0002	0.0347	21.0	0.0064	<0.0000019	0.01	0.0055		5.07	0.00251	4.66	<0.00002	128	0.218	75.5	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	9.2
RSEM-R5B-EOP	3/13/2020 12:30	XN9532	M	C019176	0.00111	<0.01	<0.0002	0.034	19.8	0.0169	<0.0000019	0.0098	0.0053		4.85	0.00246	4.6	<0.00002	124	0.223	76.5	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	4.9
RSEM-R5B-EOP	3/14/2020 12:25	XO0536	M	C019410	0.00104	<0.01	<0.0002	0.036	20.4	0.012	<0.0000019	0.01	0.0048		4.88	0.00265	4.78	<0.00002	127	0.225	76.8	<0.00001	<0.005	<0.005	0.00234	<0.005	<0.005	<0.0001	4.4
RSEM-R5B-EOP	3/14/2020 12:35	XO0537	D	C019410	0.00102	<0.01	<0.0002	0.0342	20.1	0.0091	<0.0000019	0.0099	0.0048		4.80	0.00259	4.64	<0.00002	126	0.223	76.3	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	3.2
RSEM-R5B-EOP	3/15/2020 13:00	XO0653	M	C019435	0.00105	<0.01	<0.0002	0.0374	20.8	0.0092	<0.0000019	0.0111	0.0044		5.13	0.00293	4.61	<0.00002	138	0.227	78.1	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	3/15/2020 13:10	XO0654	D	C019435	0.00105	<0.01	<0.0002	0.0374	20.9	0.0097	<0.0000019	0.0112	0.0045		5.09	0.00286	4.67	<0.00002	140	0.228	81.0	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	3/16/2020 12:50	XO2542	M	C019847	0.00104	<0.01	<0.0002	0.0455	20.8	0.0071	<0.0000019	0.0134	0.0038		5.25	0.00331	4.88	<0.00002	158	0.23	86.3	<0.00001	<0.005	<0.005	0.00254	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	3/16/2020 13:00	XO2543	D	C019847	0.00105	<0.01	<0.0002	0.0461	20.8	0.0071	<0.0000019	0.0132	0.0038		5.23	0.00333	4.88	<0.00002	157	0.228	84.3	<0.00001	<0.005	<0.005	0.00254	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	3/17/2020 12:05	XO3906	M	C020169	0.00122	<0.01	<0.0002	0.0499	22.0	0.0056	<0.0000019	0.0143	0.0037		5.62	0.00369	4.79	<0.00002	179	0.227	91.1	<0.00001	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	3/17/2020 12:15	XO3907	D	C020169	0.00118	<0.01	<0.0002	0.0496	21.9	0.0057	<0.0000019	0.0143	0.0038		5.62	0.00359	4.83	<0.00002	176	0.225	90.5	<0.00001	<0.005	<0.005	0.00263	<0.005	<0.005	<0.0001	2.2
RSEM-R5B-EOP	3/18/2020 11:40	XO5557	M	C020445	0.00106	<0.01	<0.0002	0.0461	20.5	0.0041	<0.0000019	0.0125	0.0033		5.24	0.00344	4.64	<0.00002	157	0.22	87.5	<0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	3/18/2020 11:50	XO5558	D	C020445	0.0011	<0.01	<0.0002	0.0465	21.0	0.0041	<0.0000019	0.0129	0.0034		5.35	0.00349	4.65	<0.00002	161	0.222	89.1	<0.00001	<0.005	<0.005	0.00231	<0.005	<0.005	<0.0001	2.6

Appendix 3-C: 2020 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-EOP	3/19/2020 11:30	XO6999	M	C020738	0.00123	<0.01	<0.0002	0.041	19.9	0.0064	<0.0000019	0.0132	0.0034		5.08	0.0035	4.49	<0.00002	151	0.228	83.1	<0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	6.4
RSEM-R5B-EOP	3/19/2020 11:40	XO7000	D	C020738	0.00128	<0.01	<0.0002	0.0413	20.7	0.0059	<0.0000019	0.0135	0.0035		5.19	0.00355	4.5	<0.00002	156	0.233	87.1	<0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	4.3
RSEM-R5B-EOP	3/20/2020 12:15	XO7002	M	C020739	0.00122	<0.01	<0.0002	0.0399	19.5	0.0099	<0.0000019	0.0122	0.0033		4.72	0.00336	4.32	<0.00002	144	0.228	76.6	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	5.2
RSEM-R5B-EOP	3/20/2020 12:25	XO7003	D	C020739	0.00124	<0.01	<0.0002	0.0405	19.5	0.0099	<0.0000019	0.0121	0.0032		4.77	0.00338	4.34	<0.00002	146	0.226	77.5	<0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	5.1
RSEM-R5B-EOP	3/21/2020 11:30	XO8297	M	C021037	0.00108	<0.01	<0.0002	0.0431	19.1	0.01	<0.0000019	0.0117	0.0033		4.64	0.00328	4.31	<0.00002	144	0.221	76.9	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	7.4
RSEM-R5B-EOP	3/21/2020 11:40	XO8298	D	C021037	0.00108	<0.01	<0.0002	0.0424	19.0	0.0094	<0.0000019	0.0116	0.0033		4.54	0.00338	4.29	<0.00002	144	0.215	76.9	<0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	3.5
RSEM-R5B-EOP	3/22/2020 11:20	XO8419	M	C021064	0.00095	<0.01	<0.0002	0.0451	18.2	0.0158	<0.0000019	0.0105	0.0044		4.20	0.00304	4.01	<0.00002	138	0.212	75.7	<0.00001	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	3.3
RSEM-R5B-EOP	3/22/2020 11:30	XO8420	D	C021064	0.00096	<0.01	<0.0002	0.0441	18.1	0.0156	<0.0000019	0.0103	0.0043		4.24	0.00309	4.04	<0.00002	138	0.206	73.7	<0.00001	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	4.2
RSEM-R5B-EOP	3/23/2020 12:00	XO8465	M	C021073	0.00089	<0.01	<0.0002	0.0488	18.2	0.0187	<0.0000019	0.0096	0.0055		4.04	0.00279	3.75	<0.00002	133	0.211	81.0	<0.00001	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	3.6
RSEM-R5B-EOP	3/24/2020 13:10	XP0444	M	C021618	0.00096	<0.01	<0.0002	0.0556	20.4	0.0212	<0.0000019	0.0097	0.007		4.28	0.00303	4.22	<0.00002	144	0.23	92.4	<0.00001	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	3.6
RSEM-R5B-EOP	3/24/2020 13:20	XP0441	D	C021618	0.00096	<0.01	<0.0002	0.0547	20.5	0.0211	<0.0000019	0.0095	0.0068		4.30	0.00309	4.3	<0.00002	143	0.233	91.6	<0.00001	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	3/25/2020 12:50	XP1314	M	C021872	0.00088	<0.01	<0.0002	0.0592	22.4	0.0097	<0.0000019	0.0099	0.0085		4.39	0.00322	4.43	<0.00002	151	0.247	99.2	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	3/25/2020 13:00	XP1315	D	C021872	0.00088	<0.01	<0.0002	0.0583	22.4	0.0097	0.0000024	0.0096	0.0085		4.40	0.00332	4.44	<0.00002	149	0.245	99.0	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	3/26/2020 14:10	XP2433	M	C022151	0.001	<0.01	<0.0002	0.0567	21.6	0.0123	<0.0000019	0.0096	0.0081		4.24	0.00313	4.16	<0.00002	146	0.233	93.6	<0.00001	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	3.1
RSEM-R5B-EOP	3/26/2020 14:20	XP2434	D	C022151	0.00161	<0.01	<0.0002	0.039	15.9	0.013	<0.0000019	0.0079	0.0057		3.42	0.00233	3.15	<0.00002	110	0.178	69.0	<0.00001	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	22
RSEM-R5B-EOP	3/27/2020 10:50	XP2503	M	C022160	0.00084	<0.01	<0.0002	0.0462	17.2	0.0228	<0.0000019	0.0107	0.0068		4.04	0.00279	3.69	<0.00002	139	0.203	81.6	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	8.4
RSEM-R5B-EOP	3/27/2020 11:00	XP2504	D	C022160	0.00082	<0.01	<0.0002	0.0433	16.7	0.022	<0.0000019	0.0107	0.0066		3.97	0.00278	3.6	<0.00002	136	0.202	80.1	<0.00001	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	8.6
RSEM-R5B-EOP	3/28/2020 14:10	XP3712	M	C022531	0.00091	<0.01	<0.0002	0.0466	15.6	0.0193	<0.0000019	0.0123	0.0057		4.12	0.00284	3.72	<0.00002	144	0.202	80.6	<0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	10
RSEM-R5B-EOP	3/28/2020 14:20	XP3713	D	C022531	0.00093	<0.01	<0.0002	0.0458	15.7	0.0213	<0.0000019	0.0124	0.0058		4.14	0.00283	3.7	<0.00002	146	0.201	82.5	<0.00001	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	9.4
RSEM-R5B-EOP	3/29/2020 15:30	XP3675	M	C022512	0.00097	<0.01	<0.0002	0.0509	17.8	0.0169	<0.0000019	0.0136	0.0054		4.75	0.00332	4.24	<0.00002	169	0.225	92.9	<0.00001	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	3/30/2020 15:00	XP5011	M	C022895	0.00107	<0.01	<0.0002	0.0556	21.0	0.0139	<0.0000019	0.0143	0.0057		5.30	0.00341	4.63	<0.00002	185	0.21	107	<0.00001	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	3/31/2020 12:00	XP6323	M	C023153	0.00108	<0.01	<0.0002	0.0595	23.7	0.0113	<0.0000019	0.0155	0.0058		5.80	0.00348	4.76	<0.00002	203	0.236	114	<0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	0.00012	2.1
RSEM-R5B-EOP	3/31/2020 12:10	XP6324	D	C023153	0.00104	<0.01	<0.0002	0.0598	23.2	0.0112	<0.0000019	0.0152	0.006		5.72	0.00393	4.85	<0.00002	200	0.234	116	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	3.7
RSEM-R5B-EOP	4/1/2020 12:10	XP6344	M	C023159	0.00104	<0.01	<0.0002	0.0617	25.9	0.0116	<0.0000019	0.0152	0.0065		6.21	0.00335	5.42	<0.00002	211	0.247	122	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	2.4
RSEM-R5B-EOP	4/1/2020 12:20	XP6345	D	C023159	0.00099	<0.01	<0.0002	0.063	25.4	0.0119	<0.0000019	0.0162	0.0063		6.23	0.00366	5.56	<0.00002	210	0.252	123	<0.00001	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	2.7
RSEM-R5B-EOP	4/2/2020 11:00	XP7671	M	C023465	0.00088	<0.01	<0.0002	0.0599	24.9	0.0115	<0.0000019	0.0134	0.0067		5.75	0.00347	5.32	<0.00002	198	0.254	105	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	3.8
RSEM-R5B-EOP	4/2/2020 11:10	XP7672	D	C023465	0.00091	<0.01	<0.0002	0.0578	23.8	0.0115	<0.0000019	0.0139	0.0064		5.69	0.00341	5.23	<0.00002	191	0.247	109	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	5.3
RSEM-R5B-EOP	4/3/2020 11:10	XP9111	M	C023756	0.00108	<0.01	<0.0002	0.0577	24.4	0.0102	<0.0000019	0.0139	0.0069		5.33	0.00351	5.22	<0.00002	186	0.245	108	<0.00001	<0.005	<0.005	0.00283	<0.005	<0.005	<0.0001	2.2
RSEM-R5B-EOP	4/3/2020 11:20	XP9112	D	C023756	0.00096	<0.01	<0.0002	0.0592	25.0	0.0115	<0.0000019	0.0134	0.0062		5.66	0.00331	5.19	<0.00002	196	0.254	107	0.000012	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	4/4/2020 11:30	XQ0607	M	C024053	0.0009	<0.01	<0.0002	0.0575	25.5	0.01	<0.0000019	0.0135	0.0059		5.23	0.00383	5.3	<0.00002	191	0.255	119	<0.00001	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	2.3
RSEM-R5B-EOP	4/4/2020 11:40	XQ0608	D	C024053	0.00089	<0.01	<0.0002	0.0575	25.2	0.0099	<0.0000019	0.0134	0.0057		5.15	0.00388	5.25	<0.00002	185	0.247	118	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	2.2
RSEM-R5B-EOP	4/5/2020 12:20	XQ0577	M	C024048	0.0009	<0.01	<0.0002	0.0534	24.9	0.0104	<0.0000019	0.0121	0.0058		4.97	0.00372	5.14	<0.00002	181	0.251	122	0.00001	<0.005	<0.005	0.003	<0.005	<0.005	<0.0001	2.6
RSEM-R5B-EOP	4/5/2020 12:30	XQ0578	D	C024048	0.00086	<0.01	<0.0002	0.0566	25.9	0.011	<0.0000019	0.0129	0.0059		5.14	0.0039	5.17	<0.00002	188	0.261	117	<0.00001	<0.005	<0.005	0.00312	<0.005	<0.005	<0.0001	2.3
RSEM-R5B-EOP	4/6/2020 12:25	XQ1945	M	C024407	<0.0005	<0.01	<0.0002	0.0544	27.0	0.011	<0.0000019	0.0127	0.0054		5.22	0.00332	4.89	<0.00002	186	0.264	122	<0.00001	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	3.1
RSEM-R5B-EOP	4/6/2020 12:35	XQ1946	D	C024407	<0.0005	<0.01	<0.0002	0.0545	27.1	0.0109	<0.0000019	0.0128	0.0052		5.18	0.00378	4.78	<0.00002	187	0.257	123	<0.00001	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	4/7/2020 11:50	XQ3412	M	C024753	<0.0005	<0.01	<0.0002	0.0547	29.3	0.0135	<0.0000019	0.0136	0.0051		5.34	0.00362	5.04	<0.00002	195	0.28	125	<0.00001	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	4.1
RSEM-R5B-EOP	4/7/2020 12:00	XQ3413	D	C024753	<0.0005	<0.01	<0.0002	0.0524	30.1	0.0147	<0.0000019	0.0121	0.0051		5.47	0.00367	4.98	<0.00002	199	0.293	132	<0.00001	<0.005	<0.005	0.00315	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	4/8/2020 11:30	XQ4587	M	C024938	<0.0005	<0.01	<0.0002	0.0322	24.4	0.0242	0.0000041	0.0091	0.0048		4.87	0.0026	3.64	<0.00002	131	0.243	97.2	<0.00001	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	13
RSEM-R5B-EOP	4/8/2020 11:40	XQ4588	D	C024938	<0.0005	<0.01	<0.0002	0.0341	24.6	0.0016	0.0000038	0.0096	0.0041		4.81	0.00249	3.68	<0.00002	132	0.242	96.7	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	19
RSEM-R5B-EOP	4/9/2020 12:20	XQ4586	M	C024937	<0.0005	<0.01	<0.0002	0.026	17.9	<0.001	0.0000058	0.0078	0.0035		3.85	0.00219	2.72	<0.00002	97.6	0.172	81.3	<0.00001	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	31
RSEM-R5B-EOP	4/10/2020 11:30	XQ5867	M	C025257	0.00124	<0.01	<0.0002	0.024	17.9	0.0103	0.0000057	0.0072	0.0055		3.83	0.00185	2.8	<0.00002	76.0	0.167	76.2	<0.00001	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	38
RSEM-R5B-EOP	4/10/2020 11:40	XQ5868	D	C025257	0.00119	<0.01	<0.0002	0.024	18.1	0.0282	0.0000079	0.0072	0.0057		3.88	0.00193	2.77	<0.00002	77.3	0.171	77.7	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	39
RSEM-R5B-EOP	4/11/2020 18:50	XQ5966	M	C025274	0.00101	<0.01	<0.0002	0.0348	22.3	0.0025	0.0000031	0.01	0.0075		4.63	0.00324	3.25	<0.00002	107	0.221	106	<0.00001	<0.005	<0.005	0.00212	<0.005	0.0065	<0.0001	11
RSEM-R5B-EOP	4/12/2020 13:35	XQ6093	M	C025305	0.00101	<0.01	<0.0002	0.0384	23.2	0.0218	<0.0000019	0.0109	0.0084		4.96	0.00351	3.34	<0.00002	115	0.235	105	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	4.4
RSEM-R5B-EOP	4/12/2020 13:45	XQ6094	D	C025305	0.00103	<0.01	<0.0002	0.0368	22.6	0.0374	0.0000034	0.0105	0.0083		4.80	0.00351	3.35	<0.00002	111	0.241	106	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	4.4
RSEM-R5B-EOP	4/13/2020 10:30	XQ5692	M	C025217	0.00073	<0.01	<0.0002	0.0069	28.3	0.0082	<0.0000019	0.0057	0.0033		4.75	0.00362	1.33	<0.00002	36.3	0.212	86.6	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	0.00014	6.1
RSEM-R5B-EOP	4/14/2020 18:05	XQ8327	M	C025913	0.00115	<0.01	<0.0002	0.037	19.7	0.0359	<0.0000019	0.011	0.0085		5.23	0.00401	3.2	<0.00002	109	0.224	90.7	<0.00001	<0.005	<0.005	0.00225	<0.005	0.007	<0.0001	6.0
RSEM-R5B-EOP	4/15/2020 13:05	XQ9337	M	C026226	0.00106	<0.01	<0.0002	0.0409	19.4	0.0434	0.000002	0.0123	0.0093		5.17	0.00463	3.6	<0.00002	115	0.223	99.1	<0.00001	<0.005	<0.005	0.00239	<0.005	0.0117	<0.0001	11
RSEM-R5B-EOP	4/15/2020 13:15	XQ9338	D	C026226	0.00128	<0.01	<0.0002	0.0407	20.1	0.0453	0.0000023	0.0121	0.0094		5.35	0.00436	3.55	<0.00002	117	0.23	95.5	<0.00001	<0.005	<0.005	0.00229	<0.005	0.0079	<0.0001	11
RSEM-R5B-EOP	4/16/2020 12:30	XR0406	M	C026516	0.00114	<0.01	<0.0002	0.0415	17.4	0.0171	<0.0000019	0.0114	0.0096		4.76	0.00412	3.49	<0.00002	111	0.196	86.4	<0.00001	<0.005	<0.005	0.00218	<0.005	0.0164	0.00011	10
RSEM-R5B-EOP	4/16/2020 12:40	XR0407	D	C026516	0.00148	<0.01	<0.0002	0.0448	18.7	0.0195	0.0000036	0.0122	0.0103		5.12	0.00488	3.96	<0.00002	120	0.212	98.3	<0.00001	<0.005	<0.005	0.00234	<0.005	0.0087	<0.0001	7.9
RSEM-R5B-EOP	4/17/2020 11:25	XR0398	M	C026514	0.00127	<0.01	<0.0002	0.0475	17.8	0.0331	0.0000019	0.013	0.0105		5.41	0.00456	3.96	<0.00002	123	0.207	91.5	<0.00001	<0.005	<0.005	0.00229	<0.005	0.0067	<0.0001	3.0
RSEM-R5B-EOP	4/18/2020 10:30	XR2299	M	C026869	0.00106	<0.01	<0.0002	0.0474	17.3	0.0378	<0.0000019	0.0118	0.0125		4.60	0.00464	3.62	<0.00002	120	0.197	89.9	<0.00001	<0.005	<0.005	0.00216	<0.005	0.0094	<0.0001	3.2
RSEM-R5B-EOP	4/18/2020 10:40	XR2300	D	C026869	0.00105	<0.01	<0.0002	0.0495	17.0	0.0375	<0.0000019	0.0122	0.012		4.54	0.00462	3.54	<0.00002	117	0.2	87.5	<0.00001	<0.005	<0.005	0.00227	<0.005	0.0088	<0.0001	2.4
RSEM-R5B-EOP	4/19/2020 14:45	XR2517	M	C026927	0.00099	<0.01	<0.0002	0.0479	16.1	0.036	0.0000027	0.0105	0.0114		4.06	0.00441	3.21	<0.00002	123	0.183	95.2	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0069	<0.0001	4.4
RSEM-R5B-EOP	4/20/2020 16:40	XR3425	M	C027099	0.00138	0.046	<0.0002	0.0561	16.7	0.0366	<0.0000019	0.0117	0.0113		4.25	0.00498	3.38	<0.00002	138	0.193	100	<0.00001	<0.005	<0.005	0.00206	<0.005	0.0056	<0.0001	6.4
RSEM-R5B-EOP	4/21/2020 11:20	XR4950	M	C027465	0.00082	<0.01	<0.0002	0.0592	20.2	0.0227	<0.0000019	0.0123	0.0109		4.90	0.00498	3.67	<0.00002	169	0.22	121	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	3.9
RSEM-R5B-EOP	4/21/2020 11:30	XR4951	D	C027465	0.00083	<0.01	<0.0002	0.0626	18.7	0.0204	<0.0000019	0.0133	0.0099		4.77	0.00492	3.44	<0.00002	159	0.213	109	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	4/22/2020 11:30	XR6353	M	C027799	0.0007	<0.01	<0.0002	0.058	18.5	0.0235	<0.0000019	0.0125	0.0097		4.34	0.00465	2.99	<0.00002	157	0.187	108	<0.00001	<0.005	<0.005	0.0023	<0.005	0.0087	<0.0001	2.7
RSEM-R5B-EOP	4/22/2020 11:40	XR6354	D	C027799	0.00077	<0.01	<0.0002	0.0618	20.1	0.0239	<0.0000019	0.0131	0.0103		4.64	0.00535	3.35	<0.00002	170	0.201	118	<0.00001	<0.005	<0.005	0.00244	<0.005	0.0092	<0.0001	2.0
RSEM-R5B-EOP	4/23/2020 14:05	XR7182	M	C027994	0.00089	<0.01	<0.0002	0.0645	20.1	0.0169	<0.0000019	0.0119	0.0104		4.42	0.00523	3.14	<0.00002	163	0.239	132	0.000018	<0.005	<0.005	0.00217	<0.005	0.0061	<0.0001	2.9
RSEM-R5B-EOP	4/24/2020 11:05	XR7266	M	C028014	0.00075	<0.01	<0.0002	0.0767	22.3	0.0181	<0.0000019	0.0134	0.0103		4.66	0.00572	3.35	<0.00002	178	0.272	161	0.000013	<0.005	<0.005	0.00228	<0.005	0.0067	<0.0001	2.2
RSEM-R5B-EOP	4/24/2020 11:15	XR7267	D	C028014	0.00076	<0.01	<0.0002	0.0767	22.9	0.0162	<0.0000019	0.0142	0.0108		4.73	0.00589	3.42	<0.00002	185	0.276	170	<0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	0.00023	2.2
RSEM-R5B-EOP	4/25/2020 11:05	XR8893	M	C028412	<0.0005	<0.01	0.0003	0.0251	8.58	0.0019	<0.0000019	0.0179	0.002		5.49	0.00238	4.59	<0.00002	109	0.205	44.6	0.000015	<0.005	<0.005	0.00131	0.0055	<0.005	<0.0001	1.2
RSEM-R5B-EOP	4/25/2020 11:15	XR8894	D	C028412	<0.0005	<0.01	<0.0002	0.0765	22.3	0.003	<0.0000019	0.013	0.0021		4.56	0.00559	3.18	<0.00002	187	0.27	159	0.000017	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	1.2
RSEM-R5B-EOP	4/26/2020 11:50	XR8990	M	C028429	0.00075	<0.01	<0.0002	0.0783	22.0	0.002	<0.0000019	0.0134	0.008		4.38	0.00519	3.11	<0.00002	192	0.248	165	<0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	4/26/2020 12:00	XR8991	D	C028429	0.0008	<0.01	<0.0002	0.0849	24.7	0.0029	<0.0000019	0.0151	0.0085		4.95	0.00646	3.4	<0.00002	216	0.277	187	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	4/27/2020 13:05	XS0059	M	C028666	0.00072	0.033	<0.0002	0.0749	22.2	0.0024	<0.0000019	0.0132	0.0063		4.39	0.00557	3	<0.00002	203	0.233	167	<0.00001	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	4/28/2020 14:10	XS2090	M	C029151	0.0007	<0.01	<0.0002	0.093	25.4	<0.001	<0.0000019	0.0167	0.0062		5.20	0.00618	3.35	<0.00002	248	0.269	184	<0.00001	<0.005	<0.005	0.0026	<0.005	<0.005	0.00017	1.7

Appendix 3-C: 2020 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-EOP	4/29/2020 11:45	XS3520	M	C029452	0.00078	<0.01	<0.0002	0.093	27.0	<0.001	<0.0000019	0.0178	0.0062		5.50	0.00631	3.36	<0.00002	271	0.279	203	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	4/30/2020 11:45	XS4884	M	C029734	0.00071	<0.01	<0.0002	0.0884	24.4	<0.001	0.000003	0.0163	0.0052		4.98	0.00569	2.69	<0.00002	250	0.259	183	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	5/1/2020 12:00	XS5998	M	C029956	0.00091	<0.01	<0.0002	0.102	25.4	<0.001	<0.0000019	0.0197	0.0056		5.28	0.00663	3.33	<0.00002	260	0.274	187	0.000011	<0.005	<0.005	0.00286	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	5/2/2020 12:35	XS7463	M	C030328	0.00173	<0.01	<0.0002	0.0999	25.9	0.0021	<0.0000019	0.019	0.0051		5.56	0.00634	2.97	<0.00002	261	0.288	191	0.000023	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	5/4/2020 14:30	XS8356	M	C030506	0.00136	0.035	<0.0002	0.097	26.9	0.0661	<0.0000019	0.0164	0.01		5.45	0.00577	2.76	<0.00002	258	0.29	207	0.000022	<0.005	<0.005	0.00232	<0.005	0.015	<0.0001	1.8
RSEM-R5B-EOP	5/7/2020 12:00	XT2577	M	C031444	0.00145	<0.01	<0.0002	0.116	29.6	0.0021	<0.0000019	0.0215	0.0051		6.11	0.00609	2.34	<0.00002	311	0.319	230	<0.00001	0.005	<0.005	0.00316	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	5/8/2020 13:00	XT2572	M	C031442	0.00154	<0.01	<0.0002	0.124	30.4	0.0029	<0.0000019	0.0222	0.0051		5.74	0.00586	2.23	<0.00002	283	0.337	196	0.00001	<0.005	<0.005	0.00339	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	5/9/2020 12:40	XT4488	M	C031859	0.00111	<0.01	<0.0002	0.101	28.3	<0.001	<0.0000019	0.0182	0.004		5.52	0.00586	1.93	<0.00002	270	0.295	200	<0.00001	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	5/9/2020 12:50	XT4490	D	C031859	0.00136	<0.01	<0.0002	0.108	30.7	0.002	<0.0000019	0.0197	0.0042		5.96	0.0059	2.11	<0.00002	294	0.319	227	<0.00001	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	5/10/2020 13:30	XT4528	M	C031867	0.00148	<0.01	<0.0002	0.0912	33.1	<0.001	<0.0000019	0.0179	0.0048		6.15	0.00549	1.8	<0.00002	309	0.314	202	<0.00001	<0.005	<0.005	0.0033	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	5/11/2020 9:45	XT5198	M	C032074	0.00117	<0.01	<0.0002	0.0945	28.4	<0.001	<0.0000019	0.0175	0.0034		5.45	0.00473	1.49	<0.00002	255	0.298	190	<0.00001	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	5/12/2020 11:40	XT7069	M	C032509	0.0015	<0.01	<0.0002	0.106	32.1	<0.001	<0.0000019	0.0193	0.0037		6.09	0.006	1.65	0.00003	285	0.31	205	<0.00001	<0.005	<0.005	0.00316	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	5/16/2020 12:00	XU2649	M	C033733	0.00155	<0.01	<0.0002	0.0792	30.2	<0.001	<0.0000019	0.0176	0.0027		5.25	0.00545	0.851	<0.00002	236	0.301	172	0.000011	<0.005	<0.005	0.00338	<0.005	<0.005	<0.0001	0.84
RSEM-R5B-EOP	5/17/2020 10:40	XU2515	M	C033704	0.00206	<0.01	<0.0002	0.075	30.4	<0.001	<0.0000019	0.0165	0.0029		5.16	0.00566	0.895	0.000022	235	0.303	197	<0.00001	<0.005	<0.005	0.003	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	5/18/2020 0:10	XU2636	M	C033728	0.00169	<0.01	<0.0002	0.0763	30.0	0.0011	<0.0000019	0.0165	0.003		5.10	0.00506	0.754	0.000024	228	0.298	170	<0.00001	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	5/21/2020 14:30	XU7000	M	C034623	0.0021	<0.01	<0.0002	0.0829	22.3	<0.001	<0.0000019	0.0096	0.0022		4.36	0.00471	0.573	<0.00002	185	0.227	105	<0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	1.2
RSEM-R5B-EOP	5/22/2020 15:40	XU8403	M	C034984	0.0019	<0.01	<0.0002	0.0668	24.7	0.0013	<0.0000019	0.0132	0.0023		4.47	0.00403	0.496	<0.00002	185	0.245	154	0.000031	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	6/9/2020 17:10	XX3628	M	C039793	0.00191	<0.01	<0.0002	0.0569	29.2	<0.001	0.0000027	0.0108	0.0027		4.80	0.00351	0.287	<0.00002	157	0.314	128	0.000015	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	16
RSEM-R5B-EOP	6/14/2020 15:25	XX9648	M	C040993	0.00175	<0.01	<0.0002	0.0442	28.9	<0.001	<0.0000019	0.0089	0.0029		4.69	0.00257	0.772	<0.00002	114	0.359	107	0.000015	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	17
RSEM-R5B-EOP	6/15/2020 16:30	XY1607	M	C041415	0.00122	<0.01	<0.0002	0.0214	17.3	0.0571	0.0000035	0.0063	0.0125		3.58	0.00232	2.4	<0.00002	47.1	0.28	70.2	<0.00001	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	13
RSEM-R5B-EOP	6/16/2020 11:25	XY1507	M	C041388	0.00123	<0.01	<0.0002	0.0314	21.5	0.284	0.0000026	0.0059	0.0393		3.73	0.00281	3.17	<0.00002	45.4	0.334	88.4	0.00001	<0.005	<0.005	0.00188	<0.005	0.0293	<0.0001	6.4
RSEM-R5B-EOP	6/17/2020 13:20	XY6279	M	C042380	0.00108	<0.01	<0.0002	0.0367	24.7	0.366	<0.0000019	0.0061	0.0453		4.12	0.00325	3.01	<0.00002	50.9	0.365	99.1	0.000011	<0.005	<0.005	0.00189	<0.005	0.0331	<0.0001	3.5
RSEM-R5B-EOP	6/18/2020 14:30	XY6286	M	C042383	0.00103	<0.01	<0.0002	0.0454	28.2	0.428	<0.0000019	0.0064	0.0564		4.32	0.00356	3.14	<0.00002	57.2	0.398	114	0.000013	<0.005	<0.005	0.00203	<0.005	0.0522	<0.0001	1.5
RSEM-R5B-EOP	6/19/2020 12:00	XY6265	M	C042375	0.001	<0.01	<0.0002	0.0487	30.1	0.435	<0.0000019	0.0066	0.0587		4.49	0.00376	3.27	<0.00002	63.3	0.414	123	0.000014	<0.005	<0.005	0.00214	<0.005	0.0523	<0.0001	1.4
RSEM-R5B-EOP	6/19/2020 12:10	XY6266	D	C042375	0.00099	<0.01	<0.0002	0.0486	29.7	0.42	<0.0000019	0.0066	0.0572		4.49	0.00381	3.29	<0.00002	62.7	0.41	121	0.000014	<0.005	<0.005	0.0021	<0.005	0.0505	<0.0001	1.3
RSEM-R5B-EOP	6/20/2020 15:30	XY9032	M	C042884	0.00097	<0.01	<0.0002	0.0475	29.6	0.37	<0.0000019	0.0067	0.0564		4.39	0.004	3.23	<0.00002	66.3	0.39	123	0.000015	<0.005	<0.005	0.00224	<0.005	0.04	<0.0001	1.2
RSEM-R5B-EOP	6/21/2020 14:45	XY9119	M	C042904	0.00098	<0.01	<0.0002	0.0576	32.5	0.333	<0.0000019	0.0074	0.0545		4.79	0.00445	3.2	<0.00002	74.6	0.421	135	0.000017	<0.005	<0.005	0.00249	<0.005	0.0349	<0.0001	1.5
RSEM-R5B-EOP	6/22/2020 12:30	XZ0405	M	C043197	0.001	<0.01	<0.0002	0.055	31.5	0.275	<0.0000019	0.0079	0.0505		4.87	0.00478	3.17	<0.00002	81.1	0.43	136	0.000017	<0.005	<0.005	0.00246	<0.005	0.0255	<0.0001	1.6
RSEM-R5B-EOP	6/23/2020 16:40	XZ2251	M	C043604	0.00096	<0.01	<0.0002	0.057	31.3	0.19	<0.0000019	0.0084	0.0424		5.06	0.0052	3.18	<0.00002	87.6	0.45	140	0.000019	<0.005	<0.005	0.0026	<0.005	0.0139	<0.0001	1.8
RSEM-R5B-EOP	6/24/2020 13:50	XZ5350	M	C044267	0.00095	<0.01	<0.0002	0.0566	31.5	0.121	<0.0000019	0.0086	0.0388		5.19	0.0055	2.77	<0.00002	94.1	0.417	139	0.000019	<0.005	<0.005	0.0026	<0.005	0.0099	<0.0001	1.6
RSEM-R5B-EOP	6/25/2020 16:30	XZ5986	M	C044346	0.00096	<0.01	<0.0002	0.0593	31.4	0.0796	<0.0000019	0.009	0.0342		5.23	0.00573	2.66	<0.00002	96.7	0.42	140	0.000019	<0.005	<0.005	0.00269	<0.005	0.0059	<0.0001	2.2
RSEM-R5B-EOP	6/26/2020 15:20	XZ7318	M	C044624	0.00095	<0.01	<0.0002	0.0564	31.0	0.054	<0.0000019	0.0092	0.0315		5.37	0.00577	2.45	<0.00002	98.8	0.424	142	0.000018	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	6/27/2020 18:20	XZ9067	M	C044897	0.00088	<0.01	<0.0002	0.0575	31.1	0.0016	<0.0000019	0.0093	0.0246		5.30	0.0059	2.39	<0.00002	101	0.415	141	0.000018	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	6/28/2020 11:15	XZ9157	M	C044916	0.00099	<0.01	<0.0002	0.0581	30.3	0.007	<0.0000019	0.0094	0.0248		5.35	0.00604	2.4	<0.00002	106	0.411	141	0.000019	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	3.3
RSEM-R5B-EOP	6/29/2020 15:00	YA0780	M	C045275	0.0009	<0.01	<0.0002	0.0562	30.0	<0.001	<0.0000019	0.0103	0.0201		5.55	0.00675	2.3	<0.00002	117	0.396	135	0.000018	<0.005	<0.005	0.00282	<0.005	<0.005	<0.0001	2.8
RSEM-R5B-EOP	6/29/2020 15:10	YA0781	D	C045275	0.00087	<0.01	<0.0002	0.0541	30.1	<0.001	<0.0000019	0.0104	0.0197		5.59	0.00684	2.3	<0.00002	117	0.394	135	0.000019	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	2.9
RSEM-R5B-EOP	6/30/2020 12:35	YA2736	M	C045692	0.00093	<0.01	<0.0002	0.056	29.6	<0.001	<0.0000019	0.0109	0.0181		5.68	0.00687	2.61	<0.00002	121	0.399	134	0.000017	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	3.8
RSEM-R5B-EOP	7/1/2020 12:30	YA2710	M	C045689	0.00076	<0.01	<0.0002	0.0369	27.3	<0.001	0.0000025	0.0081	0.0058		5.05	0.00456	4.23	<0.00002	94.5	0.356	82.0	0.000013	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	12
RSEM-R5B-EOP	7/2/2020 14:25	YA4191	M	C045985	0.00095	<0.01	<0.0002	0.0234	21.0	0.008	0.0000045	0.006	0.0034		4.08	0.00264	3.36	<0.00002	59.3	0.32	58.1	<0.00001	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	19
RSEM-R5B-EOP	7/3/2020 16:35	YA5157	M	C046179	0.00105	<0.01	<0.0002	0.0118	13.9	0.0252	<0.0000019	0.0042	0.0027		2.98	0.00116	2.57	<0.00002	21.9	0.235	42.6	<0.00001	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	36
RSEM-R5B-EOP	7/4/2020 12:45	YA6731	M	C046470	0.0013	<0.01	<0.0002	0.0131	12.9	0.0797	<0.000019	0.0036	0.0082		2.64	0.00086	2.47	<0.00002	14.0	0.197	43.8	<0.00001	<0.005	<0.005	0.00135	<0.005	0.0053	<0.0001	32
RSEM-R5B-EOP	7/4/2020 12:55	YA6732	D	C046470	0.00129	<0.01	<0.0002	0.013	13.0	0.0807	<0.000019	0.0037	0.0087		2.61	0.00088	2.54	<0.00002	14.1	0.198	42.9	<0.00001	<0.005	<0.005	0.00136	<0.005	0.0054	<0.0001	31
RSEM-R5B-EOP	7/5/2020 10:50	YA6920	M	C046500	0.00162	<0.01	<0.0002	0.0244	18.7	0.261	0.0000025	0.0033	0.0428		2.73	0.001	2.73	<0.00002	21.9	0.221	66.6	<0.00001	<0.005	<0.005	0.00146	<0.005	0.063	<0.0001	12
RSEM-R5B-EOP	7/6/2020 11:45	YA8350	M	C046846	0.00143	<0.01	<0.0002	0.0339	25.7	0.328	<0.0000019	0.0033	0.0573		3.10	0.00129	2.77	<0.00002	30.5	0.271	85.9	<0.00001	<0.005	<0.005	0.00194	<0.005	0.0705	<0.0001	5.8
RSEM-R5B-EOP	7/7/2020 13:00	YB0052	M	C047206	0.00118	<0.01	<0.0002	0.0488	30.1	0.377	<0.0000019	0.0034	0.0684		3.44	0.00169	3.46	<0.00002	36.0	0.327	103	0.000014	<0.005	<0.005	0.00218	<0.005	0.0909	<0.0001	3.4
RSEM-R5B-EOP	7/8/2020 15:30	YB2462	M	C047619	0.00108	<0.01	<0.0002	0.0455	31.9	0.354	<0.0000019	0.0033	0.0616		3.62	0.0019	3.57	<0.00002	39.2	0.339	106	0.000013	<0.005	<0.005	0.0023	<0.005	0.0693	<0.0001	2.8
RSEM-R5B-EOP	7/9/2020 15:30	YB4138	M	C047920	0.00095	<0.01	<0.0002	0.0402	31.4	0.255	<0.0000019	0.0033	0.0458		3.76	0.00196	3.5	<0.00002	36.5	0.352	95.6	0.000013	<0.005	<0.005	0.00245	<0.005	0.0379	<0.0001	1.7
RSEM-R5B-EOP	7/10/2020 10:45	YB4118	M	C047917	0.00087	<0.01	<0.0002	0.0352	31.0	0.156	0.0000026	0.0031	0.0315		3.86	0.00196	3.6	<0.00002	33.6	0.336	83.1	0.00001	<0.005	<0.005	0.00245	<0.005	0.0171	<0.0001	1.5
RSEM-R5B-EOP	7/11/2020 16:00	YB7195	M	C048486	0.00077	<0.01	<0.0002	0.0301	30.0	0.0678	<0.0000019	0.0032	0.0206		3.91	0.0018	3.28	<0.00002	29.6	0.34	71.1	0.000011	<0.005	<0.005	0.00255	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	7/12/2020 15:40	YB7110	M	C048462	0.00069	<0.01	<0.0002	0.028	30.5	0.0282	<0.0000019	0.003	0.0139		3.99	0.00175	3.3	<0.00002	27.5	0.341	64.1	0.000012	<0.005	<0.005	0.00257	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	7/13/2020 15:30	YB9221	M	C048875	0.00065	<0.01	<0.0002	0.0227	31.0	0.0084	<0.0000019	0.0028	0.0094		4.13	0.00183	3.3	<0.00002	26.5	0.329	57.9	0.000013	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	7/14/2020 12:45	YC1070	M	C049344	0.00057	<0.01	<0.0002	0.0207	31.2	0.0054	<0.0000019	0.0025	0.0082		3.97	0.00164	3	<0.00002	26.1	0.31	54.8	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	7/15/2020 11:35	YC2136	M	C049614	0.00052	<0.01	<0.0002	0.0221	30.4	0.0018	<0.0000019	0.0024	0.008		3.98	0.0017	3.11	<0.00002	25.1	0.333	52.1	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	7/16/2020 14:20	YC4663	M	C049952	0.00051	<0.01	<0.0002	0.0203	30.6	0.0041	<0.0000019	0.0023	0.0079		4.00	0.00159	3.22	<0.00002	25.8	0.323	50.1	<0.00001	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	7/16/2020 14:30	YC4664	D	C049952	0.00051	<0.01	<0.0002	0.0204	30.7	0.0039	<0.0000019	0.0022	0.0079		3.94	0.00168	3.22	<0.00002	25.2	0.317	50.4	<0.00001	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	7/17/2020 12:45	YC5479	M	C050110	<0.0005	<0.01	<0.0002	0.0195	29.7	0.0024	<0.0000019	0.0021	0.0068		3.82	0.00156	3.12	<0.00002	24.4	0.305	46.4	<0.00001	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	7/17/2020 12:55	YC5480	D	C050110	0.00052	<0.01	<0.0002	0.0194	29.7	0.002	<0.0000019	0.0021	0.0069		3.84	0.0016	3.1	<0.00002	24.3	0.318	46.3	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	7/18/2020 12:05	YC7456	M	C050583	<0.0005	<0.01	<0.0002	0.0188	29.6	0.0019	<0.0000019	0.0021	0.006		3.87	0.0016	3.05	<0.00002	23.8	0.305	44.8	0.000011	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	7/18/2020 12:15	YC7457	D	C050583	<0.0005	<0.01	<0.0002	0.0186	29.5	0.0014	<0.0000019	0.002	0.0057		3.86	0.00163	3.04	<0.00002	23.5	0.306	43.8	<0.00001	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	7/19/2020 12:40	YC7534	D	C050603	<0.0005	<0.01	<0.0002	0.0179	29.4	0.0013	<0.0000019	0.002	0.0048		3.85	0.00156	2.93	<0.00002	22.9	0.312	43.4	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	7/19/2020 13:30	YC7533	M	C050603	<0.0005	<0.01	<0.0002	0.0178	29.4	0.0015	<0.0000019	0.0021	0.0048		3.80	0.00162	2.97	<0.00002	23.0	0.31	42.7	<0.00001	<0.005	<0.005	0.00196	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	7/20/2020 12:30	YC8545	M	C050811	0.00052	<0.01	<0.0002	0.0162	28.8	0.003	<0.0000019	0.002	0.0041		3.82	0.00146	2.71	<0.00002	22.0	0.289	40.8	<0.00001	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	4.1
RSEM-R5B-EOP	7/21/2020 15:20	YD0798	M	C051251	<0.0005	<0.01	<0.0002	0.018	28.9	<0.001	<0.0000019	0.0019	0.0032		3.88	0.00141	2.63	<0.00002	21.2	0.296	39.3	<0.00001	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	7/22/2020 14:20	YD2619	M	C051641	0.00052	<0.01	<0.0002	0.0156	27.6	<0.001	<0.0000019	0.002	0.003		3.78	0.00142	2.59	<0.00002	20.6	0.297	39.0	<0.00001	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	7/23/2020 14:20	YD4256	M	C051864	0.0005	<0.01	<0.0002	0.0166	28.2	<0.001	<0.0000019	0.002	0.0029		3.82	0.00133	2.12	<0.00002	21.1	0.297	38.6	<0.00001	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	7/24/2020 14:05	YD5908	M	C052038	0.00052	<0.01	<0.0002	0.0173	28.1	<0.001	<0.0000019	0.0019	0.0027		3.79	0.00136	1.8	<0.00002	20.6	0.288	38.0	<0.00001	<0.005	<0.005	0.00181	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	7/25/2020 12:00	YD7676	M	C052402	0.00053	<0.01	<0.0002	0.0151	28.2	<0.001	<0.0000019	0.0019	0.0027		3.72	0.00133	1.77	<0.00002	20.3	0.275	37.3	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	7/26/2020 13:15	YD7711	M	C052420	0.00058	<0.01	<0.0002	0.0156	29.3	<0.001	<0.0000019	0.0019	0.0026		3.79	0.00139	1.6	<0.00002	21.0	0.275	38.2	<0.00001	<0.005	<0.005	0.00198	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	7/26/2020 13:25	YD7712	D	C052420	0.00056	<0.01	<0.0002	0.0153	28.3	<0.001	<0.0000019	0.0019	0.0026		3.73	0.00135	1.6	<0.00002	20.3	0.27	37.1	<0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.97

Appendix 3-C: 2020 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-EOP	7/27/2020 11:50	YD7771	M	C052432	0.00057	<0.01	<0.0002	0.0148	28.5	<0.001	<0.0000019	0.0019	0.0024		3.74	0.00131	1.5	<0.00002	20.1	0.271	36.8	<0.00001	<0.005	<0.005	0.00196	<0.005	<0.005	<0.0001	1.1
RSEM-R5B-EOP	7/28/2020 13:45	YE2031	M	C053295	0.00054	<0.01	<0.0002	0.0149	27.4	<0.001	<0.0000019	0.0019	0.0022		3.71	0.00127	1.36	<0.00002	19.3	0.282	36.8	<0.00001	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	0.99
RSEM-R5B-EOP	7/30/2020 14:30	YE4007	M	C053695	0.00055	<0.01	<0.0002	0.0147	26.7	<0.001	<0.0000019	0.0019	0.0022		3.73	0.00128	1.28	<0.00002	18.9	0.283	35.9	<0.00001	<0.005	<0.005	0.00181	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	7/31/2020 12:10	YE5652	M	C054023	0.00056	<0.01	<0.0002	0.0156	28.0	<0.001	<0.0000019	0.0019	0.002		3.72	0.00124	1.28	<0.00002	19.5	0.289	36.8	<0.00001	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	7/31/2020 12:20	YE5654	D	C054023	0.00055	<0.01	<0.0002	0.0154	28.1	<0.001	<0.0000019	0.0019	0.002		3.65	0.00128	1.26	<0.00002	19.2	0.285	36.5	<0.00001	<0.005	<0.005	0.00174	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	8/1/2020 11:30	YE6667	M	C054219	0.00062	<0.01	<0.0002	0.0146	28.5	<0.001	<0.0000019	0.002	0.002		3.75	0.00125	1.03	<0.00002	19.7	0.278	35.7	<0.00001	<0.005	<0.005	0.00179	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	8/2/2020 13:45	YE8518	M	C054579	0.00059	<0.01	<0.0002	0.0157	28.3	<0.001	<0.0000019	0.002	0.002		3.71	0.00123	1.15	<0.00002	19.3	0.29	36.4	0.00001	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	8/3/2020 11:40	YE8526	M	C054582	0.00068	<0.01	<0.0002	0.0158	28.7	<0.001	<0.0000019	0.002	0.002		3.75	0.00122	1.17	<0.00002	19.7	0.289	36.8	0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	8/4/2020 11:20	YF1642	M	C055153	0.00069	<0.01	<0.0002	0.0154	27.4	<0.001	<0.0000019	0.002	0.0019		3.69	0.00124	0.956	<0.00002	19.2	0.287	36.1	<0.00001	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	8/5/2020 11:05	YF2975	M	C055442	0.00068	<0.01	<0.0002	0.0147	27.3	<0.001	<0.0000019	0.0021	0.0019		3.70	0.00121	0.803	<0.00002	19.0	0.291	34.4	0.000011	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	1.3
RSEM-R5B-EOP	8/6/2020 12:40	YF2970	M	C055440	0.00071	<0.01	<0.0002	0.0145	27.3	0.001	<0.0000019	0.0022	0.002		3.81	0.00123	0.775	<0.00002	19.3	0.281	35.0	0.000011	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	8/7/2020 10:45	YF4855	M	C055741	0.0007	<0.01	<0.0002	0.0156	27.5	0.0066	<0.0000019	0.0023	0.002		3.77	0.00127	0.66	<0.00002	19.8	0.29	36.3	0.00001	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	1.0
RSEM-R5B-EOP	8/8/2020 11:15	YF8356	M	C056281	0.00073	<0.01	<0.0002	0.0164	26.4	0.0064	<0.0000019	0.0023	0.002		3.71	0.00116	0.567	<0.00002	19.0	0.296	36.5	0.000011	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-EOP	8/9/2020 13:20	YF8359	M	C056282	0.00076	<0.01	<0.0002	0.0166	26.8	0.0042	<0.0000019	0.0025	0.002		3.82	0.00119	0.502	<0.00002	19.6	0.285	37.4	0.000011	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	1.7
RSEM-R5B-EOP	8/9/2020 13:30	YF8360	D	C056282	0.00072	<0.01	<0.0002	0.0164	26.7	0.0038	<0.0000019	0.0025	0.0019		3.79	0.00122	0.514	<0.00002	19.4	0.297	36.5	0.000011	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	8/10/2020 11:00	YG0104	M	C056587	0.00075	<0.01	<0.0002	0.0171	28.2	0.0031	<0.0000019	0.0025	0.0018		4.03	0.00123	0.493	<0.00002	20.6	0.298	37.7	0.000011	<0.005	<0.005	0.002	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	8/11/2020 11:35	YG2364	M	C056973	0.00072	<0.01	<0.0002	0.0173	28.4	0.0026	<0.0000019	0.0026	0.0019		4.01	0.00123	0.45	<0.00002	21.0	0.279	37.9	0.000011	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-EOP	8/11/2020 11:45	YG2365	D	C056973	0.00071	<0.01	<0.0002	0.0172	28.6	0.0026	<0.0000019	0.0025	0.0019		4.08	0.00124	0.444	<0.00002	21.1	0.279	39.1	0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	1.5
RSEM-R5B-EOP	8/12/2020 16:10	YG4634	M	C057417	0.00077	<0.01	<0.0002	0.018	28.0	<0.001	<0.0000019	0.0027	0.0019		4.21	0.00137	0.47	<0.00002	21.7	0.305	41.2	0.000012	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-EOP	8/13/2020 11:50	YG7258	M	C057823	0.00075	<0.01	<0.0002	0.015	28.3	0.0011	<0.0000019	0.0026	0.0019		3.98	0.00119	0.402	<0.00002	21.4	0.264	37.1	<0.00001	<0.005	<0.005	0.002	<0.005	<0.005	<0.0001	1.9
RSEM-R5B-EOP	8/14/2020 12:00	YG7188	M	C057817	0.00077	<0.01	<0.0002	0.0169	28.2	<0.001	<0.0000019	0.0027	0.0019		4.08	0.00124	0.437	<0.00002	21.8	0.288	38.4	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	2.4
RSEM-R5B-EOP	8/15/2020 13:20	YH0058	M	C058356	0.0008	<0.01	<0.0002	0.0173	27.6	<0.001	<0.0000019	0.0027	0.0018		4.10	0.00132	0.425	<0.00002	21.4	0.304	38.2	<0.00001	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	2.5
RSEM-R5B-EOP	8/15/2020 13:30	YH0059	D	C058356	0.0008	<0.01	<0.0002	0.0173	27.3	<0.001	<0.0000019	0.0029	0.0018		4.13	0.00121	0.429	<0.00002	21.4	0.311	38.7	<0.00001	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	2.4
RSEM-R5B-EOP	8/16/2020 11:00	YH0171	M	C058389	0.00078	<0.01	<0.0002	0.0172	26.9	<0.001	<0.0000019	0.0028	0.0018		4.05	0.00124	0.415	<0.00002	21.3	0.311	38.6	0.00001	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-EOP	8/17/2020 10:10	YG9871	M	C058326	0.00079	<0.01	<0.0002	0.0175	28.0	<0.001	<0.0000019	0.0029	0.0017		4.21	0.00126	0.417	<0.00002	22.3	0.305	39.9	0.000012	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	2.0
RSEM-R5B-EOP	8/18/2020 15:45	YH3310	M	C059056	0.00078	<0.01	<0.0002	0.017	27.1	<0.001	<0.0000019	0.003	0.0017		4.11	0.0013	0.412	<0.00002	22.2	0.299	38.3	0.000011	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	8/19/2020 16:00	YH5389	M	C059422	0.00074	<0.01	<0.0002	0.0178	27.4	<0.001	<0.0000019	0.003	0.0017		4.19	0.00122	0.466	<0.00002	21.9	0.306	37.3	0.000012	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	2.4
RSEM-R5B-EOP	8/23/2020 15:30	YI0111	M	C060255	0.00121	<0.01	<0.0002	0.0182	20.8	0.0011	<0.000019	0.0055	0.002		3.73	0.00203	1.65	<0.00002	30.4	0.257	42.3	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	25
RSEM-R5B-EOP	8/24/2020 14:40	YI2200	M	C060702	0.00118	<0.01	<0.0002	0.0186	21.2	<0.001	0.000002	0.0058	0.0021		3.74	0.0022	1.61	<0.00002	31.9	0.25	43.2	0.000012	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	18
RSEM-R5B-EOP	8/25/2020 11:30	YI3993	M	C061087	0.0012	<0.01	<0.0002	0.0209	20.3	0.0087	0.000002	0.0066	0.0024		3.52	0.00257	1.78	<0.00002	32.6	0.264	46.7	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	11
RSEM-R5B-EOP	8/25/2020 11:40	YI3994	D	C061087	0.00121	<0.01	<0.0002	0.0197	20.0	0.01	0.0000022	0.0064	0.0023		3.47	0.00251	1.7	<0.00002	32.5	0.261	46.1	<0.00001	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	10
RSEM-R5B-EOP	8/26/2020 12:35	YI6262	M	C061565	0.00115	<0.01	<0.0002	0.0207	20.1	0.0019	<0.0000019	0.0069	0.0025		3.57	0.00288	1.7	<0.00002	34.7	0.263	48.8	<0.00001	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	6.5
RSEM-R5B-EOP	8/27/2020 11:30	YI7771	M	C061827	0.0011	<0.01	<0.0002	0.0208	19.6	<0.001	<0.0000019	0.0075	0.0026		3.56	0.00294	1.62	<0.00002	36.3	0.26	49.9	<0.00001	<0.005	<0.005	0.00199	<0.005	<0.005	<0.0001	5.2
RSEM-R5B-EOP	8/27/2020 11:40	YI7772	D	C061827	0.00112	<0.01	<0.0002	0.0209	19.9	0.0013	<0.0000019	0.0075	0.0027		3.55	0.00297	1.67	<0.00002	36.5	0.257	52.5	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	5.3
RSEM-R5B-EOP	8/28/2020 12:40	YI9492	M	C062013	0.0011	<0.01	<0.0002	0.0231	20.9	0.0031	<0.0000019	0.0074	0.0026		3.62	0.00283	1.48	<0.00002	39.2	0.261	54.1	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	4.6
RSEM-R5B-EOP	8/29/2020 11:15	YJ1740	M	C062465	0.00109	<0.01	<0.0002	0.0224	19.6	0.0025	<0.0000019	0.0079	0.0029		3.63	0.00312	1.51	<0.00002	36.9	0.264	52.4	<0.00001	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	3.9
RSEM-R5B-EOP	8/30/2020 13:35	YJ1571	M	C062426	0.00106	<0.01	<0.0002	0.0224	19.8	0.0016	<0.0000019	0.0079	0.0026		3.70	0.00329	1.42	<0.00002	37.3	0.266	53.6	0.000011	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	3.3
RSEM-R5B-EOP	8/31/2020 17:25	YJ3641	M	C062857	0.00104	<0.01	<0.0002	0.0231	20.8	<0.001	<0.0000019	0.0081	0.0025		3.64	0.0032	1.39	<0.00002	38.5	0.267	54.8	<0.00001	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	6.1
RSEM-R5B-EOP	9/1/2020 12:55	YJ6689	M	C063433	0.00098	<0.01	<0.0002	0.0213	20.6	0.0016	<0.0000019	0.008	0.0024		3.69	0.00324	1.23	<0.00002	38.1	0.271	54.0	<0.00001	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	9/2/2020 15:35	YJ7833	M	C063666	0.00101	<0.01	<0.0002	0.0211	20.3	<0.001	<0.0000019	0.0078	0.0024		3.71	0.00321	1.07	<0.00002	37.9	0.255	51.8	<0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	3.0
RSEM-R5B-EOP	9/3/2020 15:15	YK0032	M	C064047	0.00099	<0.01	<0.0002	0.0227	20.8	<0.001	<0.0000019	0.008	0.0023		3.78	0.00311	1.03	<0.00002	37.0	0.263	52.8	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	0.00011	4.8
RSEM-R5B-EOP	9/3/2020 15:25	YK0033	D	C064047	0.001	<0.01	<0.0002	0.0227	21.1	<0.001	<0.0000019	0.008	0.0023		3.84	0.00317	1.04	<0.00002	37.5	0.271	54.1	0.00001	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	5.1
RSEM-R5B-EOP	9/4/2020 13:30	YK0087	M	C064051	0.00098	<0.01	<0.0002	0.0227	20.7	<0.001	<0.0000019	0.0078	0.0022		3.73	0.0031	0.954	<0.00002	36.4	0.263	51.9	0.00001	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	2.8
RSEM-R5B-SP	2/22/2020 13:20	XL1355	M	C013195	0.00085	<0.01	<0.0002	0.0678	28.4	0.0071	<0.0000019	0.0119	0.0076		5.74	0.00247	5.82	<0.00002	200	0.231	106	0.000012	<0.005	<0.005	0.00286	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-SP	2/22/2020 13:30	XL1356	D	C013195	0.00088	<0.01	<0.0002	0.0678	28.6	0.0079	<0.0000019	0.0119	0.0077		5.72	0.00242	5.7	<0.00002	202	0.232	106	0.000012	<0.005	<0.005	0.00292	<0.005	<0.005	0.00059	1.3
RSEM-R5B-SP	5/3/2020 8:20	XS7392	M	C030307	0.00089	<0.01	<0.0002	0.0948	25.5	<0.001	<0.0000019	0.018	0.0055		5.27	0.00547	2.61	<0.00002	263	0.257	198	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	2.1
RSEM-R5B-SP	5/5/2020 14:20	XT0143	M	C030949	0.00132	<0.01	<0.0002	0.0961	31.7	<0.001	<0.0000019	0.0198	0.0042		5.81	0.00598	2.51	<0.00002	267	0.302	212	0.000011	<0.005	<0.005	0.00294	<0.005	<0.005	0.00029	2.3
RSEM-R5B-SP	5/6/2020 14:40	XT1603	D	C031246	0.00194	<0.01	<0.0002	0.128	31.0	0.0017	<0.0000019	0.0233	0.0053		5.96	0.00636	2.58	<0.00002	306	0.319	212	0.000019	<0.005	<0.005	0.00336	<0.005	<0.005	<0.0001	2.7
RSEM-R5B-SP	5/6/2020 14:50	XT1601	M	C031246	0.00157	<0.01	<0.0002	0.136	33.1	0.0017	<0.0000019	0.0169	0.0058		6.38	0.00599	2.58	<0.00002	322	0.356	206	0.000013	0.0053	<0.005	0.00364	<0.005	<0.005	<0.0001	2.7
RSEM-R5B-SP	5/13/2020 11:35	XT8150	M	C032775	0.00118	<0.01	<0.0002	0.0967	27.6	<0.001	<0.0000019	0.0182	0.003		5.18	0.00508	1.27	<0.00002	227	0.276	182	0.000035	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	1.4
RSEM-R5B-SP	5/15/2020 9:35	XU0134	M	C033173	0.00154	<0.01	<0.0002	0.0897	31.4	0.001	<0.0000019	0.0196	0.0032		5.58	0.00602	1.09	<0.00002	248	0.319	192	0.000018	<0.005	<0.005	0.00349	<0.005	0.0071	0.00017	1.5
RSEM-R5B-SP	5/23/2020 14:20	XU8588	M	C034993	0.00243	<0.01	<0.0002	0.0686	27.7	<0.001	<0.0000019	0.0143	0.0024		5.23	0.00496	0.534	<0.00002	212	0.3	163	0.000013	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	1.8
RSEM-R5B-SP	5/30/2020 14:45	XV8356	M	C037043	0.00201	<0.01	<0.0002	0.0677	28.7	<0.001	0.0000025	0.0145	0.0025		5.08	0.00514	0.246	<0.00002	209	0.282	162	0.000014	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	1.6
RSEM-R5B-SP	6/10/2020 14:30	XX4755	M	C040036	0.00192	<0.01	<0.0002	0.0567	28.8	<0.001	<0.0000019	0.0106	0.0027		4.85	0.00333	0.31	<0.00002	149	0.33	128	0.000014	<0.005	<0.005	0.00253	<0.005	<0.005	<0.0001	8.8
RSEM-R5B-SP	8/22/2020 12:20	YI0130	M	C060262	0.00107	<0.01	<0.0002	0.0176	21.0	<0.001	<0.000019	0.0049	0.0016		3.68	0.00173	1.67	<0.00002	28.2	0.255	39.7	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	43
RSEM-R5B-W	4/8/2020 14:20	XQ4591	M	C024938	0.00116	0.026	<0.0002	0.0074	9.30	0.0361	<0.00019	0.0046	0.0025		3.30	0.00098	1.93	<0.00002	17.8	0.162	34.8	0.000011	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	>4000
RSEM-R5B-W	7/2/2020 14:45	YA4186	M	C045984	0.00201	<0.01	<0.0002	0.0202	22.0	0.03	<0.00019	0.0079	0.0039		5.74	0.00146	3.33	<0.00002	31.6	0.377	83.2	0.000012	<0.005	<0.005	0.0034	<0.005	<0.005	<0.0001	2700
RSEM-R6E-EOP	1/1/2020 13:45	XE7145	M	C000229	0.00084	<0.01	<0.0002	0.0383	20.4	0.073	<0.000002	0.016	0.0054		5.74	0.00146	5.27	<0.00002	129	0.345	45.7	<0.00001	<0.005	<0.005	0.00158	<0.005	0.0054	<0.0001	5.3
RSEM-R6E-EOP	1/2/2020 10:55	XE7180	M	C000238	0.00085	<0.01	<0.0002	0.0388	20.6	0.0749	<0.000002	0.0162	0.0054		5.78	0.00149	5.44	<0.00002	128	0.356	46.0	0.000012	<0.005	<0.005	0.00158	<0.005	0.0052	<0.0001	2.6
RSEM-R6E-EOP	1/3/2020 14:05	XE8698	M	C000625	0.00098	<0.01	<0.0002	0.0341	20.6	0.0624	<0.000002	0.0213	0.0051		6.41	0.00156	5.22	<0.00002	128	0.379	47.5	0.000011	<0.005	<0.005	0.0016	<0.005	0.0061	<0.0001	3.7
RSEM-R6E-EOP	1/4/2020 15:30	XE9881	M	C000877	0.00099	<0.01	<0.0002	0.0367	21.3	0.0586	<0.000002	0.0203	0.0049		6.33	0.00155	4.85	<0.00002	130	0.355	46.2	0.000011	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	1/5/2020 15:00	XE9852	M	C000870	0.00111	<0.01	<0.0002	0.0365	21.5	0.0533	<0.000002	0.0222	0.0049		6.52	0.0016	4.74	<0.00002	130	0.354	47.3	0.000011	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	1/6/2020 13:40	XF0704	M	C001127	0.00108	<0.01	<0.0002	0.0342	19.4	0.0569	0.0000021	0.0231	0.0045		6.56	0.00158	4.83	<0.00002	120	0.387	46.3	0.00001	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	1/7/2020 15:00	XF1934	M	C001464	0.00114	<0.01	<0.0002	0.038	20.3	0.0615	<0.000002	0.0247	0.0046		6.97	0.00159	5.78	<0.00002	122	0.43	50.5	0.000012	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	1/8/2020 14:45	XF3043	M	C001783	0.00114	<0.01	<0.0002	0.0401	20.9	0.069	<0.000002	0.0239	0.0049		7.63	0.00157	5.2	<0.00002	128	0.374	56.7	0.000012	<0.005	<0.005	0.0016	<0.005	0.0051	0.00011	3.2
RSEM-R6E-EOP	1/9/2020 13:50	XF4213	M	C002074	0.00118	<0.01	<0.0002	0.0363	20.5	0.0601	<0.000002	0.0238	0.0045		6.98	0.00163	5.6	<0.00002	125	0.422	51.9	0.000012	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	1/10/2020 11:50	XF5141	M	C002216	0.00111	<0.01	<0.0002	0.039	20.7	0.0577	0.0000022	0.0217	0.0047		7.29	0.00163	6.14	<0.00002	122	0.359	54.1	0.000012	<0.005	<0.005	0.0016	<0.005	<0.005	0.00011	2.9
RSEM-R6E-EOP	1/11/2020 13:15	XF5749	M	C002384	0.00113	<0.01	<0.0002	0.0344	21.1	0.0483	0.0000028	0.0221	0.0045		6.70	0.00168	5.35	<0.00002	130	0.376	48.0	0.000012	<0.005	<0.005	0.00158	<0.005	<0.005	0.00011	2.1
RSEM-R6E-EOP	1/12/2020 14:30	XF5771	M	C002394	0.00115	<0.01	<0.0002	0.0339	20.8	0.0449	<0.000002	0.0217	0.0043		6.67	0.00172	5.32	<0.00002	129	0.374	47.7	0.000012	<0.005	<0.005	0.00158	<0.005	<0.005	0.00012	2.0

Appendix 3-C: 2020 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	1/13/2020 13:00	XF7161	M	C002657	0.00117	<0.01	<0.0002	0.0326	21.3	0.0445	<0.000002	0.022	0.0044		6.60	0.00169	5.43	<0.00002	129	0.373	47.0	0.000015	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	1/14/2020 13:05	XF8102	M	C002891	0.00114	<0.01	<0.0002	0.0355	20.7	0.0476	<0.000002	0.0222	0.0043		6.70	0.00161	5.93	<0.00002	127	0.398	50.6	0.000012	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	2.8
RSEM-R6E-EOP	1/15/2020 14:00	XF9572	M	C003144	0.00115	<0.01	<0.0002	0.0304	21.8	0.0472	<0.000002	0.0214	0.0042		6.60	0.00152	5.01	<0.00002	129	0.341	46.4	0.000013	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	1/16/2020 15:20	XG0618	M	C003413	0.00108	<0.01	<0.0002	0.0341	19.4	0.0455	<0.000002	0.0217	0.0039		6.42	0.00169	5.01	<0.00002	125	0.367	44.8	<0.00001	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	1/17/2020 10:20	XG0611	M	C003412	0.00108	<0.01	<0.0002	0.0345	19.1	0.0478	<0.000002	0.0216	0.004		6.42	0.00156	5	<0.00002	124	0.361	45.0	<0.00001	<0.005	<0.005	0.00155	<0.005	<0.005	0.0001	2.6
RSEM-R6E-EOP	1/17/2020 10:30	XG0612	D	C003412	0.0011	<0.01	<0.0002	0.034	19.2	0.0487	<0.000002	0.0221	0.004		6.47	0.00162	5.02	<0.00002	124	0.371	46.7	<0.00001	<0.005	<0.005	0.00157	<0.005	<0.005	0.00011	2.3
RSEM-R6E-EOP	1/18/2020 13:15	XG2773	M	C003851	0.00116	<0.01	<0.0002	0.0373	20.2	0.0535	<0.000002	0.023	0.0044		6.72	0.00172	5.38	<0.00002	131	0.389	49.5	0.000011	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	1/18/2020 13:25	XG2774	D	C003851	0.00118	<0.01	<0.0002	0.0369	20.4	0.0551	<0.000002	0.0233	0.0043		6.83	0.00172	5.36	<0.00002	133	0.388	49.9	0.000013	<0.005	<0.005	0.00167	<0.005	<0.005	0.0001	2.4
RSEM-R6E-EOP	1/19/2020 16:40	XG2757	M	C003847	0.00115	<0.01	<0.0002	0.0365	20.6	0.0586	<0.000002	0.0233	0.0044		6.76	0.00176	5.46	<0.00002	134	0.396	49.9	0.000012	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	1/19/2020 16:50	XG2758	D	C003847	0.00112	<0.01	<0.0002	0.0368	20.2	0.0584	0.0000029	0.0234	0.0043		6.72	0.00178	5.44	<0.00002	132	0.393	49.3	0.000012	<0.005	<0.005	0.00168	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	1/20/2020 10:15	XG2702	M	C003843	0.00113	<0.01	<0.0002	0.0388	19.8	0.0805	<0.000002	0.0236	0.0044		6.69	0.00175	5.47	<0.00002	141	0.403	53.7	0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	1/20/2020 10:25	XG2703	D	C003843	0.00111	<0.01	<0.0002	0.0381	19.8	0.0806	<0.000002	0.0233	0.0043		6.65	0.00173	5.46	<0.00002	140	0.402	52.7	0.000011	<0.005	<0.005	0.00169	<0.005	<0.005	0.0001	2.4
RSEM-R6E-EOP	1/21/2020 15:00	XG5823	M	C004470	0.00117	<0.01	<0.0002	0.0418	21.0	0.0913	<0.000002	0.0219	0.0047		6.82	0.00184	5.77	<0.00002	158	0.388	57.6	0.000011	<0.005	<0.005	0.00173	<0.005	0.0052	0.0001	3.6
RSEM-R6E-EOP	1/22/2020 17:00	XG7451	M	C004860	0.0011	<0.01	<0.0002	0.039	19.8	0.0823	<0.000002	0.0215	0.0045		6.55	0.00174	5.38	<0.00002	159	0.365	53.9	0.000012	<0.005	<0.005	0.00168	<0.005	0.0051	<0.0001	3.6
RSEM-R6E-EOP	1/23/2020 17:00	XG9561	M	C005172	0.00118	<0.01	<0.0002	0.0401	20.3	0.0764	<0.000002	0.0228	0.0046		6.72	0.00189	5.57	<0.00002	160	0.366	55.9	0.000011	<0.005	<0.005	0.00172	<0.005	0.0053	<0.0001	2.1
RSEM-R6E-EOP	1/24/2020 10:20	XG9567	M	C005174	0.00116	<0.01	<0.0002	0.0381	20.0	0.0782	<0.000002	0.023	0.0047		6.65	0.00191	5.44	<0.00002	164	0.37	58.0	0.000011	<0.005	<0.005	0.00171	<0.005	0.0055	<0.0001	2.5
RSEM-R6E-EOP	1/25/2020 11:00	XH2065	M	C005631	0.00113	<0.01	<0.0002	0.0395	18.5	0.0758	<0.000002	0.0223	0.0047		6.41	0.00197	5.86	<0.00002	153	0.389	57.5	<0.00001	<0.005	<0.005	0.00171	<0.005	0.0055	0.0001	2.6
RSEM-R6E-EOP	1/26/2020 12:30	XH2024	M	C005623	0.00108	<0.01	<0.0002	0.0417	18.6	0.0786	<0.000002	0.0218	0.0048		6.34	0.00196	6.21	<0.00002	150	0.402	56.7	<0.00001	<0.005	<0.005	0.00177	<0.005	0.006	0.0001	2.7
RSEM-R6E-EOP	1/27/2020 16:30	XH3885	M	C005941	0.00108	<0.01	<0.0002	0.041	20.1	0.0683	<0.000002	0.0212	0.0048		6.53	0.00135	5.52	<0.00002	161	0.365	58.2	<0.00001	<0.005	<0.005	0.00172	<0.005	0.0059	0.00012	2.3
RSEM-R6E-EOP	1/28/2020 14:05	XH5362	M	C006197	0.00115	<0.01	<0.0002	0.0333	19.6	0.0668	<0.000002	0.0202	0.005		6.14	0.00172	5.03	<0.00002	151	0.331	53.2	0.000011	<0.005	<0.005	0.00166	<0.005	0.0062	0.0001	2.1
RSEM-R6E-EOP	1/29/2020 12:25	XH6913	M	C006592	0.00123	<0.01	<0.0002	0.0372	20.8	0.0666	<0.000002	0.0217	0.0049		6.68	0.00167	5.58	<0.00002	160	0.375	56.4	0.000012	<0.005	<0.005	0.00174	<0.005	0.0062	<0.0001	1.7
RSEM-R6E-EOP	1/30/2020 14:15	XH8749	M	C006955	0.00107	<0.01	<0.0002	0.0378	19.9	0.0636	<0.000002	0.0216	0.0048		6.67	0.00184	5.82	<0.00002	156	0.361	56.2	<0.00001	<0.005	<0.005	0.00181	<0.005	0.006	0.00011	1.4
RSEM-R6E-EOP	1/31/2020 14:40	XH9852	M	C007079	0.00115	<0.01	<0.0002	0.0378	20.7	0.0657	<0.000002	0.0208	0.0049		6.71	0.00195	5.89	<0.00002	152	0.38	53.9	0.000012	<0.005	<0.005	0.0017	<0.005	0.0061	0.0001	2.2
RSEM-R6E-EOP	2/1/2020 12:30	XI1805	M	C007448	0.00103	<0.01	<0.0002	0.0385	21.0	0.0593	<0.000002	0.0193	0.0047		6.46	0.00176	5.66	<0.00002	152	0.357	53.5	0.000011	<0.005	<0.005	0.00165	<0.005	0.0058	<0.0001	2.1
RSEM-R6E-EOP	2/2/2020 15:05	XI1835	M	C007454	0.00099	<0.01	<0.0002	0.0373	20.5	0.0573	<0.000002	0.0188	0.0046		6.30	0.00162	5.45	<0.00002	146	0.348	51.7	0.000011	<0.005	<0.005	0.00172	<0.005	0.0058	<0.0001	1.4
RSEM-R6E-EOP	2/3/2020 13:10	XI3482	M	C007820	0.00072	<0.01	<0.0002	0.0398	20.4	0.0507	<0.000002	0.0215	0.0031		6.30	0.00185	6.53	<0.00002	147	0.373	56.2	<0.00001	<0.005	<0.005	0.00181	<0.005	<0.005	0.00012	2.5
RSEM-R6E-EOP	2/4/2020 12:55	XI3463	M	C007815	0.00079	<0.01	<0.0002	0.0419	21.1	0.0515	<0.000002	0.0216	0.0033		6.44	0.00261	6.27	<0.00002	150	0.385	57.6	0.00001	<0.005	<0.005	0.00193	<0.005	<0.005	0.00014	1.7
RSEM-R6E-EOP	2/5/2020 14:15	XI6889	M	C008469	0.00085	<0.01	<0.0002	0.0292	19.9	0.0511	<0.000002	0.0181	0.0046		6.13	0.00162	4.78	<0.00002	148	0.331	47.9	<0.00001	<0.005	<0.005	0.00157	<0.005	0.006	0.00011	2.0
RSEM-R6E-EOP	2/6/2020 13:05	XI8760	M	C008772	0.00094	<0.01	<0.0002	0.0351	20.2	0.0599	<0.000002	0.0182	0.0049		6.01	0.00174	5.27	<0.00002	147	0.349	50.3	0.000013	<0.005	<0.005	0.00173	<0.005	0.0064	0.00011	2.1
RSEM-R6E-EOP	2/7/2020 11:15	XI8779	M	C008775	0.00091	<0.01	<0.0002	0.0369	20.3	0.0601	<0.000002	0.0186	0.0048		6.07	0.00172	5.18	<0.00002	147	0.346	49.7	0.000013	<0.005	<0.005	0.00175	<0.005	0.0064	0.0001	2.5
RSEM-R6E-EOP	2/7/2020 11:25	XI8780	D	C008775	0.00092	<0.01	<0.0002	0.0358	19.7	0.0589	<0.000002	0.018	0.0048		6.01	0.00195	5.56	<0.00002	142	0.342	49.2	0.000013	<0.005	<0.005	0.00169	<0.005	0.0064	<0.0001	2.3
RSEM-R6E-EOP	2/8/2020 13:00	XJ1673	M	C009232	0.00086	<0.01	<0.0002	0.0339	19.6	0.0565	<0.000002	0.0178	0.0046		5.80	0.00152	5.5	<0.00002	139	0.339	49.9	0.000011	<0.005	<0.005	0.00168	<0.005	0.0065	<0.0001	1.6
RSEM-R6E-EOP	2/9/2020 14:30	XJ1693	M	C009242	0.00089	<0.01	<0.0002	0.0324	19.4	0.0543	<0.000002	0.0179	0.0048		5.83	0.00158	5.43	<0.00002	136	0.341	48.9	0.00001	<0.005	<0.005	0.00166	<0.005	0.0069	<0.0001	1.8
RSEM-R6E-EOP	2/10/2020 10:05	XJ1713	M	C009249	0.00096	<0.01	<0.0002	0.0334	19.3	0.0527	<0.000002	0.0179	0.0046		5.79	0.00159	5.3	<0.00002	136	0.35	48.5	0.000011	<0.005	<0.005	0.0017	<0.005	0.0068	<0.0001	1.6
RSEM-R6E-EOP	2/11/2020 13:15	XJ6270	M	C010122	0.00058	<0.01	<0.0002	0.035	16.7	0.0335	<0.0000019	0.017	0.0022		5.12	0.00207	5.06	<0.00002	117	0.31	41.6	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	2/12/2020 13:50	XJ8070	M	C010503	0.00086	<0.01	<0.0002	0.0376	21.7	0.0288	<0.0000019	0.0181	0.0044		6.13	0.00168	5.59	<0.00002	144	0.343	50.5	<0.00001	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	2/22/2020 14:35	XL1358	M	C013195	0.00097	<0.01	<0.0002	0.0347	20.3	0.0491	<0.0000019	0.0176	0.0045		6.08	0.00148	5.2	<0.00002	137	0.335	46.9	<0.00001	<0.005	<0.005	0.0017	<0.005	0.0086	<0.0001	1.7
RSEM-R6E-EOP	2/23/2020 13:00	XL1345	M	C013192	0.00109	<0.01	<0.0002	0.0329	20.1	0.0719	0.0000021	0.0219	0.0054		6.91	0.00152	5.07	<0.00002	138	0.394	52.0	<0.00001	<0.005	<0.005	0.00176	<0.005	0.0086	0.00012	1.6
RSEM-R6E-EOP	2/24/2020 10:30	XL1314	M	C013183	0.0011	<0.01	<0.0002	0.0348	20.6	0.0686	<0.0000019	0.0208	0.0051		6.72	0.00147	5.02	<0.00002	133	0.383	49.2	<0.00001	<0.005	<0.005	0.0017	<0.005	0.0086	0.0001	1.6
RSEM-R6E-EOP	2/24/2020 10:40	XL1315	D	C013183	0.0011	<0.01	<0.0002	0.0351	20.3	0.0685	<0.0000019	0.0209	0.0052		6.69	0.00152	5.12	<0.00002	133	0.372	48.9	0.00001	<0.005	<0.005	0.00171	<0.005	0.009	0.0001	1.5
RSEM-R6E-EOP	2/25/2020 12:50	XL5026	M	C014003	0.00126	<0.01	<0.0002	0.0345	20.6	0.0756	<0.0000019	0.0244	0.0056		7.37	0.00195	5.42	<0.00002	139	0.442	54.8	<0.00001	<0.005	<0.005	0.00163	<0.005	0.0085	0.00019	1.7
RSEM-R6E-EOP	2/26/2020 12:15	XL6614	M	C014425	0.00132	<0.01	<0.0002	0.0363	19.5	0.0745	<0.0000019	0.0233	0.0056		7.56	0.00159	5.41	<0.00002	132	0.388	56.8	0.000014	<0.005	<0.005	0.0016	<0.005	0.0088	<0.0001	1.2
RSEM-R6E-EOP	2/27/2020 10:40	XL6654	M	C014448	0.00139	<0.01	<0.0002	0.0366	19.6	0.0906	<0.0000019	0.0273	0.0057		8.71	0.00206	5.59	<0.00002	132	0.429	59.9	0.000014	<0.005	<0.005	0.00161	<0.005	0.0081	<0.0001	2.4
RSEM-R6E-EOP	2/27/2020 10:50	XL6655	D	C014448	0.00141	<0.01	<0.0002	0.0374	19.2	0.086	<0.0000019	0.0269	0.0058		8.78	0.00194	5.44	<0.00002	130	0.427	59.6	0.000012	<0.005	<0.005	0.00166	<0.005	0.0074	<0.0001	2.5
RSEM-R6E-EOP	2/28/2020 11:10	XL8817	M	C014870	0.00091	<0.01	<0.0002	0.0343	18.9	0.105	<0.0000019	0.028	0.005		9.15	0.00195	5.73	<0.00002	123	0.48	58.9	0.000014	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	12
RSEM-R6E-EOP	2/28/2020 11:20	XL8818	D	C014870	0.00086	<0.01	<0.0002	0.0343	19.2	0.109	<0.0000019	0.0277	0.0049		9.43	0.00194	5.5	<0.00002	126	0.481	59.5	0.000013	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	13
RSEM-R6E-EOP	2/29/2020 13:30	XM2599	M	C015563	0.0011	<0.01	<0.0002	0.0279	16.7	0.0697	<0.0000019	0.0291	0.0041		8.96	0.00192	5.54	<0.00002	106	0.523	51.7	0.000014	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	7.9
RSEM-R6E-EOP	2/29/2020 13:40	XM2600	D	C015563	0.00107	<0.01	<0.0002	0.0275	16.9	0.0698	<0.0000019	0.0289	0.0041		9.07	0.00192	5.57	<0.00002	109	0.514	53.7	0.000013	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	7.6
RSEM-R6E-EOP	3/1/2020 11:50	XM2631	M	C015569	0.00115	<0.01	<0.0002	0.025	16.8	0.0552	<0.0000019	0.027	0.0041		8.96	0.00199	5.02	<0.00002	106	0.446	48.6	<0.00001	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	7.1
RSEM-R6E-EOP	3/1/2020 12:00	XM2632	D	C015569	0.00115	<0.01	<0.0002	0.0252	16.7	0.0549	<0.0000019	0.0273	0.0041		8.90	0.00201	5.1	<0.00002	105	0.451	49.7	<0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	7.0
RSEM-R6E-EOP	3/2/2020 18:45	XM6320	M	C016408	0.00126	<0.01	<0.0002	0.0256	15.8	0.0538	<0.0000019	0.0301	0.0039		9.54	0.00195	5.67	<0.00002	99.0	0.509	49.6	0.000012	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	19
RSEM-R6E-EOP	3/3/2020 12:40	XM6546	M	C016468	0.00132	<0.01	<0.0002	0.0261	15.3	0.0339	<0.0000019	0.0317	0.0039		9.51	0.00204	5.64	<0.00002	96.6	0.494	49.1	0.000012	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	8.5
RSEM-R6E-EOP	3/4/2020 14:30	XM8002	M	C016829	0.00139	<0.01	<0.0002	0.0231	13.8	0.0286	<0.0000019	0.0298	0.0038		9.01	0.00189	5.46	<0.00002	89.0	0.457	45.1	0.000013	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	4.8
RSEM-R6E-EOP	3/5/2020 13:45	XN0418	M	C017276	0.00141	<0.01	<0.0002	0.023	12.9	0.033	<0.0000019	0.0306	0.0038		8.70	0.00191	5.75	<0.00002	83.6	0.446	43.2	0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	5.4
RSEM-R6E-EOP	3/10/2020 12:45	XN6089	M	C018396	0.0016	<0.01	<0.0002	0.0199	13.0	0.0316	<0.0000019	0.0308	0.0039		9.63	0.00183	5.68	<0.00002	83.5	0.495	43.9	0.000014	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	7.8
RSEM-R6E-EOP	3/10/2020 12:55	XN6090	D	C018396	0.00164	<0.01	<0.0002	0.0199	13.0	0.0317	<0.0000019	0.0312	0.0039		9.58	0.00187	5.7	<0.00002	83.0	0.497	43.2	0.000013	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	6.5
RSEM-R6E-EOP	3/11/2020 14:25	XN7891	M	C018851	0.00173	<0.01	<0.0002	0.0207	12.5	0.0267	<0.0000019	0.0368	0.0041		9.94	0.00183	5.84	<0.00002	78.9	0.49	45.2	0.000014	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	15
RSEM-R6E-EOP	3/11/2020 14:35	XN7892	D	C018851	0.00171	<0.01	<0.0002	0.0203	12.2	0.0277	<0.0000019	0.0367	0.0041		9.83	0.0019	5.8	<0.00002	77.0	0.495	44.1	0.000017	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	13
RSEM-R6E-EOP	3/12/2020 12:00	XN8894	M	C019027	0.00183	<0.01	<0.0002	0.0194	12.5	0.0164	<0.0000019	0.0368	0.0043		9.97	0.00181	5.41	<0.00002	77.3	0.456	43.8	0.000014	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	9.8
RSEM-R6E-EOP	3/12/2020 12:10	XN8895	D	C019027	0.00184	<0.01	<0.0002	0.0197	12.5	0.0179	<0.0000019	0.0369	0.0044		10.0	0.00182	5.56	<0.00002	78.2	0.47	44.0	0.000014	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	11
RSEM-R6E-EOP	3/13/2020 11:30	XN9529	M	C019176	0.0019	<0.01	<0.0002	0.0198	12.0	0.0289	<0.0000019	0.0379	0.0044		10.1	0.00189	5.86	<0.00002	75.9	0.491	44.9	0.000014	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	7.4
RSEM-R6E-EOP	3/13/2020 11:40	XN9530	D	C019176	0.0019	<0.01	<0.0002	0.0198	12.0	0.0286	<0.0000019	0.038	0.0044		10.0	0.00184	5.72	<0.00002	75.7	0.488	43.2	0.000014	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	7.4
RSEM-R6E-EOP	3/16/2020 13:45	XO2545	M	C019847	0.00188	<0.01	<0.0002	0.0204	12.3	0.0334	<0.0000019	0.0378	0.0043		10.3	0.00193	5.81	<0.00002	76.0	0.495	45.1	0.000014	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	4.1
RSEM-R6E-EOP	3/17/2020 13:15	XO3910	M	C020169	0.002	<0.01	<0.0002	0.0215	13.2	0.0367	<0.0000019	0.0386	0.0046		10.9	0.00199	5.64	<0.00002	84.8	0.497	46.1	0.000014	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	5.0
RSEM-R6E-EOP	3/18/2020 12:50	XO5560	M	C020445	0.00198	<0.01	<0.0002	0.0238	12.2	0.0325	<0.0000019	0.0369	0.0041		11.0	0.00186	5.54	<0.00002	90.4	0.48	46.6	0.000013	<0.005	<0.005	0.00122	<0.005	<0.005	0.00012	5.3
RSEM-R6E-EOP	3/21/2020 12:05	XO8300	M	C021037	0.00197	<0.01	<0.0002	0.0217	11.5	0.0325	<0.0000019	0.0374	0.0041		10.5	0.00199	5.35	<0.00002	86.0	0.488	46.4	0.000015	<0.005	<0.005	0.00128	<0.005	<0.005	0.00011	4.5
RSEM-R6E-EOP	3/22/2020 12:10	XO8422	M	C021064	0.0021	<0.01	<0.0002	0.0232	12.0	0.0385	<0.0000019	0.0386	0.004		11.2	0.00208	5.04	<0.00002	90.5	0.507	47.0	0.000013	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	7.3
RSEM-R6E-EOP	3/23/2020 11:05	XO8462	M	C021073	0.00214	<0.01	<0.0002	0.0222	11.7	0.037	<0.0000019	0.0395	0.0039		11.5	0.00211	4.91	<0.00002	83.3	0.524	45.2	0.000014	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	6.3
RSEM-R6E-EOP	3/23/2020 11:15	XO8463	D	C021073	0.00212	<0.01	<0.0002	0.022	11.6	0.0368	<0.0000019	0.0396	0.0039		11.5	0.00211	4.87	<0.00002	83.3	0.524	45.4	0.000012	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	6.3

Appendix 3-C: 2020 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	3/24/2020 11:00	XP0443	M	C021618	0.00231	<0.01	<0.0002	0.0219	12.1	0.0316	<0.0000019	0.0378	0.0043		12.5	0.00206	5.03	<0.00002	73.9	0.588	45.3	0.000013	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	4.9
RSEM-R6E-EOP	3/25/2020 11:00	XP1312	M	C021872	0.00207	<0.01	<0.0002	0.0208	12.1	0.0151	<0.0000019	0.0361	0.0043		12.8	0.00192	4.79	<0.00002	66.0	0.592	42.8	0.000013	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	3/26/2020 17:50	XP2431	M	C022151	0.00225	<0.01	<0.0002	0.0249	13.0	0.0432	<0.0000019	0.0425	0.0043		13.1	0.00225	5.22	<0.00002	89.8	0.603	49.3	0.000012	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	5.7
RSEM-R6E-EOP	3/27/2020 10:15	XP2501	M	C022160	0.00221	<0.01	<0.0002	0.0215	12.0	0.0335	<0.0000019	0.0394	0.0045		13.2	0.00199	4.78	<0.00002	72.9	0.596	45.0	0.000012	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	7.9
RSEM-R6E-EOP	3/28/2020 11:45	XP3710	M	C022531	0.00192	<0.01	<0.0002	0.0165	10.1	0.0236	<0.0000019	0.0325	0.0046		10.4	0.00141	3.77	<0.00002	42.7	0.55	33.4	0.000014	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	5.1
RSEM-R6E-EOP	4/7/2020 13:30	XQ3417	M	C024753	0.0019	<0.01	<0.0002	0.0241	14.0	0.0465	<0.0000019	0.0496	0.005		16.1	0.00238	4.85	<0.00002	75.3	0.717	58.4	0.000016	<0.005	<0.005	0.00136	<0.005	<0.005	0.00012	10
RSEM-R6E-EOP	4/8/2020 12:30	XQ4590	M	C024938	0.00149	<0.01	<0.0002	0.0201	12.8	0.0275	<0.0000019	0.042	0.0054		13.8	0.00172	4.44	<0.00002	59.2	0.642	46.5	<0.00001	<0.005	<0.005	0.00117	<0.005	0.0054	<0.0001	12
RSEM-R6E-EOP	4/9/2020 11:00	XQ4583	M	C024937	0.0015	<0.01	<0.0002	0.0187	12.1	0.0319	0.0000023	0.039	0.005		13.0	0.00177	4.28	<0.00002	52.7	0.607	43.1	0.000012	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	16
RSEM-R6E-EOP	4/9/2020 11:10	XQ4584	D	C024937	0.00143	<0.01	<0.0002	0.0191	12.3	0.0319	0.0000041	0.0403	0.0054		13.2	0.00164	4.27	<0.00002	53.5	0.616	44.9	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	18
RSEM-R6E-EOP	4/10/2020 12:35	XQ5870	M	C025257	0.00221	<0.01	<0.0002	0.0174	11.0	0.0309	0.000003	0.0342	0.0054		11.3	0.00136	3.83	<0.00002	42.2	0.576	37.8	0.000018	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	21
RSEM-R6E-EOP	4/11/2020 18:10	XQ5963	M	C025274	0.00201	<0.01	<0.0002	0.0158	10.1	0.0333	0.0000031	0.0301	0.005		9.94	0.00122	3.47	<0.00002	35.9	0.523	37.2	0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	13
RSEM-R6E-EOP	4/11/2020 18:20	XQ5964	D	C025274	0.00202	<0.01	<0.0002	0.0154	10.4	0.03	0.0000036	0.0289	0.0057		10.6	0.00104	3.29	<0.00002	37.0	0.539	33.8	0.000015	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	15
RSEM-R6E-EOP	4/12/2020 15:15	XQ6096	M	C025305	0.00208	<0.01	<0.0002	0.0149	9.68	0.0281	<0.0000019	0.027	0.0051		9.49	0.00119	3.17	<0.00002	33.8	0.499	33.4	0.00001	<0.005	<0.005	0.001	<0.005	0.0073	<0.0001	9.9
RSEM-R6E-EOP	4/13/2020 10:30	XQ5690	D	C025217	0.00115	<0.01	<0.0002	0.0121	8.71	0.0306	<0.0000019	0.025	0.0049		8.61	0.00086	2.85	<0.00002	30.1	0.473	29.8	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	6.7
RSEM-R6E-EOP	4/13/2020 10:30	XQ5689	M	C025217	0.00125	<0.01	<0.0002	0.0124	8.82	0.0327	<0.0000019	0.023	0.0046		8.71	0.00118	3.57	<0.00002	29.9	0.479	29.4	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	6.4
RSEM-R6E-EOP	4/14/2020 18:55	XQ8328	M	C025913	0.00222	<0.01	<0.0002	0.0165	11.3	0.0376	<0.0000019	0.0302	0.0058		11.4	0.00137	3.23	<0.00002	40.7	0.574	39.3	0.000019	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	5.2
RSEM-R6E-EOP	4/15/2020 14:25	XQ9341	M	C026226	0.00237	<0.01	<0.0002	0.0163	11.6	0.0392	<0.0000019	0.0312	0.0057		11.2	0.00124	3.19	<0.00002	40.9	0.587	42.2	0.000013	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	5.8
RSEM-R6E-EOP	4/16/2020 13:35	XR0409	M	C026516	0.00198	<0.01	<0.0002	0.0169	12.1	0.0372	<0.0000019	0.0295	0.0057		10.4	0.00134	3.22	<0.00002	39.5	0.578	41.2	0.000011	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	4/17/2020 10:30	XR0395	M	C026514	0.00178	<0.01	<0.0002	0.0155	11.5	0.0349	<0.0000019	0.0283	0.0053		9.38	0.00104	2.98	<0.00002	35.9	0.532	39.8	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	3.8
RSEM-R6E-EOP	4/17/2020 10:40	XR0396	D	C026514	0.00167	<0.01	<0.0002	0.0145	10.5	0.0314	<0.0000019	0.0272	0.0049		8.44	0.00123	3.08	<0.00002	32.7	0.47	42.6	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	4/18/2020 11:40	XR2302	M	C026869	0.00163	<0.01	<0.0002	0.0126	9.75	0.0271	<0.0000019	0.0231	0.0045		7.84	0.00085	2.43	<0.00002	30.3	0.434	34.2	0.000014	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	4/19/2020 12:30	XR2516	M	C026927	0.00153	<0.01	<0.0002	0.0138	11.0	0.0398	<0.0000019	0.0265	0.0046		8.48	0.00102	2.44	<0.00002	34.4	0.468	37.0	0.000014	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	4/20/2020 17:30	XR3426	M	C027099	0.00144	0.099	<0.0002	0.0136	10.6	0.0736	<0.0000019	0.0226	0.0046		7.11	0.00097	2.37	<0.00002	31.7	0.444	36.2	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	6.5
RSEM-R6E-EOP	4/21/2020 12:25	XR4953	M	C027465	<0.0005	<0.01	<0.0002	0.0138	11.2	0.0606	<0.0000019	0.0258	0.0042		6.87	0.0009	2.09	<0.00002	33.7	0.39	31.4	<0.00001	<0.005	<0.005	0.0011	<0.005	0.006	<0.0001	6.7
RSEM-R6E-EOP	4/22/2020 13:05	XR6356	M	C027799	<0.0005	0.013	<0.0002	0.0126	10.9	0.0715	<0.0000019	0.021	0.0036		6.24	0.00066	2.16	<0.00002	32.2	0.374	33.1	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	9.5
RSEM-R6E-EOP	4/23/2020 15:05	XR7184	M	C027994	0.00055	0.014	<0.0002	0.0109	9.47	0.055	<0.0000019	0.0154	0.0039		5.25	0.00074	1.78	<0.00002	25.9	0.345	28.1	<0.00001	<0.005	<0.005	0.00079	<0.005	<0.005	<0.0001	9.6
RSEM-R6E-EOP	4/24/2020 12:40	XR7269	M	C028014	<0.0005	0.01	<0.0002	0.0107	9.14	0.0486	<0.0000019	0.0148	0.0036		4.73	0.00068	1.66	<0.00002	23.8	0.315	23.9	0.000012	<0.005	<0.005	0.0008	<0.005	0.0063	0.00021	9.1
RSEM-R6E-EOP	4/25/2020 12:35	XR8896	M	C028412	0.00057	0.061	<0.0002	0.011	9.44	0.0303	<0.0000019	0.0139	0.0034		4.98	0.00078	2	<0.00002	25.4	0.336	26.3	<0.00001	<0.005	<0.005	0.00076	<0.005	<0.005	<0.0001	5.5
RSEM-R6E-EOP	4/26/2020 13:25	XR8994	M	C028429	0.00056	0.031	<0.0002	0.0102	9.18	0.0324	<0.0000019	0.0123	0.0034		4.57	0.0007	1.75	<0.00002	24.0	0.305	23.6	<0.00001	<0.005	<0.005	0.00072	<0.005	<0.005	<0.0001	4.6
RSEM-R6E-EOP	4/27/2020 14:00	XS0060	M	C028666	0.0006	0.076	<0.0002	0.0101	9.18	0.0295	<0.0000019	0.0112	0.0031		4.34	0.00067	1.81	<0.00002	23.3	0.3	5.9	<0.00001	<0.005	<0.005	0.00074	<0.005	<0.005	<0.0001	8.3
RSEM-R6E-EOP	4/28/2020 12:15	XS2084	M	C029151	0.00066	<0.01	<0.0002	0.0126	11.8	0.0361	0.0000025	0.0155	0.0037		5.33	0.00055	1.66	<0.00002	28.9	0.381	28.3	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	7.1
RSEM-R6E-EOP	4/28/2020 12:25	XS2085	D	C029151	0.00053	<0.01	<0.0002	0.0124	10.4	0.0323	<0.0000019	0.0135	0.0034		4.62	0.00055	1.7	<0.00002	25.7	0.333	25.8	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	7.7
RSEM-R6E-EOP	4/29/2020 11:00	XS3516	M	C029452	0.00061	<0.01	<0.0002	0.0122	11.0	0.033	<0.0000019	0.0133	0.0036		4.74	0.0006	1.76	<0.00002	26.8	0.338	25.2	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	0.00037	9.2
RSEM-R6E-EOP	4/29/2020 11:10	XS3517	D	C029452	0.00063	<0.01	<0.0002	0.0131	11.5	0.0289	<0.0000019	0.0141	0.0033		5.04	0.00071	1.76	<0.00002	27.8	0.364	26.1	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	5.5
RSEM-R6E-EOP	4/30/2020 11:10	XS4883	M	C029734	0.00078	<0.01	<0.0002	0.0132	11.5	0.0219	<0.0000019	0.0135	0.0034		5.00	0.00049	1.65	<0.00002	28.0	0.395	26.5	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	0.00018	5.3
RSEM-R6E-EOP	5/22/2020 12:50	XU8402	M	C034984	0.00062	<0.01	<0.0002	0.0145	16.5	<0.001	<0.0000019	0.0103	0.0021		5.70	0.00057	0.316	<0.00002	32.2	0.881	28.0	0.000027	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	5/23/2020 14:10	XU8587	M	C034993	0.00061	<0.01	<0.0002	0.0202	21.5	<0.001	<0.0000019	0.0109	0.0026		7.10	0.00073	0.654	<0.00002	37.3	1.36	30.9	0.000017	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	5/24/2020 12:50	XU8645	M	C035010	0.00065	<0.01	<0.0002	0.02	22.1	<0.001	<0.0000019	0.0103	0.0026		7.16	0.00073	0.678	<0.00002	38.1	1.42	30.9	0.000018	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	5/25/2020 8:50	XU8663	M	C035018	0.00075	<0.01	<0.0002	0.0215	22.8	<0.001	<0.0000019	0.0102	0.0028		7.40	0.00077	0.682	<0.00002	39.0	1.51	31.6	0.000021	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	5/26/2020 15:00	XV2882	M	C035941	0.0007	<0.01	<0.0002	0.0204	23.5	<0.001	<0.0000019	0.0097	0.0029		7.34	0.00077	0.656	<0.00002	40.8	1.57	30.7	0.000023	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	5/27/2020 15:10	XV4564	M	C036323	0.00075	<0.01	<0.0002	0.0199	23.9	<0.001	<0.0000019	0.0094	0.0029		7.44	0.00077	0.667	<0.00002	41.2	1.59	31.1	0.000022	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	5/28/2020 14:30	XV5618	M	C036526	0.00075	<0.01	<0.0002	0.0217	24.4	<0.001	<0.0000019	0.0092	0.003		7.45	0.00078	0.673	<0.00002	42.3	1.58	31.6	0.000023	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.67
RSEM-R6E-EOP	5/29/2020 11:40	XV5614	M	C036525	0.00079	<0.01	<0.0002	0.021	24.8	<0.001	<0.0000019	0.0091	0.0029		7.36	0.00078	0.636	<0.00002	42.5	1.56	31.9	0.000024	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.69
RSEM-R6E-EOP	5/30/2020 14:00	XV8353	M	C037043	0.00083	<0.01	<0.0002	0.0225	24.4	<0.001	0.0000019	0.009	0.003		7.06	0.00089	0.661	<0.00002	42.8	1.45	34.0	0.000023	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.78
RSEM-R6E-EOP	5/31/2020 12:30	XV8399	M	C037057	0.00085	<0.01	<0.0002	0.0226	24.5	<0.001	<0.0000019	0.0088	0.0029		6.84	0.00087	0.642	<0.00002	42.8	1.4	33.3	0.000025	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	5/31/2020 13:00	XV8401	D	C037057	0.00084	<0.01	<0.0002	0.0222	24.5	<0.001	<0.0000019	0.009	0.0029		6.83	0.00087	0.638	<0.00002	43.0	1.42	33.5	0.000024	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	6/1/2020 14:45	XW0112	M	C037316	0.00076	<0.01	<0.0002	0.0214	23.7	<0.001	<0.0000019	0.0082	0.0027		6.58	0.00083	0.598	<0.00002	42.1	1.38	31.7	0.000024	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	6/2/2020 11:45	XW3133	M	C037913	<0.001	<0.02	<0.0004	0.0213	23.3	<0.002	<0.0000019	0.0079	0.0026		6.39	0.00083	0.541	<0.00004	41.7	1.34	31.0	0.000024	<0.01	<0.01	0.00131	<0.01	<0.01	<0.0002	1.2
RSEM-R6E-EOP	6/3/2020 13:00	XW5133	M	C038222	0.00081	<0.01	<0.0002	0.0233	24.5	<0.001	<0.0000019	0.0078	0.0027		6.47	0.00078	0.494	<0.00002	43.4	1.28	33.5	0.000023	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.79
RSEM-R6E-EOP	6/4/2020 12:50	XW6864	M	C038528	0.00085	<0.01	<0.0002	0.0227	24.2	<0.001	<0.0000019	0.0078	0.0026		6.41	0.00078	0.426	<0.00002	44.1	1.28	33.0	0.000023	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.70
RSEM-R6E-EOP	6/5/2020 16:30	XW9908	M	C039108	0.00083	<0.01	<0.0002	0.0243	24.3	<0.001	<0.0000019	0.0077	0.0024		6.23	0.00076	0.398	<0.00002	42.9	1.23	32.1	0.000023	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.82
RSEM-R6E-EOP	6/6/2020 11:30	XX0124	M	C039138	0.00091	<0.01	<0.0002	0.0241	24.3	<0.001	<0.0000019	0.0075	0.0024		6.17	0.00075	0.381	<0.00002	43.1	1.22	33.1	0.000024	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	6/7/2020 12:10	XW9323	M	C038976	0.00077	<0.01	<0.0002	0.0239	24.2	0.0022	<0.0000019	0.0066	0.0023		5.67	0.00066	0.56	<0.00002	42.4	1.1	30.6	0.000022	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	6/8/2020 15:40	XX1066	M	C039370	0.00077	<0.01	<0.0002	0.0236	23.5	0.0028	0.0000024	0.0063	0.0023		5.57	0.00067	0.607	<0.00002	41.6	1.08	30.4	0.000021	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	6.4
RSEM-R6E-EOP	6/8/2020 15:50	XX1067	D	C039370	0.00073	<0.01	<0.0002	0.0239	23.9	0.0029	<0.0000019	0.0062	0.0022		5.48	0.00063	0.613	<0.00002	41.3	1.08	29.6	0.000021	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	5.8
RSEM-R6E-EOP	6/9/2020 15:20	XX3624	M	C039793	0.0008	<0.01	<0.0002	0.024	23.9	0.0204	<0.0000019	0.0059	0.004		6.28	0.00087	1.57	<0.00002	39.8	1.3	35.6	0.000025	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	6/9/2020 15:30	XX3625	D	C039793	0.0008	<0.01	<0.0002	0.0249	23.8	0.0204	<0.0000019	0.0058	0.004		6.33	0.00085	1.53	<0.00002	40.0	1.31	35.7	0.000023	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	6/10/2020 13:20	XX4753	M	C040036	0.00083	<0.01	<0.0002	0.0234	23.0	0.0137	<0.0000019	0.0058	0.0039		6.20	0.00082	1.42	<0.00002	38.7	1.29	36.0	0.000023	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.70
RSEM-R6E-EOP	6/11/2020 13:30	XX7039	M	C040416	0.00087	<0.01	<0.0002	0.024	24.8	0.009	<0.0000019	0.0062	0.004		6.22	0.00088	1.31	<0.00002	40.8	1.33	36.2	0.000023	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.48
RSEM-R6E-EOP	6/11/2020 13:40	XX7040	D	C040416	0.00086	<0.01	<0.0002	0.0243	24.5	0.0085	<0.0000019	0.0061	0.004		6.33	0.00085	1.34	<0.00002	40.6	1.31	36.2	0.000023	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	0.53
RSEM-R6E-EOP	6/12/2020 13:55	XX9580	M	C040980	0.00082	<0.01	<0.0002	0.0236	23.9	0.0084	<0.0000019	0.006	0.0041		6.17	0.00086	1.29	<0.00002	39.5	1.3	36.2	0.000024	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.29
RSEM-R6E-EOP	6/12/2020 14:05	XX9581	D	C040980	0.00084	<0.01	<0.0002	0.0239	24.3	0.0084	<0.0000019	0.006	0.004		6.30	0.00086	1.23	<0.00002	40.1	1.31	36.6	0.000023	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.30
RSEM-R6E-EOP	6/13/2020 14:35	XX9598	M	C040986	0.00081	<0.01	<0.0002	0.0221	23.1	0.0059	<0.0000019	0.0056	0.0036		5.94	0.00083	1.11	<0.00002	38.3	1.16	34.8	0.000022	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.47
RSEM-R6E-EOP	6/13/2020 14:45	XX9599	D	C040986	0.0008	<0.01	<0.0002	0.0219	23.0	0.0062	<0.0000019	0.0058	0.0036		5.86	0.00084	1.12	<0.00002	37.9	1.17	34.9	0.000022	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	0.51
RSEM-R6E-EOP	6/14/2020 14:00	XX9646	M	C040993	0.00083	<0.01	<0.0002	0.0221	22.8	0.0138	<0.0000019	0.0058	0.0039		5.65	0.00077	1.46	<0.00002	36.8	1.07	35.1	0.000021	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	4.0
RSEM-R6E-EOP	6/15/2020 14:45	XY1602	M	C041415	0.00093	<0.01	<0.0002	0.031	19.9	0.138	0.0000024	0.0044	0.0241		4.55	0.00096	1.89	<0.00002	27.3	0.818	52.9	0.00002	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	4.2
RSEM-R6E-EOP	6/16/2020 10:45	XY1504	M	C041388	0.00113	<0.01	<0.0002	0.0401	22.4	0.261	<0.0000019	0.0043	0.0433		4.41	0.00103	2.43	<0.00002	28.5	0.843	64.1	0.000021	<0.005	<0.005	0.00312	<0.005	0.011	<0.0001	3.9
RSEM-R6E-EOP	6/17/2020 15:30	XY6277	M	C042380	0.0012	<0.01	<0.0002	0.0432	23.7	0.251	<0.0000019	0.0042	0.047		4.36	0.0011	2.24	<0.00002	30.2	0.816	64.3	0.000019	<0.005	<0.005	0.00319	<0.005	0.0102	<0.0001	0.97
RSEM-R6E-EOP	6/18/2020 16:20	XY6284	M	C042383	0.00136	<0.01	<0.0002	0.0432	24.8	0.213	0.0000021	0.0045	0.0446		4.14	0.00106	2.38	<0.00002	33.2	0.743	66.4	0.000018	<0.005	<0.005	0.00329	<0.005	0.007	<0.0001	0.65

Appendix 3-C: 2020 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	6/19/2020 11:30	XY6263	M	C042375	0.00146	<0.01	<0.0002	0.0425	24.9	0.184	<0.0000019	0.0045	0.0412		3.89	0.001	2.42	<0.00002	34.0	0.695	64.0	0.000018	<0.005	<0.005	0.00323	<0.005	0.0066	<0.0001	0.70
RSEM-R6E-EOP	6/20/2020 14:00	XY9027	M	C042884	0.00159	<0.01	<0.0002	0.0367	24.2	0.126	<0.0000019	0.0043	0.035		3.49	0.00094	2.37	<0.00002	34.0	0.569	58.8	0.000016	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	0.81
RSEM-R6E-EOP	6/21/2020 15:15	XY9120	M	C042904	0.0014	<0.01	<0.0002	0.0376	25.1	0.0577	<0.0000019	0.0044	0.0253		3.48	0.00086	2.3	<0.00002	35.7	0.547	57.2	0.000019	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	0.78
RSEM-R6E-EOP	6/22/2020 13:00	XZ0403	M	C043197	0.00134	<0.01	<0.0002	0.0331	24.1	0.034	<0.0000019	0.0042	0.0199		3.31	0.00077	2.23	<0.00002	34.7	0.519	51.6	0.000018	<0.005	<0.005	0.00276	<0.005	<0.005	<0.0001	0.75
RSEM-R6E-EOP	6/23/2020 16:00	XZ2249	M	C043604	0.00131	<0.01	<0.0002	0.0266	22.8	0.0173	<0.0000019	0.0036	0.0143		3.01	0.00064	2.21	<0.00002	30.3	0.457	41.7	0.000015	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.66
RSEM-R6E-EOP	6/24/2020 13:00	XZ5349	M	C044267	0.00125	<0.01	<0.0002	0.0238	21.8	0.0071	<0.0000019	0.0035	0.0119		2.82	0.00061	1.91	<0.00002	30.0	0.409	37.9	0.000014	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	0.53
RSEM-R6E-EOP	6/25/2020 15:20	XZ5981	M	C044346	0.00131	<0.01	<0.0002	0.0233	21.6	0.0028	<0.0000019	0.0034	0.0096		2.78	0.00058	1.76	<0.00002	28.3	0.402	36.0	0.000014	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	0.61
RSEM-R6E-EOP	6/25/2020 15:30	XZ5982	D	C044346	0.00126	<0.01	<0.0002	0.0233	21.9	0.0037	<0.0000019	0.0034	0.01		2.85	0.0006	1.74	<0.00002	28.5	0.404	35.8	0.000014	<0.005	<0.005	0.00201	<0.005	<0.005	<0.0001	0.57
RSEM-R6E-EOP	6/26/2020 12:20	XZ7315	M	C044624	0.00132	<0.01	<0.0002	0.0213	21.4	0.0038	<0.0000019	0.0034	0.0086		2.79	0.00054	1.7	<0.00002	27.6	0.391	31.8	0.000014	<0.005	<0.005	0.00182	<0.005	<0.005	<0.0001	0.83
RSEM-R6E-EOP	6/26/2020 12:30	XZ7316	D	C044624	0.00129	<0.01	<0.0002	0.0213	21.3	0.004	<0.0000019	0.0033	0.0087		2.80	0.00056	1.68	<0.00002	27.6	0.385	32.1	0.000014	<0.005	<0.005	0.00181	<0.005	<0.005	<0.0001	0.81
RSEM-R6E-EOP	6/27/2020 19:00	XZ9069	M	C044897	0.00113	<0.01	<0.0002	0.0199	20.7	<0.001	<0.0000019	0.0032	0.0069		2.67	0.00054	1.71	<0.00002	26.7	0.362	28.1	0.000013	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.70
RSEM-R6E-EOP	6/28/2020 12:40	XZ9159	M	C044916	0.00118	<0.01	<0.0002	0.0182	20.4	0.0031	<0.0000019	0.0031	0.0068		2.74	0.00053	1.86	<0.00002	25.9	0.378	26.6	0.000013	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.68
RSEM-R6E-EOP	6/28/2020 12:50	XZ9160	D	C044916	0.00118	<0.01	<0.0002	0.0183	20.6	0.0029	<0.0000019	0.0031	0.0068		2.68	0.00053	1.84	<0.00002	25.5	0.379	27.2	0.000014	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.62
RSEM-R6E-EOP	6/29/2020 15:55	YA0783	M	C045275	0.00105	<0.01	<0.0002	0.0182	20.5	<0.001	<0.0000019	0.003	0.0066		2.87	0.00059	1.94	<0.00002	26.4	0.407	26.0	0.000012	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.66
RSEM-R6E-EOP	6/30/2020 13:50	YA2738	M	C045692	0.00121	<0.01	<0.0002	0.0172	21.0	0.0013	<0.0000019	0.0029	0.0074		2.89	0.0005	2.18	<0.00002	25.9	0.413	25.1	0.000013	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.85
RSEM-R6E-EOP	6/30/2020 14:00	YA2739	D	C045692	0.00118	<0.01	<0.0002	0.0175	20.6	0.0011	<0.0000019	0.003	0.0072		2.88	0.00056	2.16	<0.00002	25.5	0.418	25.5	0.000011	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.79
RSEM-R6E-EOP	7/1/2020 11:30	YA2706	M	C045689	0.00121	<0.01	<0.0002	0.0146	19.1	0.0048	0.000002	0.0025	0.0064		2.50	0.0005	2.5	<0.00002	21.5	0.356	22.1	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	7/1/2020 11:40	YA2707	D	C045689	0.0012	<0.01	<0.0002	0.0145	19.0	0.0034	<0.0000019	0.0025	0.0064		2.54	0.00049	2.51	<0.00002	21.2	0.355	21.2	0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	7/2/2020 13:30	YA4188	M	C045985	0.00114	<0.01	<0.0002	0.0219	17.5	0.112	0.0000023	0.0049	0.013		4.15	0.00072	2.47	<0.00002	22.1	0.616	38.2	0.000013	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	7.3
RSEM-R6E-EOP	7/2/2020 13:40	YA4189	D	C045985	0.00111	<0.01	<0.0002	0.0219	17.3	0.109	<0.0000019	0.0049	0.0124		4.09	0.00072	2.48	<0.00002	21.9	0.609	37.8	0.000015	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	8.0
RSEM-R6E-EOP	7/3/2020 16:10	YA5155	M	C046179	0.00118	<0.01	<0.0002	0.0275	17.0	0.162	<0.0000019	0.0048	0.0189		3.70	0.00076	2.81	<0.00002	22.3	0.539	45.6	0.000015	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	14
RSEM-R6E-EOP	7/4/2020 15:05	YA6735	M	C046470	0.00123	<0.01	<0.0002	0.0331	18.1	0.251	<0.0000019	0.0038	0.0343		3.06	0.00076	2.85	<0.00002	20.3	0.448	51.7	0.000011	<0.005	<0.005	0.0025	<0.005	0.0085	<0.0001	6.2
RSEM-R6E-EOP	7/5/2020 10:05	YA6916	M	C046500	0.00153	<0.01	<0.0002	0.0332	20.3	0.243	<0.0000019	0.0038	0.0419		2.97	0.00077	3.16	<0.00002	22.1	0.413	53.1	0.000013	<0.005	<0.005	0.00245	<0.005	0.0112	<0.0001	4.9
RSEM-R6E-EOP	7/5/2020 10:15	YA6917	D	C046500	0.00166	<0.01	<0.0002	0.0329	20.3	0.246	<0.0000019	0.0039	0.0418		2.98	0.00075	3.2	<0.00002	21.9	0.426	53.5	0.000014	<0.005	<0.005	0.00239	<0.005	0.0111	<0.0001	4.4
RSEM-R6E-EOP	7/6/2020 11:30	YA8348	D	C046846	0.00175	<0.01	<0.0002	0.0299	21.9	0.19	<0.0000019	0.0037	0.0403		2.87	0.00071	3.07	<0.00002	22.7	0.379	49.4	<0.00001	<0.005	<0.005	0.00243	<0.005	0.0102	<0.0001	3.1
RSEM-R6E-EOP	7/6/2020 23:20	YA8347	M	C046846	0.00174	<0.01	<0.0002	0.0302	21.8	0.19	<0.0000019	0.0038	0.0403		2.82	0.0007	3.08	<0.00002	22.5	0.389	50.2	<0.00001	<0.005	<0.005	0.00245	<0.005	0.0095	<0.0001	2.9
RSEM-R6E-EOP	7/7/2020 12:30	YB0051	M	C047206	0.00175	<0.01	<0.0002	0.0287	21.0	0.123	<0.0000019	0.0036	0.0316		2.78	0.00066	3.38	<0.00002	20.8	0.365	43.0	0.000011	<0.005	<0.005	0.00213	<0.005	0.0081	<0.0001	3.4
RSEM-R6E-EOP	7/8/2020 12:30	YB2460	M	C047619	0.00185	<0.01	<0.0002	0.025	21.4	0.0928	<0.0000019	0.0039	0.0263		2.97	0.00071	3.67	<0.00002	21.8	0.35	40.1	<0.00001	<0.005	<0.005	0.00195	<0.005	0.0074	<0.0001	3.5
RSEM-R6E-EOP	7/9/2020 14:00	YB4136	M	C047920	0.00216	<0.01	<0.0002	0.0217	20.5	0.062	<0.0000019	0.0038	0.0219		2.91	0.00066	3.7	<0.00002	21.4	0.341	33.8	<0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	7/9/2020 14:10	YB4139	D	C047920	0.00188	<0.01	<0.0002	0.0214	20.5	0.0626	<0.0000019	0.0039	0.0222		2.95	0.00066	3.56	<0.00002	21.4	0.339	35.7	0.00001	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	7/10/2020 10:00	YB4116	M	C047917	0.00175	<0.01	<0.0002	0.0193	20.3	0.0507	<0.0000019	0.0034	0.0186		2.83	0.00063	3.65	<0.00002	19.9	0.33	30.2	<0.00001	<0.005	<0.005	0.00161	<0.005	0.0056	<0.0001	2.6
RSEM-R6E-EOP	7/11/2020 15:10	YB7193	M	C048486	0.00143	<0.01	<0.0002	0.0171	19.8	0.0213	<0.0000019	0.0028	0.0143		2.74	0.00061	3.43	<0.00002	17.6	0.328	27.1	<0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	7/12/2020 14:00	YB7108	M	C048462	0.00133	<0.01	<0.0002	0.0157	19.6	0.0175	<0.0000019	0.0026	0.0116		2.72	0.00065	3.42	<0.00002	16.6	0.329	25.7	<0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	7/13/2020 14:30	YB9219	M	C048875	0.0012	0.01	<0.0002	0.0134	19.9	0.0092	<0.0000019	0.0024	0.0088		2.82	0.00063	3.43	<0.00002	17.0	0.317	26.1	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	7/14/2020 14:30	YC1074	M	C049344	0.00116	<0.01	<0.0002	0.0114	20.0	0.0071	<0.0000019	0.0024	0.0082		2.76	0.00063	2.97	<0.00002	17.7	0.296	26.4	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	7/15/2020 12:45	YC2137	M	C049614	0.00105	<0.01	<0.0002	0.0121	19.6	0.0014	<0.0000019	0.0022	0.0068		2.68	0.00063	3.14	<0.00002	17.2	0.309	25.8	0.000011	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	7/16/2020 15:30	YC4665	M	C049952	0.00105	0.011	<0.0002	0.0118	19.8	0.0047	<0.0000019	0.0022	0.0063		2.69	0.00068	3.11	<0.00002	17.7	0.31	27.0	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	7/17/2020 13:55	YC5481	M	C050110	0.00103	0.013	<0.0002	0.0119	19.5	0.0026	<0.0000019	0.0023	0.0057		2.64	0.00068	3.05	<0.00002	18.1	0.301	27.3	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	7/18/2020 13:05	YC7458	M	C050583	0.00106	0.014	<0.0002	0.0121	19.8	0.0048	<0.0000019	0.0023	0.0054		2.68	0.0007	3.05	<0.00002	18.9	0.307	27.5	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	7/19/2020 13:30	YC7536	M	C050603	0.00104	0.013	<0.0002	0.012	19.2	0.0032	<0.0000019	0.0025	0.0049		2.75	0.00071	3.01	<0.00002	19.2	0.314	27.5	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	7/20/2020 10:40	YC8542	M	C050811	0.00106	0.014	<0.0002	0.0123	20.8	0.0049	<0.0000019	0.0026	0.0053		3.00	0.00073	2.83	<0.00002	21.4	0.303	28.7	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	7/21/2020 13:55	YD0796	M	C051251	0.00099	0.013	<0.0002	0.0144	20.9	0.0012	<0.0000019	0.0026	0.0048		3.00	0.00069	2.82	<0.00002	21.8	0.328	29.5	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	7/22/2020 13:30	YD2617	M	C051641	0.001	0.014	<0.0002	0.0125	20.5	0.0032	<0.0000019	0.0025	0.0045		3.01	0.00072	2.93	<0.00002	21.0	0.331	29.9	<0.00001	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	7/23/2020 11:55	YD4254	M	C051864	0.00092	0.012	<0.0002	0.014	20.6	0.0026	<0.0000019	0.0025	0.0045		3.01	0.00071	2.72	<0.00002	21.4	0.327	28.9	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	7/24/2020 15:20	YD5909	M	C052038	0.00092	0.02	<0.0002	0.0144	20.9	0.0026	<0.0000019	0.0028	0.004		3.09	0.0007	2.7	<0.00002	21.8	0.33	28.7	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	7/25/2020 11:05	YD7674	M	C052402	0.00093	0.016	<0.0002	0.0132	21.3	0.0053	<0.0000019	0.0037	0.0041		3.33	0.00073	2.84	<0.00002	22.7	0.324	29.0	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	7/26/2020 14:15	YD7713	M	C052420	0.00089	0.019	<0.0002	0.0127	21.1	0.0025	<0.0000019	0.0042	0.0037		3.44	0.00071	2.8	<0.00002	22.9	0.318	28.8	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	0.95
RSEM-R6E-EOP	7/27/2020 10:30	YD7769	M	C052432	0.00087	0.025	<0.0002	0.0129	21.0	0.0029	<0.0000019	0.0041	0.0035		3.45	0.00074	2.85	<0.00002	22.6	0.316	28.0	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	0.69
RSEM-R6E-EOP	7/28/2020 12:30	YE2029	M	C053295	0.00084	0.013	<0.0002	0.0126	20.1	<0.001	<0.0000019	0.0046	0.0029		3.58	0.0007	2.92	<0.00002	22.0	0.337	28.8	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.84
RSEM-R6E-EOP	7/30/2020 12:30	YE4008	M	C053695	0.00084	0.019	<0.0002	0.0116	19.5	<0.001	<0.0000019	0.004	0.0028		3.39	0.00064	3.09	<0.00002	20.7	0.326	26.1	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	0.87
RSEM-R6E-EOP	7/30/2020 16:30	YE5556	M	C054021	0.00077	0.018	<0.0002	0.0118	20.1	<0.001	<0.0000019	0.0037	0.0025		3.24	0.00063	3.06	<0.00002	21.1	0.31	25.2	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	0.89
RSEM-R6E-EOP	7/31/2020 11:00	YE5650	M	C054023	0.00076	0.026	<0.0002	0.0119	20.2	<0.001	<0.0000019	0.0035	0.0024		3.19	0.0006	3.06	<0.00002	21.0	0.319	24.8	<0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	0.99
RSEM-R6E-EOP	8/1/2020 12:15	YE6665	M	C054219	0.00084	0.032	<0.0002	0.0118	20.7	0.003	<0.0000019	0.0034	0.0024		3.23	0.00057	2.88	<0.00002	22.1	0.325	23.7	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	8/2/2020 12:40	YE8516	M	C054579	0.00078	0.03	<0.0002	0.0123	20.0	0.0013	<0.0000019	0.003	0.0024		3.00	0.00054	3.21	<0.00002	21.0	0.315	23.1	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/3/2020 13:00	YE8524	M	C054582	0.00075	0.042	<0.0002	0.0121	19.6	0.0031	<0.0000019	0.0029	0.0022		2.91	0.00057	3.26	<0.00002	20.4	0.305	22.4	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/4/2020 12:50	YF1643	M	C055153	0.00079	0.038	<0.0002	0.0116	19.5	0.0058	<0.0000019	0.0029	0.0021		2.89	0.00049	3.34	<0.00002	20.5	0.315	22.9	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.76
RSEM-R6E-EOP	8/4/2020 13:00	YF1644	D	C055153	0.00076	0.035	<0.0002	0.0117	19.9	0.0055	<0.0000019	0.0029	0.0021		2.98	0.00051	3.31	<0.00002	20.9	0.317	23.2	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	0.87
RSEM-R6E-EOP	8/5/2020 12:20	YF2976	M	C055442	0.00078	0.035	<0.0002	0.0107	19.5	<0.001	<0.0000019	0.0028	0.002		2.82	0.00049	3.24	<0.00002	19.7	0.301	20.3	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	8/5/2020 12:30	YF2977	D	C055442	0.00078	0.037	<0.0002	0.0109	19.1	<0.001	<0.0000019	0.0028	0.002		2.78	0.00048	3.18	<0.00002	19.4	0.303	20.0	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.84
RSEM-R6E-EOP	8/6/2020 11:20	YF2968	M	C055440	0.0008	0.047	<0.0002	0.0106	19.1	0.0012	<0.0000019	0.0028	0.0021		2.78	0.00047	3.24	<0.00002	19.3	0.304	19.9	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/7/2020 11:55	YF4856	M	C055741	0.00076	0.039	<0.0002	0.0106	18.6	0.0044	<0.0000019	0.0028	0.0019		2.67	0.00045	3.29	<0.00002	19.1	0.293	19.3	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.67
RSEM-R6E-EOP	8/7/2020 12:05	YF4857	D	C055741	0.00073	0.035	<0.0002	0.0107	18.5	0.0035	<0.0000019	0.0028	0.0018		2.65	0.00045	3.29	<0.00002	18.9	0.291	19.9	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.69
RSEM-R6E-EOP	8/8/2020 12:40	YF8358	M	C056281	0.00075	0.034	<0.0002	0.0105	17.9	0.0027	<0.0000019	0.0028	0.0018		2.51	0.00041	3.25	<0.00002	18.2	0.286	19.0	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	0.91
RSEM-R6E-EOP	8/9/2020 14:10	YF8361	M	C056282	0.00073	0.04	<0.0002	0.0107	17.9	0.0047	<0.0000019	0.0028	0.0019		2.62	0.00041	3.26	<0.00002	18.0	0.298	19.3	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	0.00012	0.88
RSEM-R6E-EOP	8/10/2020 12:50	YG0105	M	C056587	0.0007	0.036	<0.0002	0.0105	18.4	0.0027	<0.0000019	0.0028	0.0017		2.59	0.00041	3.06	<0.00002	19.0	0.286	18.9	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	0.88
RSEM-R6E-EOP	8/11/2020 13:10	YG2366	M	C056973	0.0007	0.04	<0.0002	0.0111	19.2	0.0032	<0.0000019	0.003	0.0017		2.64	0.00045	3.08	<0.00002	20.4	0.277	19.4	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	8/12/2020 17:30	YG4635	M	C057417	0.00077	0.044	<0.0002	0.0119	18.8	<0.001	<0.0000019	0.0034	0.0017		2.78	0.00049	3.18	<0.00002	21.6	0.306	21.4	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/13/2020 13:20	YG7260	M	C057823	0.00074	0.033	<0.0002	0.0102	19.4	0.0024	<0.0000019	0.0035	0.0016		2.83	0.00044	2.7	<0.00002	23.7	0.276	21.2	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	0.74
RSEM-R6E-EOP	8/13/2020 13:30	YG7261	D	C057823	0.00074	0.034	<0.0002	0.0103	19.2	0.0023	<0.0000019	0.0034	0.0017		2.79	0.00044	2.69	<0.00002	23.4	0.273	20.4	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	0.76

Appendix 3-C: 2020 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	8/14/2020 12:45	YG7189	M	C057817	0.00076	0.034	<0.0002	0.0118	19.4	0.0028	<0.0000019	0.0039	0.0018		2.98	0.00049	3.02	<0.00002	24.9	0.306	22.5	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	8/15/2020 14:45	YH0060	M	C058356	0.00076	0.038	<0.0002	0.0127	19.0	0.0033	<0.0000019	0.0045	0.0017		3.23	0.00057	2.73	<0.00002	25.6	0.335	23.6	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/16/2020 11:40	YH0172	M	C058389	0.0008	0.04	<0.0002	0.0131	19.9	0.004	<0.0000019	0.0047	0.0018		3.41	0.00055	2.65	<0.00002	27.8	0.336	24.9	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	0.99
RSEM-R6E-EOP	8/17/2020 9:20	YG9869	M	C058326	0.0008	0.051	<0.0002	0.0132	19.3	0.0043	<0.0000019	0.0051	0.0018		3.37	0.00055	2.56	<0.00002	27.6	0.343	24.2	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.78
RSEM-R6E-EOP	8/18/2020 16:30	YH3312	M	C059056	0.00082	0.069	<0.0002	0.013	19.7	0.0038	<0.0000019	0.0052	0.0017		3.44	0.0006	2.43	<0.00002	29.1	0.323	26.9	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	8/19/2020 15:00	YH5387	M	C059422	0.0008	0.068	<0.0002	0.0139	19.7	0.0023	<0.0000019	0.0053	0.0017		3.56	0.00054	2.41	<0.00002	28.9	0.333	24.1	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	8/20/2020 14:50	YH7341	M	C059760	0.00075	0.053	<0.0002	0.014	19.9	0.0016	<0.0000019	0.0053	0.0017		3.66	0.00054	2.15	<0.00002	30.9	0.314	24.8	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/21/2020 11:10	YH7339	M	C059759	0.00074	0.056	<0.0002	0.0142	20.1	0.0018	<0.0000019	0.0055	0.0016		3.75	0.00049	2.09	<0.00002	31.0	0.321	25.0	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	8/22/2020 11:30	YI0129	M	C060262	0.00091	0.027	<0.0002	0.0227	22.3	0.0288	<0.0000019	0.0078	0.0063		6.42	0.00075	2.11	<0.00002	31.8	0.948	48.0	0.000015	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	8/23/2020 14:50	YI0109	M	C060255	0.0008	0.027	<0.0002	0.0227	22.0	0.0146	<0.0000019	0.0076	0.0057		6.52	0.00075	2.07	<0.00002	32.0	0.994	49.0	0.000014	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/23/2020 15:00	YI0112	D	C060255	0.0008	0.028	<0.0002	0.0223	21.9	0.0151	<0.0000019	0.0077	0.0056		6.36	0.0008	2.03	<0.00002	31.2	1.01	48.3	0.000013	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	8/24/2020 13:40	YI2198	M	C060702	0.00072	0.036	<0.0002	0.0224	22.5	0.0089	<0.0000019	0.0075	0.0049		6.19	0.0008	1.91	<0.00002	32.2	0.941	47.6	0.000013	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	0.96
RSEM-R6E-EOP	8/25/2020 12:20	YI3995	M	C061087	0.00073	0.043	<0.0002	0.024	22.5	0.0062	<0.0000019	0.0073	0.0045		5.87	0.00079	2.05	<0.00002	31.8	0.959	46.0	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.86
RSEM-R6E-EOP	8/26/2020 13:50	YI6263	M	C061565	0.00071	0.042	<0.0002	0.0235	22.9	0.0022	<0.0000019	0.0067	0.0041		5.73	0.00084	1.9	<0.00002	33.0	0.893	44.2	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.82
RSEM-R6E-EOP	8/27/2020 12:40	YI7773	M	C061827	0.00068	0.042	<0.0002	0.0222	22.4	0.0023	<0.0000019	0.0066	0.0038		5.42	0.00071	2.01	<0.00002	33.4	0.814	43.4	0.000011	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	0.71
RSEM-R6E-EOP	8/28/2020 13:45	YI9493	M	C062013	0.00067	0.046	<0.0002	0.0235	24.0	0.0034	<0.0000019	0.0063	0.0036		5.43	0.00063	1.87	<0.00002	35.9	0.789	45.0	<0.00001	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	0.97
RSEM-R6E-EOP	8/29/2020 10:35	YJ1737	M	C062465	0.00063	0.045	<0.0002	0.0224	22.4	0.0019	<0.0000019	0.0065	0.0033		5.25	0.00066	1.84	<0.00002	33.1	0.753	42.5	<0.00001	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.77
RSEM-R6E-EOP	8/29/2020 10:45	YJ1738	D	C062465	0.00065	0.048	<0.0002	0.0227	22.6	0.002	<0.0000019	0.0065	0.0033		5.32	0.00068	1.84	<0.00002	33.3	0.771	44.6	0.000011	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.76
RSEM-R6E-EOP	8/30/2020 11:50	YJ1569	M	C062426	0.00064	0.062	<0.0002	0.0224	22.5	0.0022	<0.0000019	0.0065	0.0033		5.29	0.00075	2.3	<0.00002	33.2	0.754	41.9	0.000013	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.72
RSEM-R6E-EOP	8/31/2020 17:00	YJ3638	M	C062857	0.0006	0.05	<0.0002	0.0224	22.6	0.0019	<0.0000019	0.0068	0.0029		5.13	0.00064	1.82	<0.00002	33.9	0.709	41.1	<0.00001	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.89
RSEM-R6E-EOP	8/31/2020 17:10	YJ3639	D	C062857	0.0006	0.05	<0.0002	0.0224	22.5	0.0019	<0.0000019	0.0068	0.003		5.17	0.00065	1.82	<0.00002	33.6	0.718	41.0	<0.00001	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.80
RSEM-R6E-EOP	9/1/2020 14:10	YJ6690	M	C063433	0.0006	0.046	<0.0002	0.0206	22.0	0.0018	<0.0000019	0.0069	0.0028		5.06	0.00064	1.72	<0.00002	33.8	0.679	39.4	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	0.91
RSEM-R6E-EOP	9/2/2020 13:45	YJ7830	M	C063666	0.00057	0.028	<0.0002	0.0212	21.6	<0.001	<0.0000019	0.0073	0.0023		5.22	0.00068	1.66	<0.00002	34.4	0.641	39.6	<0.00001	<0.005	<0.005	0.00069	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	9/3/2020 14:20	YK0030	M	C064047	0.00064	0.05	<0.0002	0.0211	22.0	0.0012	<0.0000019	0.007	0.0026		5.07	0.00062	1.48	<0.00002	33.4	0.637	37.9	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.98
RSEM-R6E-EOP	9/4/2020 11:50	YK0085	M	C064051	0.0006	0.049	<0.0002	0.0207	21.8	0.0014	<0.0000019	0.0069	0.0024		4.98	0.00059	1.37	<0.00002	33.1	0.628	37.0	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/5/2020 12:20	YK1344	M	C064288	0.00059	0.053	<0.0002	0.0206	20.6	0.0023	<0.0000019	0.0066	0.0024		4.77	0.00056	1.28	<0.00002	32.2	0.607	36.2	<0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	0.97
RSEM-R6E-EOP	9/5/2020 12:30	YK1345	D	C064288	0.00057	0.052	<0.0002	0.021	20.5	0.0023	<0.0000019	0.0065	0.0025		4.79	0.00054	1.26	<0.00002	32.0	0.611	36.5	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.98
RSEM-R6E-EOP	9/6/2020 10:50	YK2529	M	C064579	0.00058	0.051	<0.0002	0.02	21.7	0.0017	<0.0000019	0.0071	0.0024		4.89	0.00055	1.19	<0.00002	33.9	0.611	36.8	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	9/6/2020 11:00	YK2530	D	C064579	0.00058	0.05	<0.0002	0.0203	21.3	0.0017	<0.0000019	0.0071	0.0023		4.84	0.00056	1.18	<0.00002	33.0	0.614	35.9	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	0.94
RSEM-R6E-EOP	9/7/2020 10:15	YK2584	M	C064592	0.00057	0.061	<0.0002	0.0201	21.5	0.0021	<0.0000019	0.0069	0.0023		4.76	0.00052	1.18	<0.00002	33.8	0.588	35.3	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	9/8/2020 10:45	YK6314	M	C065313	0.00056	0.044	<0.0002	0.0192	21.5	<0.001	0.0000019	0.0064	0.0022		4.74	0.00053	1.03	<0.00002	34.5	0.548	34.6	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	9/9/2020 14:30	YK6316	M	C065314	0.00059	0.047	<0.0002	0.0187	21.8	0.0012	0.000002	0.0066	0.0021		4.85	0.00052	0.949	<0.00002	35.5	0.527	34.6	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	9/10/2020 11:40	YK8213	M	C065709	0.00057	0.059	<0.0002	0.0177	21.9	0.0017	<0.0000019	0.0068	0.0022		4.71	0.00054	0.872	<0.00002	35.4	0.514	33.2	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	9/11/2020 11:30	YK8182	M	C065706	0.00056	0.057	<0.0002	0.0179	21.6	0.0015	<0.0000019	0.0066	0.0021		4.64	0.00055	0.775	<0.00002	35.5	0.482	32.8	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	9/12/2020 14:10	YL1185	M	C066169	0.00057	0.061	<0.0002	0.0186	22.2	0.0018	<0.0000019	0.0068	0.002		4.83	0.00053	0.739	<0.00002	37.1	0.501	35.3	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	9/13/2020 12:50	YL1414	M	C066239	0.00055	0.06	<0.0002	0.0191	21.8	0.0015	<0.0000019	0.0067	0.0021		4.78	0.00052	0.791	<0.00002	37.3	0.487	32.5	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	9/14/2020 12:30	YL3784	M	C066659	0.00051	0.06	<0.0002	0.0196	21.3	0.002	<0.0000019	0.0065	0.002		4.58	0.00046	0.948	<0.00002	35.2	0.519	32.3	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	9/15/2020 14:40	YL6685	M	C067245	0.00068	0.026	<0.0002	0.0208	22.1	0.0126	<0.0000019	0.0102	0.0042		7.07	0.00066	2.14	<0.00002	35.5	0.885	38.8	0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	9/15/2020 14:50	YL6686	D	C067245	0.0007	0.026	<0.0002	0.0212	22.4	0.0127	<0.0000019	0.0102	0.0042		7.04	0.00067	2.11	<0.00002	36.1	0.875	39.1	0.000011	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	2.8
RSEM-R6E-EOP	9/16/2020 15:20	YL8113	M	C067490	0.00074	0.032	<0.0002	0.0184	21.3	0.0047	<0.0000019	0.0088	0.0037		6.24	0.00063	1.98	<0.00002	36.2	0.715	36.6	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	9/17/2020 12:50	YL8047	M	C067474	0.00068	0.03	<0.0002	0.0181	21.7	0.0039	<0.0000019	0.0085	0.0036		6.00	0.00059	1.97	<0.00002	36.3	0.692	36.4	0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	9/17/2020 13:00	YL8048	D	C067474	0.00068	0.03	<0.0002	0.0184	21.6	0.0041	<0.0000019	0.0085	0.0034		5.96	0.00059	1.99	<0.00002	36.6	0.702	36.5	0.00001	<0.005	<0.005	0.00124	<0.005	0.0052	<0.0001	1.3
RSEM-R6E-EOP	9/18/2020 9:40	YL9984	M	C067838	0.00068	0.027	<0.0002	0.0187	21.0	0.0044	<0.0000019	0.0079	0.0037		5.61	0.00057	2.05	<0.00002	36.6	0.649	38.2	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/19/2020 12:30	YM3342	M	C068349	0.00067	0.027	<0.0002	0.0183	20.3	0.004	<0.0000019	0.0078	0.0035		5.38	0.00061	2.03	<0.00002	37.1	0.607	33.2	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	9/19/2020 12:40	YM3343	D	C068349	0.00068	0.027	<0.0002	0.0186	20.3	0.0047	<0.0000019	0.0079	0.0035		5.27	0.00057	2	<0.00002	37.0	0.617	34.8	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	9/20/2020 11:30	YM3373	M	C068353	0.00067	0.023	<0.0002	0.0178	20.1	0.0038	<0.0000019	0.0078	0.0033		5.16	0.0006	2.11	<0.00002	38.0	0.569	35.5	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	9/21/2020 12:30	YM6391	M	C068837	0.00063	0.01	<0.0002	0.0189	19.1	<0.001	<0.0000019	0.0076	0.003		4.86	0.00064	2.17	<0.00002	37.1	0.52	34.2	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	9/21/2020 12:40	YM6392	D	C068837	0.00064	0.01	<0.0002	0.0182	19.2	<0.001	<0.0000019	0.0075	0.003		4.85	0.00061	2.15	<0.00002	37.1	0.499	34.5	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	9/22/2020 13:45	YM9230	M	C069318	0.00063	0.011	<0.0002	0.0194	19.0	<0.001	<0.0000019	0.0074	0.0028		4.69	0.00062	2.2	<0.00002	38.9	0.476	34.9	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	9/23/2020 15:20	YN0385	M	C069533	0.00063	0.015	<0.0002	0.017	19.2	<0.001	<0.0000019	0.0071	0.0027		4.63	0.0006	2.16	<0.00002	40.5	0.478	35.5	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/23/2020 15:30	YN0386	D	C069533	0.00062	0.017	<0.0002	0.0171	19.0	<0.001	<0.0000019	0.0073	0.0028		4.72	0.00066	2.22	<0.00002	39.7	0.487	35.9	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/24/2020 13:50	YN2678	M	C069910	0.00067	0.017	<0.0002	0.0168	19.2	0.0013	<0.0000019	0.0067	0.0027		4.45	0.00062	2.26	<0.00002	39.9	0.457	34.5	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/25/2020 13:10	YN2672	M	C069908	0.00059	0.017	<0.0002	0.0168	19.5	0.0016	<0.0000019	0.0062	0.0027		4.29	0.00059	2.37	<0.00002	38.4	0.441	34.5	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	9/25/2020 13:20	YN2673	D	C069908	0.0006	0.016	<0.0002	0.0166	19.3	0.0015	<0.0000019	0.0063	0.0027		4.25	0.00059	2.34	<0.00002	38.2	0.441	34.6	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/26/2020 13:00	YN7495	M	C070621	0.00059	0.016	<0.0002	0.0163	19.4	0.0014	<0.0000019	0.0057	0.0027		4.10	0.00061	2.59	<0.00002	36.0	0.423	33.3	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/27/2020 16:00	YN7528	M	C070629	0.00069	0.016	<0.0002	0.0159	19.7	0.0014	<0.0000019	0.0054	0.0028		3.94	0.0006	2.46	<0.00002	35.0	0.406	33.7	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	9/27/2020 16:10	YN7529	D	C070629	0.00068	0.015	<0.0002	0.0159	19.4	0.0014	<0.0000019	0.0055	0.0028		3.90	0.0006	2.51	<0.00002	34.6	0.409	32.4	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/28/2020 9:30	YN7449	M	C070613	0.0006	0.015	<0.0002	0.0158	19.5	0.0015	<0.0019	0.0052	0.0028		3.91	0.00055	2.61	<0.00002	33.4	0.41	31.7	<0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	9/29/2020 16:00	YO1377	M	C071354	0.00061	0.015	<0.0002	0.0151	19.6	0.0011	<0.0000019	0.0051	0.0027		3.70	0.00056	2.37	<0.00002	32.1	0.385	30.8	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	0.0002	0.91
RSEM-R6E-EOP	9/30/2020 13:00	YO4160	M	C071825	0.00061	0.013	<0.0002	0.0159	19.9	<0.001	<0.0000019	0.005	0.0028		3.71	0.00055	2.29	<0.00002	32.3	0.391	31.1	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	0.99
RSEM-R6E-EOP	10/1/2020 0:05	YO6613	D	C072228	0.0006	0.014	<0.0002	0.0148	20.2	<0.001	<0.0000019	0.005	0.0027		3.85	0.00057	2.28	<0.00002	32.2	0.4	32.0	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	10/1/2020 11:55	YO6611	M	C072228	0.00058	0.014	<0.0002	0.0147	19.7	<0.001	<0.0000019	0.0049	0.0027		3.71	0.00057	2.25	<0.00002	31.8	0.395	31.4	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	0.94
RSEM-R6E-EOP	10/2/2020 11:20	YO6594	M	C072223	0.00063	0.016	<0.0002	0.016	20.1	0.0011	<0.0000019	0.0051	0.0028		3.87	0.00054	2.16	<0.00002	31.8	0.379	32.0	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	0.73
RSEM-R6E-EOP	10/3/2020 16:00	YP0034	M	C072771	0.00063	0.017	<0.0002	0.017	20.3	<0.001	0.0000029	0.0053	0.0026		3.93	0.00055	1.97	<0.00002	32.6	0.381	31.9	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	0.00024	0.69
RSEM-R6E-EOP	10/4/2020 16:00	YP0008	M	C072767	0.0006	0.015	<0.0002	0.0172	20.5	0.0012	<0.0000019	0.0054	0.0026		3.90	0.00055	1.86	<0.00002	32.6	0.383	31.9	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	0.78
RSEM-R6E-EOP	10/4/2020 16:10	YP0012	D	C072767	0.00061	0.016	<0.0002	0.0171	20.1	0.0012	<0.0000019	0.0054	0.0027		3.81	0.00056	1.88	<0.00002	32.2	0.384	31.5	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	0.71
RSEM-R6E-EOP	10/5/2020 17:00	YP2998	M	C073260	0.00059	0.016	<0.0002	0.0161	19.6	<0.001	<0.0000019	0.0056	0.0025		3.86	0.00055	1.56	<0.00002	31.1	0.379	31.5	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	10/6/2020 14:50	YP5777	M	C073719	0.0006	0.017	<0.0002	0.0173	20.0	0.0011	<0.0000019	0.0055	0.0026		4.00	0.00054	1.64	<0.00002	31.8	0.4	31.5	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	10/6/2020 15:00	YP5778	D	C073719	0.00058	0.017	<0.0002	0.0166	19.6	0.0011	<0.0000019	0.0054	0.0026		3.89	0.00055	1.6	<0.00002	30.9	0.382	30.4	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	1.2

Appendix 3-C: 2020 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	10/7/2020 14:10	YP7387	M	C074014	0.00061	0.016	<0.0002	0.0138	19.9	<0.001	<0.0000019	0.0055	0.0027		3.93	0.00057	1.53	<0.00002	31.8	0.379	30.2	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	10/8/2020 11:10	YP9901	M	C074375	0.00062	0.014	<0.0002	0.0163	20.9	<0.001	<0.0000019	0.0053	0.0026		4.13	0.00056	1.68	<0.00002	33.1	0.398	32.7	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	10/8/2020 11:20	YP9902	D	C074375	0.00062	0.015	<0.0002	0.0164	21.0	<0.001	<0.0000019	0.0054	0.0025		4.12	0.00055	1.69	<0.00002	32.6	0.405	32.2	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	10/9/2020 11:10	YQ0240	M	C074391	0.00064	0.014	<0.0002	0.0204	22.5	0.001	<0.0000019	0.0053	0.0025		4.70	0.00056	1.74	<0.00002	33.8	0.649	32.9	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	10/10/2020 11:50	YQ1626	M	C074557	0.0006	0.016	<0.0002	0.0185	24.5	0.003	<0.0000019	0.0049	0.003		5.74	0.00056	1.93	<0.00002	35.5	1.14	32.3	0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	10/10/2020 12:00	YQ1627	D	C074557	0.0006	0.015	<0.0002	0.0185	24.3	0.003	<0.0000019	0.005	0.0031		5.75	0.00057	1.96	<0.00002	35.4	1.13	32.4	0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	10/11/2020 11:30	YQ4407	M	C075136	0.00065	0.012	<0.0002	0.0317	30.4	0.0191	<0.0000019	0.0093	0.0046		11.4	0.00074	2.45	<0.00002	38.4	3.35	36.3	0.000018	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	10/12/2020 13:30	YQ4365	M	C075125	0.00066	<0.01	<0.0002	0.0354	32.1	0.0221	<0.0000019	0.0113	0.0059		13.2	0.00086	2.61	<0.00002	39.3	3.93	38.9	0.000019	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	10/12/2020 13:40	YQ4366	D	C075125	0.00067	<0.01	<0.0002	0.0354	31.8	0.0225	<0.0000019	0.0112	0.0057		13.2	0.00085	2.55	<0.00002	39.3	3.96	38.6	0.000018	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	10/13/2020 13:50	YQ8015	M	C075829	0.00056	<0.01	<0.0002	0.018	21.8	0.0122	<0.0000019	0.0054	0.003		6.14	0.00048	3.42	<0.00002	19.8	1.62	22.6	<0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	7.0
RSEM-R6E-EOP	10/14/2020 14:50	YQ9242	M	C076027	0.00058	<0.01	<0.0002	0.0179	21.7	0.0139	<0.0000019	0.005	0.0032		5.83	0.00047	3.4	<0.00002	20.3	1.5	23.1	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	10/15/2020 11:45	YR1302	M	C076291	0.00057	<0.01	<0.0002	0.0163	21.4	0.0131	<0.0000019	0.0048	0.0033		5.63	0.00044	3.17	<0.00002	20.9	1.44	23.7	0.000012	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	5.8
RSEM-R6E-EOP	10/16/2020 11:50	YR1520	M	C076320	0.00055	<0.01	<0.0002	0.0175	22.0	0.0109	<0.0000019	0.0047	0.0038		5.64	0.00046	3.11	<0.00002	22.3	1.49	25.1	0.000011	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	10/16/2020 12:00	YR1521	D	C076320	0.00056	<0.01	<0.0002	0.0166	21.3	0.011	<0.0000019	0.0044	0.0035		5.25	0.00046	3.15	<0.00002	20.8	1.38	23.1	0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	10/17/2020 10:20	YR5391	M	C076925	0.00062	<0.01	<0.0002	0.0136	19.6	0.011	<0.0000019	0.0046	0.0041		5.05	0.00043	3.3	<0.00002	20.2	1.26	23.3	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	10/18/2020 12:45	YR5379	M	C076923	0.00055	<0.01	<0.0002	0.0164	19.9	0.0221	<0.0000019	0.0041	0.0039		4.62	0.00041	3.76	<0.00002	21.6	1.08	24.2	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	3.5
RSEM-R6E-EOP	10/19/2020 10:10	YR5408	M	C076929	0.00066	<0.01	<0.0002	0.0203	24.1	0.0109	<0.0000019	0.0056	0.0066		6.63	0.00061	3.26	<0.00002	33.9	1.61	33.7	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	10/20/2020 14:40	YR8828	M	C077551	0.00069	<0.01	<0.0002	0.0211	24.3	0.0128	<0.0000019	0.0053	0.0059		6.10	0.00066	2.98	<0.00002	35.2	1.4	32.8	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	10/21/2020 16:00	YS1500	M	C077998	0.00069	<0.01	<0.0002	0.0202	23.5	0.0133	<0.0000019	0.0054	0.0053		5.87	0.00064	3.27	<0.00002	34.9	1.31	32.8	0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	10/22/2020 12:20	YS3854	M	C078323	0.00066	<0.01	<0.0002	0.0188	22.4	0.0135	<0.0000019	0.0054	0.0049		5.34	0.00068	3.17	<0.00002	33.9	1.22	31.2	0.000012	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	10/22/2020 12:30	YS3856	D	C078323	0.00066	<0.01	<0.0002	0.0188	23.3	0.0141	<0.0000019	0.0053	0.0054		5.46	0.00067	3.23	<0.00002	34.7	1.25	32.6	0.000012	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	10/23/2020 10:20	YS3573	M	C078301	0.00067	<0.01	<0.0002	0.0186	22.6	0.0145	<0.0000019	0.0053	0.0051		5.22	0.00068	3.24	<0.00002	34.3	1.19	31.3	0.000011	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	10/24/2020 15:20	YS7915	M	C078871	0.00069	<0.01	<0.0002	0.0187	22.5	0.0127	<0.0000019	0.0054	0.0051		5.15	0.00069	3.16	<0.00002	35.2	1.14	32.8	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	10/25/2020 13:40	YS7913	M	C078870	0.00065	<0.01	<0.0002	0.019	23.1	0.0131	<0.0000019	0.0054	0.005		5.18	0.00076	3.31	<0.00002	36.7	1.07	34.9	<0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	10/26/2020 14:25	YT0276	M	C079297	0.00081	<0.01	<0.0002	0.0198	23.6	0.0147	<0.0000019	0.0052	0.0052		5.02	0.00077	3.18	<0.00002	39.2	0.891	33.7	<0.00001	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	10/26/2020 14:35	YT0278	D	C079297	0.00075	<0.01	<0.0002	0.0199	23.4	0.0144	<0.0000019	0.0053	0.0051		4.86	0.00074	3.22	<0.00002	39.6	0.884	33.1	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	10/27/2020 12:30	YT3320	M	C079639	0.00066	<0.01	<0.0002	0.0199	21.9	0.0107	<0.0000019	0.0052	0.0043		4.81	0.00077	3.29	<0.00002	35.5	0.964	33.3	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	10/28/2020 14:10	YT5232	M	C079984	0.00068	<0.01	<0.0002	0.0194	21.7	0.0096	<0.0000019	0.0051	0.0042		4.62	0.00078	3.28	<0.00002	35.1	0.971	33.4	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	10/29/2020 14:15	YT7960	M	C080439	0.00072	0.01	<0.0002	0.02	23.9	0.0104	<0.0000019	0.005	0.0045		4.81	0.00086	3.36	<0.00002	38.2	0.879	35.6	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	10/30/2020 12:00	YT7954	M	C080436	0.00071	0.015	<0.0002	0.0201	23.9	0.0114	<0.0000019	0.0047	0.0043		4.67	0.00089	3.5	<0.00002	38.0	0.843	36.0	<0.00001	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	10/31/2020 14:20	YU1484	M	C081008	0.00066	0.012	<0.0002	0.018	22.3	0.0114	<0.0000019	0.0044	0.0044		4.15	0.00079	3.08	<0.00002	37.9	0.717	33.8	<0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	10/31/2020 14:30	YU1487	D	C081008	0.00066	0.014	<0.0002	0.0173	21.6	0.0114	<0.0000019	0.0043	0.0045		4.04	0.00078	3.06	<0.00002	36.6	0.717	32.7	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	11/1/2020 13:10	YU1489	M	C081010	0.0007	0.015	<0.0002	0.0177	21.1	0.0126	<0.0000019	0.0045	0.0043		3.93	0.00077	3.12	<0.00002	37.2	0.676	33.6	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	11/2/2020 13:40	YU2810	M	C081296	0.00101	<0.01	<0.0002	0.0253	23.6	0.0223	<0.0000019	0.0076	0.0065		4.37	0.00156	3.29	<0.00002	77.8	0.551	61.2	<0.00001	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	11/3/2020 14:10	YU4781	M	C081741	0.00099	<0.01	<0.0002	0.0408	26.8	0.0175	<0.0000019	0.0095	0.0063		4.63	0.0023	3.5	<0.00002	111	0.455	96.1	<0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	4.7
RSEM-R6E-EOP	11/3/2020 14:20	YU4782	D	C081741	0.00096	<0.01	<0.0002	0.0425	26.8	0.0176	<0.0000019	0.0096	0.0063		4.62	0.00241	3.54	<0.00002	112	0.451	96.9	<0.00001	<0.005	<0.005	0.00234	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	11/4/2020 14:25	YU7151	M	C082156	0.00107	<0.01	<0.0002	0.0461	27.6	0.0036	<0.0000019	0.0098	0.0061		4.70	0.00295	3.76	<0.00002	139	0.368	116	<0.00001	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	11/5/2020 13:20	YU9363	M	C082511	0.00092	<0.01	<0.0002	0.0473	27.9	0.0048	<0.0000019	0.0105	0.0055		4.78	0.00325	4.25	<0.00002	146	0.378	125	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	4.9
RSEM-R6E-EOP	11/5/2020 13:30	YU9364	D	C082511	0.00091	<0.01	<0.0002	0.0468	28.0	0.005	<0.0000019	0.0104	0.0055		4.73	0.00323	4.21	<0.00002	148	0.385	124	<0.00001	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	11/6/2020 13:10	YU9362	M	C082510	0.00085	<0.01	<0.0002	0.0508	28.3	0.0061	<0.0000019	0.0104	0.0058		4.81	0.00344	4.35	<0.00002	154	0.388	131	<0.00001	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	5.0
RSEM-R6E-EOP	11/7/2020 13:10	YV3091	M	C082988	0.00087	<0.01	<0.0002	0.0594	27.0	0.0088	<0.0000019	0.0107	0.006		4.59	0.00338	4.19	<0.00002	154	0.386	119	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	4.9
RSEM-R6E-EOP	11/7/2020 13:20	YV3092	D	C082988	0.00085	<0.01	<0.0002	0.0592	27.0	0.0092	<0.0000019	0.0106	0.0064		4.64	0.00335	4.15	<0.00002	154	0.379	119	<0.00001	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	4.6
RSEM-R6E-EOP	11/8/2020 13:27	YV3108	M	C082994	0.00083	<0.01	<0.0002	0.0551	28.0	0.0104	<0.0000019	0.0104	0.006		4.72	0.00329	4.37	<0.00002	147	0.393	125	<0.00001	<0.005	<0.005	0.00276	<0.005	<0.005	<0.0001	4.4
RSEM-R6E-EOP	11/9/2020 10:30	YV4611	M	C083253	0.00083	<0.01	<0.0002	0.0555	26.3	0.0121	<0.0000019	0.0101	0.0061		4.50	0.00316	4.23	<0.00002	142	0.388	111	<0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	4.2
RSEM-R6E-EOP	11/9/2020 10:40	YV4612	D	C083253	0.00085	<0.01	<0.0002	0.0553	26.4	0.0123	<0.0000019	0.0102	0.0059		4.58	0.00314	4.13	<0.00002	142	0.391	111	<0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	11/10/2020 13:30	YV4533	M	C083245	0.00085	<0.01	<0.0002	0.0514	26.2	0.0193	<0.0000019	0.0101	0.0058		4.51	0.003	4.07	<0.00002	137	0.406	109	<0.00001	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-EOP	11/11/2020 12:50	YV8316	M	C083838	0.0008	<0.01	<0.0002	0.0413	27.6	0.0253	<0.0000019	0.0101	0.0055		4.53	0.00281	3.93	<0.00002	134	0.412	109	<0.00001	<0.005	<0.005	0.00257	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	11/11/2020 13:00	YV8317	D	C083838	0.00081	<0.01	<0.0002	0.0417	27.3	0.0253	<0.0000019	0.0101	0.0056		4.59	0.00278	3.85	<0.00002	133	0.402	109	<0.00001	<0.005	<0.005	0.00263	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	11/12/2020 10:35	YV9792	M	C084025	0.00068	<0.01	<0.0002	0.0462	25.4	0.025	<0.0000019	0.0103	0.0039		4.49	0.0028	4.05	<0.00002	133	0.368	107	<0.00001	<0.005	<0.005	0.0007	<0.005	<0.005	<0.0001	<0.10
RSEM-R6E-EOP	11/13/2020 9:40	YV9728	M	C084016	<0.001	<0.02	<0.0004	0.0425	26.2	0.0408	<0.0000019	0.0089	0.0056		4.37	0.00246	3.87	<0.00004	124	0.385	98.8	<0.00002	<0.01	<0.01	0.00244	<0.01	<0.01	<0.0002	2.0
RSEM-R6E-EOP	11/13/2020 9:50	YV9729	D	C084016	<0.001	<0.02	<0.0004	0.0436	27.3	0.0422	<0.0000019	0.0092	0.0058		4.53	0.00263	3.94	<0.00004	129	0.399	104	<0.00002	<0.01	<0.01	0.00244	<0.01	<0.01	<0.0002	2.0
RSEM-R6E-EOP	11/14/2020 12:05	YW2819	M	C084420	0.00081	<0.01	<0.0002	0.0432	26.7	0.0428	<0.0000019	0.0092	0.0056		4.44	0.00244	3.98	<0.00002	121	0.397	101	<0.00001	<0.005	<0.005	0.00246	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	11/15/2020 12:30	YW2809	M	C084417	0.00075	<0.01	<0.0002	0.0403	27.5	0.0448	<0.0000019	0.0086	0.0054		4.31	0.00236	3.97	<0.00002	111	0.424	94.7	<0.00001	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	11/15/2020 12:40	YW2810	D	C084417	0.00074	<0.01	<0.0002	0.0405	27.6	0.0451	<0.0000019	0.0087	0.0054		4.40	0.00227	3.98	<0.00002	113	0.418	95.4	<0.00001	<0.005	<0.005	0.00249	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	11/16/2020 10:20	YW2813	M	C084418	0.00074	<0.01	<0.0002	0.0378	28.2	0.0468	<0.0000019	0.0082	0.0054		4.28	0.00222	4.04	<0.00002	104	0.425	90.6	<0.00001	<0.005	<0.005	0.00254	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	11/17/2020 12:45	YW6847	M	C085190	0.00072	<0.01	<0.0002	0.0361	28.7	0.05	<0.0000019	0.0078	0.0053		4.16	0.00212	3.86	<0.00002	93.9	0.44	83.9	0.000018	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	11/18/2020 16:00	YW9288	M	C085621	0.00068	<0.01	<0.0002	0.0324	28.2	0.0482	<0.0000019	0.0071	0.0052		4.10	0.00202	4.16	<0.00002	85.6	0.463	77.1	<0.00001	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	11/19/2020 13:30	YX1119	M	C085951	0.00066	<0.01	<0.0002	0.0297	28.2	0.0475	<0.0000019	0.0068	0.0052		3.94	0.00188	4.09	<0.00002	80.7	0.455	72.0	<0.00001	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	0.99
RSEM-R6E-EOP	11/19/2020 13:40	YX1121	D	C085951	0.00068	<0.01	<0.0002	0.0301	28.4	0.0478	<0.0000019	0.0067	0.0051		4.05	0.00192	4.1	<0.00002	80.2	0.454	75.3	<0.00001	<0.005	<0.005	0.00249	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	11/20/2020 11:30	YX1116	M	C085949	0.00064	<0.01	<0.0002	0.0289	28.8	0.0462	<0.0000019	0.0065	0.0052		3.93	0.00187	4.01	<0.00002	77.1	0.454	72.3	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	11/21/2020 13:30	YX3969	M	C086434	0.00057	<0.01	<0.0002	0.028	29.4	0.0475	<0.0000019	0.0063	0.0053		3.90	0.00185	4.09	<0.00002	75.0	0.464	72.4	<0.00001	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	11/22/2020 13:45	YX3965	M	C086433	0.00057	<0.01	<0.0002	0.0261	29.4	0.0464	<0.0000019	0.0059	0.0054		3.83	0.0018	4.17	<0.00002	72.7	0.46	68.5	<0.00001	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	0.97
RSEM-R6E-EOP	11/22/2020 13:55	YX3968	D	C086433	0.00057	<0.01	<0.0002	0.0266	29.4	0.0472	<0.0000019	0.0059	0.0054		3.90	0.00181	4.12	<0.00002	72.9	0.473	70.4	<0.00001	<0.005	<0.005	0.00241	<0.005	0.0053	<0.0001	1.0
RSEM-R6E-EOP	11/23/2020 13:30	YX5756	M	C086734	0.00063	<0.01	<0.0002	0.0265	28.9	0.0455	<0.0000019	0.0056	0.0054		3.70	0.00171	4.15	<0.00002	68.0	0.456	64.7	<0.00001	<0.005	<0.005	0.00235	<0.005	0.0053	<0.0001	2.5
RSEM-R6E-EOP	11/24/2020 13:45	YX7832	M	C087146	0.00055	<0.01	<0.0002	0.0231	28.9	0.046	<0.0000019	0.0055	0.0055		3.75	0.00173	4.1	<0.00002	66.3	0.473	63.5	<0.00001	<0.005	<0.005	0.00222	<0.005	0.005	<0.0001	0.90
RSEM-R6E-EOP	11/24/2020 13:55	YX7833	D	C087146	0.00054	<0.01	<0.0002	0.0232	28.1	0.045	<0.0000019	0.0055	0.0053		3.78	0.00173	4.08	<0.00002	64.4	0.473	63.3	<0.00001	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	0.92
RSEM-R6E-EOP	11/25/2020 14:00	YY0221	M	C087472	0.00053	<0.01	<0.0002	0.0256	27.2	0.0504	<0.0000019	0.0054	0.0054		3.72	0.0017	3.97	<0.00002	63.4	0.46	62.7	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	11/26/2020 11:40	YY2047	M	C087819	0.0005	<0.01	<0.0002	0.0238	27.4	0.0583	<0.0000019	0.0051	0.0052		3.57	0.00153	3.89	<0.00002	59.6	0.467	58.2	<0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	0.96
RSEM-R6E-EOP	11/26/2020 11:50	YY2048	D	C087819	<0.0005	<0.01	<0.0002	0.0241	27.7	0.0596	<0.0000019	0.0051	0.0052		3.73	0.00153	3.99	<0.00002	61.0	0.479	59.8	<0.00001	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	1.1

Appendix 3-C: 2020 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	11/27/2020 11:20	YY2095	M	C087822	<0.0005	<0.01	<0.0002	0.0236	27.3	0.0582	<0.0000019	0.0047	0.0052		3.55	0.00145	3.96	<0.00002	56.7	0.468	55.0	<0.00001	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	11/28/2020 12:50	YY5267	M	C088400	<0.0005	<0.01	<0.0002	0.0196	26.2	0.0568	<0.0000019	0.0045	0.0051		3.34	0.00143	3.84	<0.00002	51.4	0.429	50.9	<0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	11/28/2020 13:00	YY5268	D	C088400	<0.0005	<0.01	<0.0002	0.0195	26.2	0.0568	<0.0000019	0.0046	0.005		3.42	0.00142	3.86	<0.00002	52.6	0.428	52.0	<0.00001	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	11/29/2020 12:35	YY5334	M	C088408	<0.0005	<0.01	<0.0002	0.0186	25.3	0.0571	<0.0000019	0.0047	0.0047		3.32	0.00137	3.94	<0.00002	49.7	0.419	48.7	<0.00001	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	11/30/2020 14:00	YY7386	M	C088703	<0.0005	<0.01	<0.0002	0.0189	25.9	0.0549	<0.0000019	0.0044	0.0047		3.40	0.00133	3.72	<0.00002	51.2	0.387	49.2	<0.00001	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	11/30/2020 14:10	YY7387	D	C088703	<0.0005	<0.01	<0.0002	0.0193	25.9	0.0545	<0.0000019	0.0045	0.0046		3.35	0.00133	3.73	<0.00002	51.7	0.4	47.6	<0.00001	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	12/1/2020 13:45	YY9247	M	C089096	<0.0005	<0.01	<0.0002	0.0187	25.0	0.0541	<0.0000019	0.0043	0.0045		3.27	0.0013	3.73	<0.00002	48.4	0.389	45.7	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	12/2/2020 13:00	YZ1565	M	C089572	<0.0005	<0.01	<0.0002	0.018	25.2	0.0547	<0.0000019	0.0042	0.0046		3.33	0.00128	4.03	<0.00002	48.4	0.416	47.1	<0.00001	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	12/2/2020 13:10	YZ1566	D	C089572	<0.0005	<0.01	<0.0002	0.0188	25.7	0.0565	<0.0000019	0.0042	0.0046		3.35	0.00129	3.97	<0.00002	49.3	0.418	47.9	<0.00001	<0.005	<0.005	0.00203	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	12/3/2020 12:40	YZ2306	M	C089704	<0.0005	<0.01	<0.0002	0.0199	26.1	0.0541	<0.0000019	0.0043	0.0045		3.31	0.00122	4.05	<0.00002	48.9	0.411	48.0	<0.00001	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	12/4/2020 13:20	YZ4236	M	C089912	<0.0005	<0.01	<0.0002	0.0171	24.3	0.0511	<0.0000019	0.004	0.0043		3.16	0.00128	3.96	<0.00002	44.6	0.422	45.8	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	12/4/2020 13:30	YZ4237	D	C089912	<0.0005	<0.01	<0.0002	0.0174	25.1	0.0524	<0.0000019	0.0041	0.0043		3.27	0.00131	3.89	<0.00002	46.2	0.422	47.0	<0.00001	<0.005	<0.005	0.002	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	12/5/2020 13:20	YZ8273	M	C090368	<0.0005	<0.01	<0.0002	0.0196	24.3	0.0488	<0.0000019	0.004	0.0042		3.06	0.00116	3.78	<0.00002	44.0	0.387	41.8	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	12/6/2020 12:50	YZ8304	M	C090376	<0.0005	<0.01	<0.0002	0.0202	24.5	0.0467	<0.0000019	0.0039	0.0043		3.05	0.00116	3.65	<0.00002	43.4	0.387	42.5	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	12/6/2020 13:00	YZ8305	D	C090376	<0.0005	<0.01	<0.0002	0.0202	24.6	0.0475	<0.0000019	0.0039	0.0043		3.11	0.00119	3.84	<0.00002	44.4	0.391	44.0	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	12/7/2020 10:05	YZ8152	M	C090358	<0.0005	<0.01	<0.0002	0.0195	25.2	0.0448	<0.0000019	0.0038	0.0043		3.06	0.0013	3.62	<0.00002	43.0	0.397	44.6	<0.00001	<0.005	<0.005	0.00198	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	12/8/2020 15:10	ZA2149	M	C091061	0.00066	<0.01	<0.0002	0.0203	27.2	0.0555	<0.0000019	0.004	0.0087		3.52	0.00183	3.69	<0.00002	45.8	0.516	54.8	<0.00001	<0.005	<0.005	0.00221	<0.005	0.0073	<0.0001	2.4
RSEM-R6E-EOP	12/9/2020 15:30	ZA6284	M	C091815	0.00082	<0.01	<0.0002	0.0226	28.7	0.0728	<0.0000019	0.0044	0.0141		3.67	0.00173	3.68	<0.00002	47.0	0.524	57.5	<0.00001	<0.005	<0.005	0.00235	<0.005	0.0117	<0.0001	2.8
RSEM-R6E-EOP	12/10/2020 14:20	ZA6276	D	C091812	0.00096	<0.01	<0.0002	0.0228	28.1	0.0797	<0.0000019	0.0044	0.0175		3.57	0.00167	3.66	<0.00002	47.1	0.509	58.6	<0.00001	<0.005	<0.005	0.00243	<0.005	0.015	<0.0001	2.2
RSEM-R6E-EOP	12/10/2020 14:30	ZA6277	M	C091812	0.00098	<0.01	<0.0002	0.0237	28.5	0.0797	<0.0000019	0.0045	0.0173		3.66	0.00172	3.73	<0.00002	48.1	0.52	59.6	<0.00001	<0.005	<0.005	0.00244	<0.005	0.0151	<0.0001	2.1
RSEM-R6E-EOP	12/11/2020 23:40	ZA6280	M	C091813	0.00105	<0.01	<0.0002	0.0243	28.5	0.0745	<0.0000019	0.0045	0.018		3.75	0.00167	3.72	<0.00002	50.2	0.515	60.4	<0.00001	<0.005	<0.005	0.0024	<0.005	0.0158	<0.0001	3.2
RSEM-R6E-EOP	12/13/2020 15:10	ZA8556	M	C092267	0.00108	<0.01	<0.0002	0.0251	27.6	0.0546	<0.0000019	0.0049	0.0174		3.70	0.00156	3.92	<0.00002	50.7	0.494	58.0	<0.00001	<0.005	<0.005	0.00241	<0.005	0.0141	<0.0001	1.7
RSEM-R6E-EOP	12/13/2020 16:50	ZA8523	M	C092261	0.00106	<0.01	<0.0002	0.0247	27.3	0.0608	<0.0000019	0.0048	0.0175		3.71	0.00157	3.82	<0.00002	49.9	0.492	58.9	<0.00001	<0.005	<0.005	0.00236	<0.005	0.0144	<0.0001	2.0
RSEM-R6E-EOP	12/14/2020 13:00	ZA8428	M	C092250	0.00104	<0.01	<0.0002	0.0234	26.7	0.0558	<0.0000019	0.0047	0.0171		3.51	0.00158	3.76	<0.00002	48.8	0.501	56.6	<0.00001	<0.005	<0.005	0.00235	<0.005	0.0143	<0.0001	2.5
RSEM-R6E-EOP	12/15/2020 15:10	ZB1647	M	C092932	0.00106	<0.01	<0.0002	0.0249	28.2	0.0543	<0.0000019	0.0047	0.0167		3.72	0.00157	3.76	<0.00002	50.9	0.497	58.3	<0.00001	<0.005	<0.005	0.00235	<0.005	0.0146	<0.0001	1.5
RSEM-R6E-EOP	12/15/2020 15:20	ZB1648	D	C092932	0.00103	<0.01	<0.0002	0.0251	27.8	0.0538	<0.0000019	0.0046	0.0167		3.64	0.00159	3.75	<0.00002	49.9	0.493	59.4	<0.00001	<0.005	<0.005	0.00237	<0.005	0.0147	<0.0001	2.0
RSEM-R6E-EOP	12/16/2020 14:10	ZB3421	M	C093364	0.00101	<0.01	<0.0002	0.0249	25.8	0.0473	<0.0000019	0.0046	0.0154		3.59	0.0015	3.44	<0.00002	48.5	0.51	54.1	<0.00001	<0.005	<0.005	0.00235	<0.005	0.0131	<0.0001	0.82
RSEM-R6E-EOP	12/17/2020 14:30	ZB5911	M	C093625	0.00093	<0.01	<0.0002	0.0231	26.1	0.0429	<0.0000019	0.0047	0.014		3.64	0.00156	3.77	<0.00002	48.5	0.504	53.6	<0.00001	<0.005	<0.005	0.00226	<0.005	0.0118	<0.0001	1.4
RSEM-R6E-EOP	12/17/2020 14:40	ZB5912	D	C093625	0.00093	<0.01	<0.0002	0.022	26.3	0.0434	<0.0000019	0.0047	0.0141		3.65	0.00158	3.85	<0.00002	47.7	0.507	54.4	<0.00001	<0.005	<0.005	0.00227	<0.005	0.0122	<0.0001	0.95
RSEM-R6E-EOP	12/18/2020 13:25	ZB5852	M	C093610	0.0009	<0.01	<0.0002	0.0228	26.2	0.0419	<0.0000019	0.0049	0.0134		3.68	0.00153	3.91	<0.00002	48.8	0.5	52.3	<0.00001	<0.005	<0.005	0.00224	<0.005	0.0115	<0.0001	1.1
RSEM-R6E-EOP	12/19/2020 12:50	ZB8418	M	C094046	0.0009	<0.01	<0.0002	0.0227	26.5	0.0352	<0.0000019	0.005	0.0119		3.62	0.0013	4.14	<0.00002	48.7	0.487	54.1	<0.00001	<0.005	<0.005	0.00225	<0.005	0.0098	<0.0001	0.96
RSEM-R6E-EOP	12/20/2020 12:45	ZB8513	M	C094070	0.00088	<0.01	<0.0002	0.0208	26.8	0.0403	<0.0000019	0.0047	0.0115		3.60	0.00148	4.06	<0.00002	47.8	0.468	50.6	<0.00001	<0.005	<0.005	0.00219	<0.005	0.0098	<0.0001	0.94
RSEM-R6E-EOP	12/20/2020 12:55	ZB8514	D	C094070	0.00085	<0.01	<0.0002	0.0205	26.4	0.0397	<0.0000019	0.0047	0.0113		3.54	0.00145	4.18	<0.00002	46.7	0.477	49.6	<0.00001	<0.005	<0.005	0.0022	<0.005	0.0094	<0.0001	0.90
RSEM-R6E-EOP	12/21/2020 10:40	ZB8328	M	C094023	0.00082	<0.01	<0.0002	0.0204	26.0	0.0372	<0.0000019	0.0046	0.0104		3.53	0.00126	4.26	<0.00002	45.6	0.456	50.2	<0.00001	<0.005	<0.005	0.00214	<0.005	0.0089	<0.0001	0.98
RSEM-R6E-EOP	12/22/2020 11:30	ZC0503	M	C094296	0.0011	<0.01	<0.0002	0.0207	25.8	0.0368	<0.0000019	0.0046	0.01		3.56	0.00134	4.08	<0.00002	45.0	0.455	47.9	<0.00001	<0.005	<0.005	0.00211	<0.005	0.0086	<0.0001	1.2
RSEM-R6E-EOP	12/23/2020 13:00	ZC1950	M	C094642	0.00085	<0.01	<0.0002	0.018	25.2	0.0379	<0.0000019	0.0044	0.0096		3.39	0.00141	4.16	<0.00002	44.9	0.419	46.9	<0.00001	<0.005	<0.005	0.00206	<0.005	0.0085	<0.0001	1.1
RSEM-R6E-EOP	12/24/2020 9:30	ZC3450	M	C094856	0.00078	<0.01	<0.0002	0.017	24.6	0.0356	<0.0000019	0.0046	0.0087		3.32	0.0012	4.31	<0.00002	43.6	0.43	45.1	<0.00001	<0.005	<0.005	0.00204	<0.005	0.0077	<0.0001	0.97
RSEM-R6E-EOP	12/24/2020 9:40	ZC3451	D	C094856	0.00075	<0.01	<0.0002	0.0174	25.2	0.0363	<0.0000019	0.0045	0.0089		3.46	0.0012	4.31	<0.00002	44.3	0.434	45.6	<0.00001	<0.005	<0.005	0.00206	<0.005	0.0082	<0.0001	0.81
RSEM-R6E-EOP	12/25/2020 15:00	ZC3693	M	C094909	0.00075	<0.01	<0.0002	0.0188	24.7	0.0352	<0.0000019	0.0045	0.0084		3.36	0.00117	4.25	<0.00002	43.4	0.42	45.8	0.000012	<0.005	<0.005	0.00203	<0.005	0.0075	<0.0001	0.89
RSEM-R6E-EOP	12/26/2020 16:00	ZC3699	M	C094911	0.00075	<0.01	<0.0002	0.019	24.3	0.0358	<0.0000019	0.0045	0.008		3.34	0.00114	4.3	<0.00002	42.6	0.418	41.0	0.000011	<0.005	<0.005	0.00199	<0.005	0.0071	<0.0001	0.91
RSEM-R6E-EOP	12/27/2020 16:10	ZC4643	M	C095191	0.00078	<0.01	<0.0002	0.019	25.4	0.0429	<0.0000019	0.0044	0.0086		3.29	0.00116	3.94	<0.00002	44.3	0.423	43.6	<0.00001	<0.005	<0.005	0.00203	<0.005	0.0076	<0.0001	1.5
RSEM-R6E-EOP	12/27/2020 16:20	ZC4645	D	C095191	0.00079	<0.01	<0.0002	0.0193	25.0	0.0438	<0.0000019	0.0043	0.0089		3.34	0.00122	3.9	<0.00002	44.5	0.427	43.3	<0.00001	<0.005	<0.005	0.00202	<0.005	0.0078	<0.0001	1.3
RSEM-R6E-EOP	12/28/2020 9:30	ZC4618	M	C095179	0.00078	<0.01	<0.0002	0.0191	24.7	0.0419	<0.0000019	0.0044	0.0086		3.32	0.00116	3.88	<0.00002	43.9	0.428	43.8	<0.00001	<0.005	<0.005	0.00207	<0.005	0.0076	<0.0001	0.90
RSEM-R6E-EOP	12/29/2020 13:55	ZC5602	M	C095537	0.00087	<0.01	<0.0002	0.0179	25.4	0.0415	<0.0000019	0.0044	0.008		3.41	0.0012	4.49	<0.00002	42.9	0.413	44.5	<0.00001	<0.005	<0.005	0.00207	<0.005	0.0072	<0.0001	0.86
RSEM-R6E-EOP	12/30/2020 14:50	ZC6411	M	C100028	0.00073	<0.01	<0.0002	0.0182	24.2	0.0425	<0.0000019	0.0043	0.008		3.28	0.00115	3.97	<0.00002	42.3	0.419	41.5	<0.00001	<0.005	<0.005	0.00197	<0.005	0.0074	<0.0001	1.0
RSEM-R6E-EOP	12/30/2020 14:55	ZC6410	D	C100028	0.00075	<0.01	<0.0002	0.0187	24.7	0.0431	<0.0000019	0.0044	0.0081		3.41	0.00114	4	<0.00002	43.2	0.419	42.9	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0073	<0.0001	0.93
RSEM-R6E-EOP	12/31/2020 14:45	ZC6408	M	C100027	0.00075	<0.01	<0.0002	0.0186	24.9	0.0451	<0.0000019	0.0045	0.0085		3.35	0.00116	3.94	<0.00002	43.6	0.433	43.0	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0075	<0.0001	0.97
RSEM-R6-EP-US-SD	4/8/2020 14:40	XQ4592	M	C024938	<0.0005	<0.01	<0.0002	0.0124	10.5	0.0303	0.000047	0.0123	0.0049		4.03	0.00062	2.3	<0.00002	26.0	0.34	23.8	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	48
RSEM-R6-EP-US-SD	6/15/2020 15:20	XY1606	M	C041415	0.00128	<0.01	<0.0002	0.0572	45.4	0.807	0.00047	0.0057	0.026		6.11	0.00248	2.52	<0.00002	65.5	1.52	152	0.000035	<0.005	<0.005	0.00995	<0.005	0.0086	<0.0001	>4000
RSEM-R6-EP-US-SD	10/11/2020 12:10	YQ4409	M	C075136	0.00133	<0.01	<0.0002	0.0282	25.3	0.0709	<0.000019	0.0044	0.0253		4.81	0.00077	4.17	<0.00002	41.0	0.689	45.6	<0.00001	<0.005	<0.005	0.00181	<0.005	0.0071	<0.0001	25
RSEM-R6W-EOP	4/27/2020 14:10	XS0061	M	C028666	0.00231	0.551	0.0003	0.019	7.05	0.0152	0.0000031	0.0138	0.0018		4.61	0.00196	4.86	<0.00002	90.5	0.153	35.9	<0.00001	<0.005	<0.005	0.00106	0.0056	<0.005	0.00044	16
RSEM-R6W-EOP	4/28/2020 12:45	XS2087	M	C029151	0.0014	<0.01	<0.0002	0.0277	9.67	<0.001	0.0000062	0.0205	0.0014		6.30	0.00262	3.61	<0.00002	131	0.22	49.2	<0.00001	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	25
RSEM-R6W-EOP	4/29/2020 11:30	XS3519	M	C029452	0.00124	0.011	<0.0002	0.0237	8.41	<0.001	0.0000039	0.0176	0.0015		5.48	0.00252	3.14	<0.00002	117	0.181	45.2	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	24
RSEM-R6W-EOP	4/30/2020 10:40	XS4880	M	C029734	0.0012	<0.01	<0.0002	0.0262	8.77	<0.001	0.000004	0.0196	0.0013		5.83	0.00266	3.01	<0.00002	124	0.197	45.6	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	0.00016	22
RSEM-R6W-EOP	4/30/2020 10:50	XS4881	D	C029734	0.00122	<0.01	<0.0002	0.0262	8.59	<0.001	0.0000043	0.0199	0.0014		5.68	0.00274	3.03	<0.00002	121	0.203	49.1	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	0.0002	19
RSEM-R6W-EOP	5/1/2020 11:25	XS5995	M	C029956	0.001	<0.01	<0.0002	0.0255	8.04	<0.001	0.0000045	0.0188	0.0012		5.27	0.00257	2.92	<0.00002	113	0.181	44.5	0.00002	<0.005	<0.005	0.00128	<0.005	<0.005	0.00012	18
RSEM-R6W-EOP	5/1/2020 11:35	XS5996	D	C029956	0.00111	<0.01	<0.0002	0.028	8.20	<0.001	0.0000046	0.0211	0.0013		5.47	0.00252	3.24	<0.00002	116	0.181	45.4	0.000014	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	19
RSEM-R6W-EOP	5/2/2020 11:40	XS7460	M	C030328	0.00116	<0.01	<0.0002	0.0279	9.30	<0.001	0.0000037	0.0204	0.0011		5.74	0.00233	2.92	<0.00002	128	0.201	52.6	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	0.00021	17
RSEM-R6W-EOP	5/2/2020 11:50	XS7461	D	C030328	0.00088	<0.01	<0.0002	0.0249	7.78	<0.001	0.0000033	0.0194	<0.001		5.40	0.00229	3.13	<0.00002	112	0.188	43.3	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	17
RSEM-R6W-EOP	5/3/2020 7:40	XS7389	M	C030307	0.00101	<0.01	<0.0002	0.0249	8.18	<0.001	0.0000035	0.0191	0.0013		5.38	0.00268	2.74	<0.00002	117	0.187	44.0	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	15
RSEM-R6W-EOP	5/3/2020 7:50	XS7390	D	C030307	0.00098	<0.01	<0.0002	0.0254	8.41	<0.001	0.0000035	0.0191	0.0011		5.54	0.00272	3.21	<0.00002	121	0.19	50.2	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	13
RSEM-R6W-EOP	5/4/2020 13:00	XS8355	M	C030506	0.00108	<0.01	<0.0002	0.0251	7.93	<0.001	<0.0000019	0.0192	<0.001		5.19	0.00238	3.43	<0.00002	109	0.175	44.3	0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	0.00015	9.4
RSEM-R6W-EOP	5/5/2020 16:45	XT0141	M	C030949	0.00114	<0.01	<0.0002	0.0254	9.15	0.0039	0.0000022	0.0199	0.0012		6.00	0.0024	3.22	<0.00002	123	0.206	53.8	<0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	0.00029	9.0
RSEM-R6W-EOP	5/6/2020 13:15	XT1600	M	C031246	0.00135	<0.01	<0.0002	0.0286	9.33	<0.001	<0.0000019	0.0281	0.0012		6.11	0.00319	4.3	<0.00002	131	0.248	53.5	<0.00001	<0.005	<0.005	0.00201	0.0051	<0.005	<0.0001	7.6
RSEM-R6W-EOP	5/7/2020 11:30	XT2576	M	C031444	0.00128	<0.01	<0.0002	0.0361	10.6	<0.001	0.0000019	0.0262	0.0014		6.36	0.00332	3.95	<0.00002	141	0.24	56.4	<0.00001	<0.005	<0.005	0.00181	<0.005	<0.005	0.00017	6.8
RSEM-R6W-EOP	5/8/2020 12:45	XT2570	M	C031442	0.00126	<0.01	<0.0002	0.0364	10.8	<0.001	<0.0000019	0.0249	0.0013		6.51	0.00287	3.64	<0.00002	144	0.25	56.4	<0.00001	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	5.9
RSEM-R6W-EOP	5/9/2020 11:15	XT4486	M	C031859	0.00119	<0.01	<0.0002	0.0342	10.2	<0.001	<0.0000019	0.0279	0.0011		6.27	0.00254	3.44	0.000028	151	0.223	62.5	<0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	4.8
RSEM-R6W-EOP	5/10/2020 15:30	XT4527	M	C031867	0.00102	<0.01	<0.0002	0.0351	11.6	<0.001	<0.0000019	0.0204	0.0014		5.35	0.00299	3.17	<0.00002	175	0.192	75.3	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	3.4
RSEM-R6W-EOP	5/11/2020 11:30	XT5200	M	C032074	0.00107	<0.01	<0.0002	0.0527	13.8	<0.001	<0.0000019	0.0247	0.0017		6.26	0.00337	3.69	<0.00002	213	0.231	105	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	3.6

Appendix 3-C: 2020 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	5/12/2020 12:55	XT7070	M	C032509	0.00108	<0.01	<0.0002	0.0719	15.2	<0.001	<0.0000019	0.0256	0.002		6.14	0.00369	3.75	<0.00002	233	0.217	109	<0.00001	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	2.6
RSEM-R6W-EOP	5/12/2020 13:05	XT7071	D	C032509	0.001	<0.01	<0.0002	0.0641	15.0	<0.001	<0.0000019	0.0229	0.002		6.16	0.00355	3.96	<0.00002	233	0.222	111	<0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	2.6
RSEM-R6W-EOP	5/13/2020 13:20	XT8153	M	C032775	0.00089	<0.01	<0.0002	0.0686	13.4	<0.001	<0.0000019	0.0234	0.002		5.12	0.00347	3.23	<0.00002	199	0.184	105	0.000013	<0.005	<0.005	0.0022	<0.005	<0.005	0.00039	2.7
RSEM-R6W-EOP	5/13/2020 13:30	XT8154	D	C032775	0.00096	<0.01	<0.0002	0.0697	13.0	<0.001	<0.0000019	0.021	0.0018		5.01	0.00344	3.25	<0.00002	198	0.191	109	0.000014	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	3.3
RSEM-R6W-EOP	5/14/2020 12:40	XU0098	M	C033161	0.00104	<0.01	<0.0002	0.0784	16.6	<0.001	<0.0000019	0.0248	0.0021		5.17	0.00395	3.72	<0.00002	236	0.212	131	0.000012	0.0059	<0.005	0.00293	<0.005	<0.005	0.00011	2.4
RSEM-R6W-EOP	5/14/2020 12:50	XU0099	D	C033161	0.00109	<0.01	<0.0002	0.0815	17.1	<0.001	<0.0000019	0.0248	0.0023		5.50	0.00403	3.84	<0.00002	243	0.218	126	0.000026	0.0061	<0.005	0.00297	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	5/15/2020 9:05	XU0130	M	C033173	0.00091	<0.01	<0.0002	0.0791	17.1	<0.001	<0.0000019	0.0247	0.0023		5.09	0.00411	3.68	<0.00002	242	0.21	142	0.000015	0.0061	<0.005	0.00291	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	5/15/2020 9:15	XU0131	D	C033173	0.00095	<0.01	<0.0002	0.0802	16.3	<0.001	<0.0000019	0.025	0.0024		4.84	0.00385	3.74	<0.00002	229	0.206	133	0.000031	0.0062	<0.005	0.00295	<0.005	<0.005	<0.0001	2.3
RSEM-R6W-EOP	5/16/2020 13:30	XU2650	M	C033733	0.00096	<0.01	<0.0002	0.0813	19.4	<0.001	<0.0000019	0.0236	0.0028		5.27	0.00395	3.42	<0.00002	269	0.217	138	<0.00001	0.0074	<0.005	0.00304	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	5/16/2020 13:40	XU2651	D	C033733	0.00111	<0.01	<0.0002	0.0782	18.2	<0.001	<0.0000019	0.0229	0.0028		4.89	0.00434	3.48	<0.00002	253	0.212	141	<0.00001	0.0074	<0.005	0.00301	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	5/17/2020 12:10	XU2516	M	C033704	0.0012	<0.01	<0.0002	0.0859	19.9	<0.001	<0.0000019	0.0238	0.0031		5.19	0.00441	3.44	<0.00002	273	0.222	152	<0.00001	0.0076	<0.005	0.00311	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	5/17/2020 12:20	XU2517	D	C033704	0.00122	<0.01	<0.0002	0.0829	19.0	<0.001	<0.0000019	0.0232	0.0031		4.81	0.00468	3.51	<0.00002	262	0.21	156	<0.00001	0.0074	<0.005	0.00304	<0.005	<0.005	0.00021	1.2
RSEM-R6W-EOP	5/18/2020 13:50	XU2637	M	C033728	0.001	<0.01	<0.0002	0.086	20.2	<0.001	<0.0000019	0.0222	0.0032		4.70	0.00399	3.28	<0.00002	261	0.208	155	<0.00001	0.0079	<0.005	0.00302	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	5/18/2020 14:00	XU2638	D	C033728	0.00098	<0.01	<0.0002	0.0895	21.2	<0.001	<0.0000019	0.024	0.0036		4.94	0.00441	3.42	<0.00002	275	0.225	162	<0.00001	0.0081	<0.005	0.00316	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	5/19/2020 14:20	XU3584	M	C033944	0.00096	<0.01	<0.0002	0.0881	21.8	<0.001	<0.0000019	0.0229	0.0036		4.98	0.00447	3.41	<0.00002	274	0.228	174	<0.00001	0.0088	<0.005	0.00309	<0.005	<0.005	0.00019	0.94
RSEM-R6W-EOP	5/19/2020 14:30	XU3585	D	C033944	0.00101	<0.01	<0.0002	0.0931	22.8	<0.001	<0.0000019	0.0242	0.0039		5.29	0.00494	3.58	<0.00002	291	0.239	166	<0.00001	0.0092	<0.005	0.00329	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	5/20/2020 12:50	XU5558	M	C034306	0.00094	<0.01	<0.0002	0.0978	16.5	<0.001	<0.0000019	0.0132	0.0032		4.23	0.00412	3.15	<0.00002	231	0.165	104	0.000012	0.0083	<0.005	0.00231	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	5/20/2020 13:00	XU5559	D	C034306	0.00065	<0.01	<0.0002	0.0991	21.4	<0.001	<0.0000019	0.0212	0.0033		5.00	0.00432	3.21	<0.00002	285	0.216	169	<0.00001	0.0075	<0.005	0.00295	<0.005	<0.005	<0.0001	0.92
RSEM-R6W-EOP	5/21/2020 11:55	XU6997	M	C034623	0.00092	<0.01	<0.0002	0.0978	21.0	<0.001	<0.0000019	0.0193	0.0034		4.88	0.00363	3.07	<0.00002	269	0.209	154	<0.00001	0.0072	<0.005	0.00289	<0.005	<0.005	0.00014	1.4
RSEM-R6W-EOP	5/21/2020 12:05	XU6998	D	C034623	0.00087	<0.01	<0.0002	0.0916	21.5	<0.001	<0.0000019	0.0184	0.0035		4.92	0.00383	3.08	<0.00002	275	0.216	165	<0.00001	0.0069	<0.005	0.00272	<0.005	<0.005	0.0002	1.5
RSEM-R6W-EOP	5/22/2020 12:20	XU8399	M	C034984	0.00082	<0.01	<0.0002	0.0865	20.4	<0.001	<0.0000019	0.0182	0.0044		4.87	0.00431	2.9	<0.00002	250	0.202	154	0.000011	0.0071	<0.005	0.00261	<0.005	<0.005	<0.0001	2.4
RSEM-R6W-EOP	5/22/2020 12:30	XU8400	D	C034984	0.00079	<0.01	<0.0002	0.0862	19.1	<0.001	<0.0000019	0.0189	0.0041		4.54	0.00409	2.92	<0.00002	234	0.192	144	0.000011	0.0071	<0.005	0.00255	<0.005	<0.005	<0.0001	2.5
RSEM-R6W-EOP	5/23/2020 13:40	XU8584	M	C034993	<0.001	<0.02	<0.0004	0.0953	22.9	<0.002	<0.0000019	0.0207	0.0044		5.66	0.00511	3.36	<0.00004	285	0.222	169	<0.00002	<0.01	<0.01	0.00275	<0.01	<0.01	<0.0002	3.9
RSEM-R6W-EOP	5/23/2020 13:50	XU8585	D	C034993	0.00072	<0.01	<0.0002	0.0924	22.5	<0.001	<0.0000019	0.0207	0.0047		5.44	0.00534	3.56	<0.00002	279	0.231	166	0.000015	0.0072	<0.005	0.00273	<0.005	<0.005	<0.0001	3.7
RSEM-R6W-EOP	5/24/2020 13:00	XU8646	M	C035010	<0.001	<0.02	<0.0004	0.0945	22.8	<0.002	<0.0000019	0.021	0.0047		5.67	0.00571	3.56	<0.00004	282	0.23	168	<0.00002	<0.01	<0.01	0.00277	<0.01	<0.01	<0.0002	3.8
RSEM-R6W-EOP	5/24/2020 13:10	XU8647	D	C035010	<0.001	<0.02	<0.0004	0.0912	23.7	<0.002	<0.0000019	0.0213	0.0048		5.83	0.0056	3.48	<0.00004	297	0.219	174	<0.00002	<0.01	<0.01	0.00284	<0.01	<0.01	<0.0002	3.9
RSEM-R6W-EOP	5/25/2020 9:00	XU8664	M	C035018	0.00074	<0.01	<0.0002	0.0965	23.2	<0.001	<0.0000019	0.0222	0.0047		5.64	0.00611	3.54	<0.00002	294	0.244	178	0.000014	0.0069	<0.005	0.0029	<0.005	<0.005	<0.0001	3.9
RSEM-R6W-EOP	5/25/2020 9:10	XU8665	D	C035018	<0.001	<0.02	<0.0004	0.0978	23.5	<0.002	<0.0000019	0.0222	0.0051		5.76	0.00629	3.71	<0.00004	298	0.225	176	<0.00002	<0.01	<0.01	0.0029	<0.01	<0.01	<0.0002	3.9
RSEM-R6W-EOP	5/26/2020 15:10	XV2883	M	C035941	<0.001	<0.02	<0.0004	0.0966	23.7	<0.002	<0.0000019	0.0232	0.0051		6.17	0.00704	3.28	<0.00004	316	0.225	176	<0.00002	<0.01	<0.01	0.00302	<0.01	<0.01	<0.0002	1.4
RSEM-R6W-EOP	5/27/2020 15:00	XV4565	M	C036323	0.00082	<0.01	<0.0002	0.0962	23.6	<0.001	<0.0000019	0.0241	0.0045		6.12	0.00753	3.36	<0.00002	321	0.266	183	0.000014	0.0066	<0.005	0.00306	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	5/28/2020 14:15	XV5619	M	C036526	0.00087	<0.01	<0.0002	0.0946	23.8	<0.001	<0.0000019	0.0246	0.0048		6.34	0.0081	3.28	<0.00002	330	0.264	190	0.000015	0.0064	<0.005	0.00311	<0.005	<0.005	<0.0001	0.71
RSEM-R6W-EOP	5/28/2020 14:40	XV5620	D	C036526	0.00089	<0.01	<0.0002	0.0956	23.8	<0.001	<0.0000019	0.0247	0.0048		6.25	0.00808	3.23	<0.00002	335	0.262	189	0.000014	0.0064	<0.005	0.00312	<0.005	<0.005	<0.0001	0.76
RSEM-R6W-EOP	5/29/2020 11:30	XV5615	M	C036525	0.0011	<0.02	<0.0004	0.0951	23.3	<0.002	<0.0000019	0.0241	0.0048		6.29	0.00827	3.16	<0.00004	326	0.233	182	<0.00002	<0.01	<0.01	0.00314	<0.01	<0.01	<0.0002	0.78
RSEM-R6W-EOP	5/30/2020 13:45	XV8354	M	C037043	<0.001	<0.02	<0.0004	0.102	22.7	<0.002	0.0000037	0.0259	0.0046		6.30	0.00984	3.52	<0.00004	331	0.247	200	<0.00002	<0.01	<0.01	0.00312	<0.01	<0.01	<0.0002	1.0
RSEM-R6W-EOP	5/31/2020 12:45	XV8400	M	C037057	0.0011	<0.02	<0.0004	0.103	23.0	<0.002	0.0000024	0.0267	0.0045		6.44	0.0102	3.36	<0.00004	345	0.251	205	<0.00002	<0.01	<0.01	0.00314	<0.01	<0.01	<0.0002	1.8
RSEM-R6W-EOP	6/1/2020 15:00	XW0113	M	C037316	0.00094	<0.01	<0.0002	0.108	22.8	<0.001	0.0000024	0.0265	0.0042		6.42	0.00969	3.47	<0.00002	343	0.257	205	0.000015	0.006	<0.005	0.00306	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	6/2/2020 12:00	XW3134	M	C037913	0.00094	<0.01	<0.0002	0.0966	22.2	<0.001	<0.0000019	0.027	0.004		6.48	0.0104	3.26	<0.00002	342	0.276	201	0.000016	0.0062	<0.005	0.00312	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	6/3/2020 12:45	XW5134	M	C038222	<0.001	<0.02	<0.0004	0.106	22.4	<0.002	<0.0000019	0.0256	0.004		6.80	0.0102	3.12	<0.00004	351	0.252	210	<0.00002	<0.01	<0.01	0.00297	<0.01	<0.01	<0.0002	1.2
RSEM-R6W-EOP	6/4/2020 12:20	XW6861	M	C038528	0.00091	<0.01	<0.0002	0.105	22.1	<0.001	<0.0000019	0.0277	0.0038		7.05	0.00975	3.29	<0.00002	349	0.269	233	0.000016	0.0062	<0.005	0.00312	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	6/4/2020 12:30	XW6862	D	C038528	0.00093	<0.01	<0.0002	0.108	22.4	<0.001	<0.0000019	0.028	0.0038		7.00	0.00976	3.29	<0.00002	350	0.269	227	0.000017	0.0063	<0.005	0.00316	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	6/5/2020 16:40	XW9909	M	C039108	0.00094	<0.01	<0.0002	0.108	22.6	<0.001	<0.0000019	0.0279	0.0038		7.05	0.00992	3.14	<0.00002	353	0.26	227	0.000016	0.0064	<0.005	0.00314	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	6/5/2020 16:50	XW9910	D	C039108	0.00097	<0.01	<0.0002	0.106	23.0	<0.001	<0.0000019	0.0282	0.0038		7.13	0.0102	3.14	<0.00002	359	0.262	235	0.000017	0.0065	<0.005	0.00313	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	6/6/2020 11:40	XX0125	M	C039138	0.0012	<0.02	<0.0004	0.117	23.9	<0.002	<0.0000019	0.027	0.0041		7.43	0.0104	3.33	<0.00004	368	0.277	232	<0.00002	<0.01	<0.01	0.00327	<0.01	<0.01	<0.0002	1.5
RSEM-R6W-EOP	6/6/2020 11:50	XX0126	D	C039138	0.0013	<0.02	<0.0004	0.118	24.1	<0.002	<0.0000019	0.0277	0.0041		7.45	0.0105	3.3	<0.00004	371	0.279	232	<0.00002	<0.01	<0.01	0.00331	<0.01	<0.01	<0.0002	1.4
RSEM-R6W-EOP	6/7/2020 12:20	XW9324	M	C038976	0.00109	<0.01	<0.0002	0.109	22.9	<0.001	<0.0000019	0.0273	0.0038		7.16	0.00897	3.24	<0.00002	348	0.27	216	0.000017	0.0067	<0.005	0.00309	<0.005	<0.005	<0.0001	4.4
RSEM-R6W-EOP	6/7/2020 12:30	XW9325	D	C038976	0.00107	<0.01	<0.0002	0.105	22.7	<0.001	<0.0000019	0.027	0.0038		7.05	0.00909	3.25	<0.00002	345	0.262	228	0.000017	0.0066	<0.005	0.00303	<0.005	<0.005	<0.0001	4.7
RSEM-R6W-EOP	6/8/2020 16:00	XX1068	M	C039370	0.0011	<0.02	<0.0004	0.116	23.7	<0.002	<0.0000019	0.025	0.0041		7.12	0.00865	3.61	<0.00004	344	0.271	215	<0.00002	<0.01	<0.01	0.00307	<0.01	<0.01	<0.0002	4.8
RSEM-R6W-EOP	6/9/2020 15:40	XX3626	M	C039793	0.0012	<0.02	<0.0004	0.113	24.1	<0.002	<0.0000019	0.0239	0.0039		7.57	0.00837	3.82	<0.00004	348	0.301	215	<0.00002	<0.01	<0.01	0.00297	<0.01	<0.01	<0.0002	6.9
RSEM-R6W-EOP	6/10/2020 13:30	XX4754	M	C040036	<0.001	<0.02	<0.0004	0.104	22.6	<0.002	<0.0000019	0.0227	0.0037		7.42	0.00758	3.67	<0.00004	330	0.289	203	<0.00002	<0.01	<0.01	0.00278	<0.01	<0.01	<0.0002	4.3
RSEM-R6W-EOP	6/11/2020 13:50	XX7041	M	C040416	0.00102	<0.01	<0.0002	0.103	23.1	<0.001	<0.0000019	0.0247	0.004		7.97	0.00838	3.83	<0.00002	329	0.303	204	0.000017	0.0077	<0.005	0.00307	<0.005	<0.005	<0.0001	3.2
RSEM-R6W-EOP	6/12/2020 14:15	XX9582	M	C040980	0.00103	<0.01	<0.0002	0.103	23.3	<0.001	<0.0000019	0.0244	0.0042		8.33	0.00849	4.02	<0.00002	328	0.345	206	0.000019	0.0076	<0.005	0.00304	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	6/13/2020 14:55	XX9600	M	C040986	0.00097	<0.01	<0.0002	0.0994	22.0	<0.001	<0.0000019	0.0233	0.0039		8.61	0.00827	4.05	<0.00002	324	0.302	201	0.000017	0.0071	<0.005	0.00312	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	6/14/2020 14:10	XX9647	M	C040993	0.00116	<0.01	<0.0002	0.105	22.6	<0.001	<0.0000019	0.0241	0.0038		8.85	0.00852	4.19	<0.00002	335	0.322	212	0.000017	0.007	<0.005	0.00304	<0.005	<0.005	<0.0001	4.0
RSEM-R6W-EOP	6/15/2020 14:55	XY1603	M	C041415	0.00119	<0.01	<0.0002	0.0909	20.9	<0.001	<0.000019	0.0198	0.0068		8.64	0.00782	4.32	<0.00002	300	0.344	200	0.000018	0.0053	<0.005	0.00284	<0.005	<0.005	<0.0001	50
RSEM-R6W-EOP	6/15/2020 15:05	XY1604	D	C041415	0.00129	<0.01	<0.0002	0.0897	20.5	<0.001	0.0000059	0.0193	0.0068		8.47	0.00767	4.27	<0.00002	296	0.336	193	0.000018	0.0054	<0.005	0.00284	<0.005	<0.005	<0.0001	31
RSEM-R6W-EOP	6/16/2020 10:55	XY1505	M	C041388	0.00138	<0.01	<0.0002	0.0974	22.1	0.0854	<0.000019	0.0182	0.0174		9.21	0.00767	4.92	<0.00002	275	0.403	202	0.000018	<0.005	<0.005	0.00316	<0.005	0.0066	<0.0001	67
RSEM-R6W-EOP	6/16/2020 11:05	XY1506	D	C041388	0.00137	<0.01	<0.0002	0.0975	22.0	0.0828	<0.000019	0.0184	0.0171		9.34	0.00796	4.9	<0.00002	279	0.394	202	0.000019	<0.005	<0.005	0.00313	<0.005	0.006	<0.0001	65
RSEM-R6W-EOP	6/17/2020 15:15	XY6280	M	C042380	0.00113	<0.01	<0.0002	0.0961	23.8	0.0151	0.0000022	0.0191	0.0098		10.3	0.00854	4.98	<0.00002	285	0.407	209	0.000018	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	26
RSEM-R6W-EOP	6/18/2020 16:15	XY6285	M	C042383	0.0011	<0.02	<0.0004	0.0965	23.4	0.0074	0.0000022	0.0177	0.0079		9.26	0.00834	4.78	<0.00004	271	0.399	202	<0.00002	<0.01	<0.01	0.00247	<0.01	<0.01	<0.0002	28
RSEM-R6W-EOP	6/19/2020 11:40	XY6264	M	C042375	0.0011	<0.02	<0.0004	0.108	24.9	0.0076	0.000003	0.0173	0.0054		8.89	0.00971	4.86	<0.00004	277	0.432	217	<0.00002	<0.01	<0.01	0.00239	<0.01	<0.01	<0.0002	13
RSEM-R6W-EOP	6/20/2020 14:15	XY9028	M	C042884	0.00098	<0.01	<0.0002	0.0983	26.1	<0.001	<0.0000019	0.0171	0.0049		8.52	0.00992	4.8	<0.00002	289	0.436	233	0.000021	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	6.1
RSEM-R6W-EOP	6/21/2020 15:30	XY9118	M	C042904	0.00095	<0.01	<0.0002	0.137	33.6	0.004	<0.0000019	0.0163	0.0052		8.87	0.00996	4.98	<0.00002	307	0.536	285	0.000027	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	2.9
RSEM-R6W-EOP	6/22/2020 13:10	XZ0404	M	C043197	0.001	<0.02	<0.0004	0.14	35.4	0.0072	<0.0000019	0.0158	0.0053		8.64	0.00973	5.04	<0.00004	313	0.571	282	0.000027	<0.01	<0.01	0.00194	<0.01	<0.01	<0.0002	1.6
RSEM-R6W-EOP	6/22/2020 13:30	XZ0407	D	C043197	0.00091	<0.01	<0.0002	0.135	34.4	0.0069	<0.0000019	0.0158	0.0049		8.51	0.00981	4.87	<0.00002	306	0.581	285	0.000027	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	6/23/2020 16:10	XZ2250	M	C043604	<0.001	<0.02	<0.0004	0.151	39.7	0.0064	<0.0000019	0.014	0.0046		8.44	0.00928	4.85	<0.00004	312	0.644	317	0.000031	<0.01	<0.01	0.00169	<0.01	<0.01	<0.0002	1.2
RSEM-R6W-EOP	6/24/2020 12:50	XZ5348	M	C044267	0.00085	<0.01	<0.0002	0.15	41.0	0.0047	<0.0000019	0.0141	0.0042		8.13	0.00913	4.1	<0.00002	309	0.642	337	0.000032	<0.005	<0.005	0.00154	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	6/25/2020 15:40	XZ5983	M	C044346	0.00084	<0.01	<0.0002	0.154	42.2	0.0048	<0.0000019	0.0131	0.0041		7.74	0.00871	3.86	<0.00002	299	0.66	329	0.000033	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	6/26/2020 12:40	XZ7317	M	C044624	0.00082	<0.01	<0.0002	0.155	43.8	0.0064	<0.0000019	0.0122	0.004		7.39	0.00811	3.59	<0.00002	293	0.643	320	0.000034	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	6/27/2020 18:50	XZ9068	M	C044897	<0.001	<0.02	<0.0004	0.145	44.5	0.0033	<0.0000019	0.0099	0.0042		6.70	0.00797	3.19	<0.00004	284	0.579	297	0.000032	<0.01	<0.01	0.00115	<0.01	<0.01	<0.0002	0.49

Appendix 3-C: 2020 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	6/28/2020 12:30	XZ9158	M	C044916	<0.001	<0.02	<0.0004	0.161	47.2	0.0085	<0.0000019	0.0096	0.0044		6.64	0.00759	3.56	<0.00004	290	0.605	321	0.000035	<0.01	<0.01	0.00117	<0.01	<0.01	<0.0002	1.9
RSEM-R6W-EOP	6/29/2020 16:05	YA0784	M	C045275	<0.001	<0.02	<0.0004	0.159	47.9	0.0052	<0.0000019	0.01	0.0045		6.73	0.00766	3.16	<0.00004	306	0.595	318	0.000034	<0.01	<0.01	0.00117	<0.01	<0.01	<0.0002	0.76
RSEM-R6W-EOP	6/30/2020 14:20	YA2741	M	C045692	<0.001	<0.02	<0.0004	0.167	48.8	0.0101	<0.0000019	0.0096	0.0047		6.61	0.00747	3.46	<0.00004	303	0.594	326	0.000033	<0.01	<0.01	0.00119	<0.01	<0.01	<0.0002	0.85
RSEM-R6W-EOP	7/1/2020 11:50	YA2708	M	C045689	<0.001	<0.02	<0.0004	0.169	49.3	0.005	<0.0000019	0.0084	0.0047		6.32	0.00693	3.66	<0.00004	296	0.566	323	0.000033	<0.01	<0.01	0.00113	<0.01	<0.01	<0.0002	1.6
RSEM-R6W-EOP	7/3/2020 16:20	YA5156	M	C046179	<0.001	<0.02	<0.0004	0.126	37.8	0.0164	<0.0000019	0.0066	0.0037		5.13	0.00503	2.91	<0.00004	229	0.458	240	0.000024	<0.01	<0.01	0.001	<0.01	<0.01	<0.0002	5.1
RSEM-R6W-EOP	7/4/2020 15:15	YA6736	M	C046470	0.00072	<0.01	<0.0002	0.114	33.6	0.0285	<0.000019	0.007	0.004		5.05	0.00453	3.48	<0.00002	217	0.435	210	0.000019	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	12
RSEM-R6W-EOP	7/5/2020 10:25	YA6918	M	C046500	0.00134	<0.01	<0.0002	0.116	34.7	0.116	<0.0000019	0.0067	0.0219		4.93	0.00459	3.48	<0.00002	214	0.418	211	0.000019	<0.005	<0.005	0.00105	<0.005	0.0392	<0.0001	6.6
RSEM-R6W-EOP	7/6/2020 11:40	YA8349	M	C046846	0.00164	<0.01	<0.0002	0.119	36.3	0.175	<0.0000019	0.0068	0.0352		4.85	0.00459	3.31	<0.00002	220	0.416	216	0.000015	<0.005	<0.005	0.00117	<0.005	0.0699	<0.0001	3.5
RSEM-R6W-EOP	7/7/2020 12:15	YB0050	M	C047206	0.00136	<0.01	<0.0002	0.146	37.5	0.14	<0.0000019	0.0067	0.0294		4.87	0.00479	3.64	<0.00002	219	0.439	235	0.000021	<0.005	<0.005	0.00133	<0.005	0.0603	<0.0001	2.6
RSEM-R6W-EOP	7/8/2020 12:40	YB2461	M	C047619	0.00109	<0.01	<0.0002	0.146	36.9	0.0977	<0.0000019	0.0068	0.0223		4.82	0.00516	3.48	<0.00002	234	0.435	232	0.00002	<0.005	<0.005	0.00145	<0.005	0.0388	<0.0001	5.3
RSEM-R6W-EOP	7/9/2020 14:20	YB4137	M	C047920	0.00095	<0.01	<0.0002	0.139	34.6	0.0518	0.0000021	0.0075	0.0141		4.86	0.00495	3.41	<0.00002	224	0.439	227	0.000021	<0.005	<0.005	0.00158	<0.005	0.0186	<0.0001	2.1
RSEM-R6W-EOP	7/10/2020 10:10	YB4117	M	C047917	0.00095	<0.01	<0.0002	0.138	34.4	0.0442	<0.0000019	0.007	0.0128		4.66	0.005	3.25	<0.00002	227	0.421	220	0.00002	<0.005	<0.005	0.00156	<0.005	0.0157	<0.0001	1.4
RSEM-R6W-EOP	7/12/2020 14:10	YB7109	M	C048462	0.00093	<0.01	<0.0002	0.151	35.5	0.0126	<0.0000019	0.0079	0.0086		4.91	0.00495	3.08	<0.00002	231	0.436	226	0.00002	<0.005	<0.005	0.00179	<0.005	0.0052	<0.0001	3.3
RSEM-R6W-EOP	7/12/2020 15:00	YB7194	M	C048486	0.00094	<0.01	<0.0002	0.151	35.4	0.0202	<0.0000019	0.0076	0.0097		4.84	0.00489	3.09	<0.00002	230	0.437	228	0.000023	<0.005	<0.005	0.00172	<0.005	0.0074	<0.0001	3.7
RSEM-R6W-EOP	7/13/2020 14:45	YB9220	M	C048875	0.00092	<0.01	<0.0002	0.151	35.4	0.0037	<0.0000019	0.009	0.0074		5.44	0.00536	3.46	<0.00002	254	0.469	232	0.000027	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	3.1
RSEM-R6W-EOP	7/14/2020 14:10	YC1072	M	C049344	0.00094	<0.01	<0.0002	0.134	35.4	0.0026	<0.0000019	0.0094	0.0072		5.52	0.00507	3.08	<0.00002	262	0.425	230	0.000024	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	7/14/2020 14:20	YC1073	D	C049344	0.00093	<0.01	<0.0002	0.135	34.9	0.0028	<0.0000019	0.0095	0.007		5.43	0.00507	3.12	<0.00002	256	0.432	233	0.000024	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	7/15/2020 12:55	YC2138	M	C049614	0.00093	<0.01	<0.0002	0.145	33.6	<0.001	<0.0000019	0.0095	0.0063		5.38	0.00498	3.39	<0.00002	249	0.439	224	0.000029	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	7/15/2020 13:05	YC2139	D	C049614	0.00091	<0.01	<0.0002	0.143	33.5	<0.001	<0.0000019	0.0094	0.0063		5.36	0.00484	3.36	<0.00002	249	0.448	221	0.000025	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	7/16/2020 15:40	YC4666	M	C049952	0.00095	<0.01	<0.0002	0.148	34.1	0.0012	<0.0000019	0.0094	0.0059		5.40	0.00485	3.37	<0.00002	251	0.446	223	0.000021	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	7/17/2020 14:05	YC5482	M	C050110	0.00095	<0.01	<0.0002	0.148	33.6	0.0015	<0.0000019	0.0093	0.0053		5.28	0.00481	3.27	<0.00002	248	0.442	215	0.000023	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	7/18/2020 13:15	YC7459	M	C050583	0.00083	<0.01	<0.0002	0.159	36.9	0.0018	<0.0000019	0.0084	0.0053		5.17	0.00556	3.51	<0.00002	259	0.456	231	0.000024	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.69
RSEM-R6W-EOP	7/19/2020 13:40	YC7537	M	C050603	0.00084	<0.01	<0.0002	0.159	38.7	0.0023	<0.0000019	0.0081	0.0053		5.09	0.00506	3.3	<0.00002	261	0.45	237	0.000025	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	0.77
RSEM-R6W-EOP	7/20/2020 10:50	YC8543	M	C050811	0.00077	<0.01	<0.0002	0.15	39.6	0.0035	<0.0000019	0.0078	0.005		5.20	0.0057	3.02	<0.00002	269	0.456	256	0.000024	<0.005	<0.005	0.00182	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	7/20/2020 11:00	YC8544	D	C050811	0.00076	<0.01	<0.0002	0.151	40.0	0.003	<0.0000019	0.0077	0.0049		5.19	0.00569	3.03	<0.00002	269	0.456	254	0.000025	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	7/21/2020 13:35	YD0794	M	C051251	<0.0025	<0.05	<0.001	0.168	42.5	<0.005	<0.0000019	0.0071	0.0056		5.25	0.00504	2.77	<0.0001	272	0.43	244	<0.00005	<0.025	<0.025	0.00186	<0.025	<0.025	<0.0005	0.91
RSEM-R6W-EOP	7/21/2020 13:45	YD0795	D	C051251	<0.0025	<0.05	<0.001	0.164	41.2	<0.005	<0.0000019	0.0069	0.0054		5.03	0.00504	2.67	<0.0001	262	0.42	234	<0.00005	<0.025	<0.025	0.00179	<0.025	<0.025	<0.0005	0.89
RSEM-R6W-EOP	7/22/2020 13:40	YD2618	M	C051641	0.00079	<0.01	<0.0002	0.15	38.8	0.0047	<0.0000019	0.0068	0.0052		4.84	0.00529	2.87	<0.00002	248	0.465	233	0.000025	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	0.55
RSEM-R6W-EOP	7/23/2020 12:05	YD4255	M	C051864	0.00076	<0.01	<0.0002	0.161	41.4	0.0055	<0.0000019	0.0064	0.0056		4.91	0.00487	2.6	<0.00002	253	0.459	240	0.000026	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	0.71
RSEM-R6W-EOP	7/24/2020 15:30	YD5910	M	C052038	0.00075	<0.01	<0.0002	0.161	41.3	0.0044	<0.0000019	0.0063	0.0055		4.84	0.00485	2.43	<0.00002	253	0.458	239	0.000025	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	7/25/2020 11:15	YD7675	M	C052402	0.00077	<0.01	<0.0002	0.152	41.8	0.0058	<0.0000019	0.0061	0.0056		4.72	0.0047	2.47	<0.00002	253	0.437	234	0.000026	<0.005	<0.005	0.00186	<0.005	<0.005	<0.0001	0.55
RSEM-R6W-EOP	7/26/2020 14:25	YD7714	M	C052420	0.00071	<0.01	<0.0002	0.149	41.0	0.0044	<0.0000019	0.0062	0.005		4.70	0.00451	2.64	<0.00002	247	0.426	232	0.000025	<0.005	<0.005	0.00168	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	7/27/2020 10:20	YD7768	M	C052432	0.0007	<0.01	<0.0002	0.148	41.6	0.0061	<0.0000019	0.0064	0.0048		4.73	0.00442	2.58	<0.00002	251	0.434	234	0.000024	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	0.61
RSEM-R6W-EOP	7/28/2020 12:20	YE2030	M	C053295	<0.001	<0.02	<0.0004	0.147	39.5	<0.002	<0.0000019	0.0063	0.0041		4.93	0.00444	2.4	<0.00004	245	0.453	235	0.000023	<0.01	<0.01	0.0015	<0.01	<0.01	<0.0002	0.59
RSEM-R6W-EOP	7/29/2020 12:20	YE4006	M	C053695	<0.001	<0.02	<0.0004	0.151	38.8	<0.002	<0.0000019	0.0065	0.0039		5.02	0.00427	2.4	<0.00004	247	0.434	238	0.000021	<0.01	<0.01	0.00146	<0.01	<0.01	<0.0002	0.67
RSEM-R6W-EOP	7/30/2020 15:00	YE5557	M	C054021	0.00055	<0.01	<0.0002	0.0147	28.1	<0.001	<0.0000019	0.0019	0.002		3.69	0.00128	1.33	<0.00002	19.6	0.287	36.4	0.00001	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	7/30/2020 16:20	YE5558	M	C054021	0.00062	<0.01	<0.0002	0.149	39.9	<0.001	<0.0000019	0.0069	0.0032		5.05	0.00399	2.55	<0.00002	251	0.438	238	0.000024	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	7/31/2020 11:10	YE5651	M	C054023	0.00061	<0.01	<0.0002	0.142	38.7	<0.001	<0.0000019	0.0071	0.0029		4.98	0.00371	2.58	<0.00002	246	0.418	227	0.000022	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	8/1/2020 12:30	YE6666	M	C054219	0.00069	<0.01	<0.0002	0.13	38.9	0.0024	<0.0000019	0.008	0.0028		5.26	0.00368	2.37	<0.00002	261	0.424	220	0.000019	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	8/2/2020 12:50	YE8517	M	C054579	0.00065	<0.01	<0.0002	0.145	37.8	<0.001	<0.0000019	0.0075	0.0024		5.10	0.0035	2.5	<0.00002	249	0.394	225	0.000021	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	8/3/2020 13:10	YE8525	M	C054582	0.00066	<0.01	<0.0002	0.142	36.5	<0.001	<0.0000019	0.0076	0.0022		5.02	0.00328	2.41	<0.00002	245	0.369	214	0.00002	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	8/4/2020 13:10	YF1645	M	C055153	0.00063	<0.01	<0.0002	0.131	34.0	0.0017	<0.0000019	0.0085	0.0021		5.19	0.00336	2.38	<0.00002	249	0.373	213	0.000019	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	8/5/2020 12:40	YF2978	M	C055442	0.00069	<0.01	<0.0002	0.122	34.1	<0.001	<0.0000019	0.008	0.0021		5.21	0.00302	2.64	<0.00002	244	0.342	198	0.00002	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	8/6/2020 11:30	YF2969	M	C055440	0.00072	<0.01	<0.0002	0.122	34.5	<0.001	<0.0000019	0.0083	0.0023		5.28	0.00299	2.71	<0.00002	244	0.338	197	0.00002	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	8/7/2020 12:15	YF4858	M	C055741	0.00065	<0.01	<0.0002	0.118	33.8	<0.001	<0.0000019	0.009	0.0023		5.32	0.00299	2.65	<0.00002	251	0.357	203	0.000018	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	8/8/2020 12:50	YF8357	M	C056281	0.00074	<0.01	<0.0002	0.12	34.5	0.0011	<0.0000019	0.0087	0.0027		5.33	0.00284	2.73	<0.00002	243	0.358	212	0.000019	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	8/9/2020 14:20	YF8362	M	C056282	0.00075	<0.01	<0.0002	0.114	34.6	<0.001	<0.0000019	0.009	0.0026		5.26	0.00271	2.81	<0.00002	241	0.361	209	0.00002	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	8/10/2020 13:00	YG0106	M	C056587	0.00076	<0.01	<0.0002	0.114	36.5	<0.001	<0.0000019	0.0091	0.0027		5.54	0.00263	2.81	<0.00002	250	0.358	213	0.000021	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	8/11/2020 13:20	YG2367	M	C056973	0.00072	<0.01	<0.0002	0.111	36.5	<0.001	<0.0000019	0.0095	0.0025		5.55	0.00274	2.83	<0.00002	261	0.339	207	0.00002	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	2.1
RSEM-R6W-EOP	8/12/2020 17:40	YG4636	M	C057417	0.00082	<0.01	<0.0002	0.117	36.9	<0.001	<0.0000019	0.0102	0.0025		5.67	0.00295	3.21	<0.00002	267	0.373	222	0.000021	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	8/13/2020 13:40	YG7262	M	C057823	0.00075	<0.01	<0.0002	0.0923	37.4	<0.001	<0.0000019	0.009	0.0023		5.36	0.00253	2.6	<0.00002	274	0.315	210	0.000017	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/14/2020 12:55	YG7190	M	C057817	0.00076	<0.01	<0.0002	0.102	37.3	<0.001	<0.0000019	0.009	0.0022		5.40	0.00267	2.73	<0.00002	270	0.334	220	0.000016	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	8/15/2020 14:55	YH0061	M	C058356	0.00081	<0.01	<0.0002	0.112	36.4	<0.001	<0.0000019	0.0094	0.0021		5.46	0.0025	2.65	<0.00002	273	0.358	224	0.000018	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	8/16/2020 11:50	YH0173	M	C058389	0.00076	<0.01	<0.0002	0.109	36.2	0.0015	<0.0000019	0.009	0.002		5.35	0.00244	2.64	<0.00002	270	0.348	219	0.000015	<0.005	<0.005	0.00203	<0.005	<0.005	<0.0001	0.95
RSEM-R6W-EOP	8/17/2020 9:30	YG9870	M	C058326	0.00076	<0.01	<0.0002	0.105	35.2	0.0015	<0.0000019	0.009	0.002		5.08	0.00248	2.8	<0.00002	263	0.341	212	0.000016	<0.005	<0.005	0.00197	<0.005	<0.005	0.00011	0.70
RSEM-R6W-EOP	8/18/2020 16:20	YH3311	M	C059056	0.00074	<0.01	<0.0002	0.0987	34.6	<0.001	<0.0000019	0.0091	0.0018		5.03	0.00257	2.54	<0.00002	261	0.313	208	0.000015	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	0.87
RSEM-R6W-EOP	8/19/2020 14:50	YH5388	M	C059422	0.00081	<0.01	<0.0002	0.101	34.2	<0.001	<0.0000019	0.0087	0.0018		4.97	0.00226	2.78	<0.00002	246	0.288	195	0.000017	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	8/20/2020 14:40	YH7342	M	C059760	0.00081	<0.01	<0.0002	0.0979	32.5	<0.001	<0.0000019	0.0086	0.0017		4.70	0.00235	2.65	<0.00002	245	0.249	180	0.000021	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/21/2020 12:00	YH7340	M	C059759	0.00082	<0.01	<0.0002	0.0896	28.8	<0.001	<0.0000019	0.0086	0.0016		4.49	0.00212	2.85	<0.00002	221	0.243	158	0.000014	<0.005	<0.005	0.00184	<0.005	<0.005	<0.0001	3.2
RSEM-R6W-EOP	8/22/2020 11:20	YI0128	M	C060262	0.00086	<0.01	<0.0002	0.0761	22.7	<0.001	<0.000019	0.0084	0.0016		4.24	0.00194	3.17	<0.00002	182	0.228	127	0.000012	<0.005	<0.005	0.00174	<0.005	<0.005	<0.0001	31
RSEM-R6W-EOP	8/23/2020 14:40	YI0110	M	C060255	0.00097	<0.01	<0.0002	0.0708	20.2	0.0026	<0.0000019	0.0094	0.0016		4.85	0.00198	3.6	<0.00002	170	0.224	116	0.000013	<0.005	<0.005	0.00168	<0.005	<0.005	<0.0001	10
RSEM-R6W-EOP	8/24/2020 13:50	YI2199	M	C060702	0.00101	<0.01	<0.0002	0.0717	20.2	0.0061	<0.0000019	0.0096	0.0016		4.65	0.00213	3.45	<0.00002	173	0.224	113	0.000018	<0.005	<0.005	0.00169	<0.005	<0.005	<0.0001	3.6
RSEM-R6W-EOP	8/25/2020 12:30	YI3996	M	C061087	0.00102	<0.01	<0.0002	0.0778	19.9	0.007	<0.0000019	0.0095	0.0018		4.70	0.0023	3.68	<0.00002	170	0.243	117	0.00001	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	8/26/2020 14:00	YI6264	M	C061565	0.00095	<0.01	<0.0002	0.0819	21.8	0.0011	<0.0000019	0.0095	0.002		4.88	0.00268	3.64	<0.00002	186	0.271	130	0.000011	<0.005	<0.005	0.00171	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	8/27/2020 12:50	YI7774	M	C061827	0.00088	<0.01	<0.0002	0.0836	22.9	0.0016	<0.0000019	0.0094	0.0022		4.74	0.00309	3.26	<0.00002	195	0.289	145	0.000013	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	0.95
RSEM-R6W-EOP	8/28/2020 13:55	YI9494	M	C062013	0.00087	<0.01	<0.0002	0.0913	24.6	0.0056	<0.0000019	0.0092	0.0022		4.98	0.00302	3.2	<0.00002	206	0.325	155	0.000013	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	0.74
RSEM-R6W-EOP	8/29/2020 10:55	YJ1739	M	C062465	0.0009	<0.01	<0.0002	0.0931	24.0	0.006	<0.0000019	0.0095	0.0022		4.91	0.0035	3.11	<0.00002	198	0.328	155	0.000015	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	0.83
RSEM-R6W-EOP	8/30/2020 12:00	YJ1570	M	C062426	0.00098	<0.01	<0.0002	0.0951	24.0	0.0066	<0.0000019	0.0093	0.0023		4.93	0.00359	2.99	<0.00002	197	0.33	159	0.000016	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	0.98
RSEM-R6W-EOP	8/31/2020 17:20	YJ3640	M	C062857	0.00078	<0.01	<0.0002	0.109	27.4	0.0024	<0.0000019	0.0093	0.0023		5.12	0.00388	3.25	<0.00002	218	0.362	176	0.000015	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	1.1

Appendix 3-C: 2020 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	9/1/2020 14:20	YJ6691	M	C063433	0.00073	<0.01	<0.0002	0.101	26.9	0.0032	<0.0000019	0.0098	0.0024		5.16	0.00415	3.24	<0.00002	220	0.379	181	0.000014	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	0.47
RSEM-R6W-EOP	9/2/2020 13:55	YJ7831	M	C063666	0.00076	<0.01	<0.0002	0.0982	27.2	<0.001	<0.0000019	0.0103	0.0028		5.41	0.0045	3.13	<0.00002	227	0.392	185	0.000016	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	0.49
RSEM-R6W-EOP	9/3/2020 14:30	YK0031	M	C064047	0.00078	<0.01	<0.0002	0.108	28.2	<0.001	<0.0000019	0.0109	0.0029		5.54	0.0046	3.18	<0.00002	228	0.402	190	0.000016	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	0.69
RSEM-R6W-EOP	9/4/2020 12:00	YK0086	M	C064051	0.00078	<0.01	<0.0002	0.109	28.3	0.0013	<0.0000019	0.0111	0.0028		5.53	0.00459	3.19	<0.00002	232	0.399	193	0.000016	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	0.26
RSEM-R6W-EOP	9/5/2020 12:40	YK1346	M	C064288	0.0008	<0.01	<0.0002	0.108	26.4	0.0024	<0.0000019	0.0107	0.0026		5.34	0.00454	2.87	<0.00002	222	0.41	191	0.000015	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.58
RSEM-R6W-EOP	9/6/2020 11:10	YK2531	M	C064579	0.00081	<0.01	<0.0002	0.108	27.6	0.0015	<0.0000019	0.0116	0.0026		5.47	0.0046	2.97	<0.00002	233	0.403	191	0.000017	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	0.32
RSEM-R6W-EOP	9/7/2020 10:25	YK2585	M	C064592	0.0008	<0.01	<0.0002	0.107	27.6	0.0026	<0.0000019	0.0117	0.0027		5.49	0.00455	3	<0.00002	232	0.401	190	0.000016	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	0.39
RSEM-R6W-EOP	9/8/2020 11:00	YK6315	M	C065313	0.00073	<0.01	<0.0002	0.104	25.5	<0.001	<0.0000019	0.0107	0.0023		5.32	0.00455	3.27	<0.00002	226	0.359	177	0.000014	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	0.42
RSEM-R6W-EOP	9/9/2020 14:15	YK6317	M	C065314	0.00069	<0.01	<0.0002	0.103	24.9	<0.001	<0.0000019	0.0108	0.0022		5.29	0.00435	3.4	<0.00002	221	0.351	169	0.000014	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	0.55
RSEM-R6W-EOP	9/10/2020 11:50	YK8214	M	C065709	0.00068	<0.01	<0.0002	0.0916	24.7	<0.001	<0.0000019	0.0114	0.0021		5.27	0.00416	3.43	<0.00002	218	0.324	167	0.000014	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	0.73
RSEM-R6W-EOP	9/10/2020 12:00	YK8215	D	C065709	0.00069	<0.01	<0.0002	0.0923	24.7	<0.001	<0.0000019	0.0111	0.0021		5.25	0.00437	3.4	<0.00002	220	0.317	169	0.000015	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	0.69
RSEM-R6W-EOP	9/11/2020 11:40	YK8183	M	C065706	0.00068	<0.01	<0.0002	0.0821	24.3	0.0012	<0.0000019	0.0112	0.002		5.05	0.00398	3.46	<0.00002	207	0.308	159	0.000014	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	9/12/2020 14:20	YL1186	M	C066169	0.00069	<0.01	<0.0002	0.0822	23.3	0.0013	<0.0000019	0.0108	0.0019		4.78	0.00369	3.61	<0.00002	202	0.282	149	0.000013	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	9/13/2020 12:40	YL1415	M	C066239	0.0007	<0.01	<0.0002	0.0797	23.4	0.0014	<0.0000019	0.0108	0.002		4.86	0.00345	3.78	<0.00002	206	0.281	146	0.000013	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	2.9
RSEM-R6W-EOP	9/14/2020 12:40	YL3785	M	C066659	0.00077	<0.01	<0.0002	0.0831	24.0	0.0015	<0.0000019	0.0107	0.002		4.68	0.0033	3.84	<0.00002	196	0.298	145	0.000014	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	3.4
RSEM-R6W-EOP	9/15/2020 15:00	YL6687	M	C067245	0.00072	<0.01	<0.0002	0.0851	24.8	0.0052	<0.0000019	0.0108	0.0028		4.60	0.00324	3.91	<0.00002	200	0.297	147	0.000014	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	9.9
RSEM-R6W-EOP	9/16/2020 15:30	YL8114	M	C067490	0.0007	<0.01	<0.0002	0.0701	23.5	0.0046	<0.0000019	0.0107	0.0028		4.65	0.00331	3.95	<0.00002	202	0.285	147	0.000011	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	5.4
RSEM-R6W-EOP	9/17/2020 13:10	YL8049	M	C067474	0.00067	<0.01	<0.0002	0.0781	23.6	0.0044	<0.0000019	0.0109	0.0027		4.66	0.00317	4.32	<0.00002	202	0.294	150	0.000013	<0.005	<0.005	0.00248	<0.005	0.0051	<0.0001	3.7
RSEM-R6W-EOP	9/18/2020 9:50	YL9985	M	C067838	0.00068	<0.01	<0.0002	0.078	24.3	0.0026	<0.0000019	0.0108	0.0028		4.60	0.00338	4.11	<0.00002	209	0.306	154	0.000014	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	9/19/2020 12:50	YM3344	M	C068349	0.0007	<0.01	<0.0002	0.0785	24.5	0.0013	<0.0000019	0.0111	0.0026		4.77	0.0037	4.07	<0.00002	213	0.306	159	0.000013	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	9/20/2020 11:40	YM3374	M	C068353	0.00068	<0.01	<0.0002	0.0787	23.9	0.0015	<0.0000019	0.0109	0.0026		4.73	0.00381	4.06	<0.00002	207	0.301	153	0.000013	<0.005	<0.005	0.00265	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	9/21/2020 12:50	YM6393	M	C068837	0.00062	<0.01	<0.0002	0.0884	23.7	<0.001	<0.0000019	0.0106	0.0023		4.80	0.00419	4.21	<0.00002	193	0.286	146	0.000012	<0.005	<0.005	0.00267	<0.005	<0.005	0.00015	1.3
RSEM-R6W-EOP	9/22/2020 13:55	YM9231	M	C069318	0.00063	<0.01	<0.0002	0.0898	23.8	<0.001	<0.0000019	0.0105	0.0023		4.80	0.00413	4.32	<0.00002	193	0.277	143	0.000013	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	9/23/2020 15:40	YN0387	M	C069533	0.00063	<0.01	<0.0002	0.0777	24.3	<0.001	<0.0000019	0.0107	0.0022		5.04	0.00392	4.11	<0.00002	195	0.302	147	0.000012	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	9/24/2020 14:00	YN2679	M	C069910	0.00067	<0.01	<0.0002	0.0769	24.8	<0.001	<0.0000019	0.0104	0.0023		4.88	0.0037	4.02	<0.00002	196	0.281	140	0.000012	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	9/25/2020 13:30	YN2674	M	C069908	0.00063	<0.01	<0.0002	0.0775	24.2	<0.001	<0.0000019	0.0101	0.0022		4.85	0.00359	4.15	<0.00002	189	0.283	137	0.000012	<0.005	<0.005	0.00265	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	9/26/2020 13:10	YN7496	M	C070621	0.0007	<0.01	<0.0002	0.0725	22.8	<0.001	<0.0000019	0.0103	0.0027		4.67	0.00348	4.07	<0.00002	178	0.267	127	0.000012	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	9/27/2020 16:20	YN7530	M	C070629	0.00071	<0.01	<0.0002	0.0714	22.5	<0.001	<0.0000019	0.0099	0.002		4.55	0.00318	4.08	<0.00002	168	0.259	122	0.000012	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	9/28/2020 9:40	YN7450	M	C070613	0.00069	<0.01	<0.0002	0.0705	23.0	0.0015	<0.0000019	0.0097	0.002		4.58	0.00286	4.17	<0.00002	163	0.26	123	0.000011	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	9/29/2020 16:10	YO1378	M	C071354	0.0007	<0.01	<0.0002	0.0664	22.6	0.001	<0.0000019	0.0093	0.0019		4.29	0.00302	3.99	<0.00002	158	0.239	110	0.000011	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	9/30/2020 13:10	YO4161	M	C071825	0.0007	<0.01	<0.0002	0.0718	22.4	<0.001	<0.0000019	0.0092	0.0019		4.22	0.00287	4.06	<0.00002	154	0.244	110	0.00001	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	10/1/2020 12:15	YO6612	M	C072228	0.00065	<0.01	<0.0002	0.0654	23.6	0.0011	<0.0000019	0.0094	0.0018		4.37	0.00282	4.12	<0.00002	156	0.258	113	0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	10/2/2020 11:30	YO6595	M	C072223	0.00066	<0.01	<0.0002	0.0676	23.9	0.001	<0.0000019	0.0096	0.0018		4.30	0.00292	4.21	<0.00002	159	0.256	113	0.000011	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	0.78
RSEM-R6W-EOP	10/3/2020 16:10	YP0035	M	C072771	0.00067	<0.01	<0.0002	0.0685	24.2	<0.001	<0.0000019	0.0099	0.0018		4.38	0.00286	4.22	<0.00002	163	0.251	113	<0.00001	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	0.70
RSEM-R6W-EOP	10/4/2020 16:20	YP0009	M	C072767	0.00064	<0.01	<0.0002	0.0711	24.0	<0.001	<0.0000019	0.0099	0.0018		4.34	0.00294	4.16	<0.00002	161	0.252	112	<0.00001	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	0.93
RSEM-R6W-EOP	10/5/2020 17:10	YP2999	M	C073260	0.00057	<0.01	<0.0002	0.0699	22.6	<0.001	<0.0000019	0.0108	0.0019		4.31	0.0029	4.1	<0.00002	154	0.254	109	<0.00001	<0.005	<0.005	0.00246	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	10/6/2020 15:10	YP5779	M	C073719	0.00066	<0.01	<0.0002	0.0703	23.4	<0.001	<0.0000019	0.0106	0.0018		4.22	0.00288	4.02	<0.00002	156	0.247	106	<0.00001	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	10/7/2020 14:20	YP7388	M	C074014	0.00065	<0.01	<0.0002	0.0565	24.2	<0.001	<0.0000019	0.0108	0.002		4.27	0.00304	3.85	<0.00002	160	0.251	106	<0.00001	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	10/8/2020 11:30	YP9903	M	C074375	0.00065	<0.01	<0.0002	0.0621	24.7	<0.001	<0.0000019	0.011	0.0018		4.50	0.00299	4.07	<0.00002	163	0.246	110	<0.00001	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	10/9/2020 11:20	YQ0241	M	C074391	0.00067	<0.01	<0.0002	0.0709	24.5	<0.001	<0.0000019	0.0113	0.0019		4.52	0.00296	4.13	<0.00002	166	0.246	113	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	10/10/2020 12:10	YQ1628	M	C074557	0.00064	<0.01	<0.0002	0.0526	24.2	0.0024	<0.0000019	0.0117	0.0018		4.48	0.00301	3.91	<0.00002	165	0.247	109	<0.00001	<0.005	<0.005	0.00244	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	10/11/2020 11:40	YQ4408	M	C075136	0.00072	<0.01	<0.0002	0.0584	23.1	0.0035	<0.0000019	0.0113	0.0022		4.33	0.0028	3.84	<0.00002	154	0.271	102	<0.00001	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	5.6
RSEM-R6W-EOP	10/12/2020 13:50	YQ4367	M	C075125	0.00077	<0.01	<0.0002	0.0619	23.4	0.012	<0.0000019	0.0118	0.0034		4.54	0.00295	3.94	<0.00002	161	0.323	108	<0.00001	<0.005	<0.005	0.00246	<0.005	<0.005	<0.0001	6.4
RSEM-R6W-EOP	10/13/2020 14:00	YQ8016	M	C075829	0.00092	<0.01	<0.0002	0.0675	23.8	0.0093	<0.0000019	0.0128	0.0037		4.63	0.00311	4.1	<0.00002	167	0.309	114	<0.00001	<0.005	<0.005	0.00259	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	10/14/2020 15:00	YQ9243	M	C076027	0.00097	<0.01	<0.0002	0.072	24.5	0.0084	<0.0000019	0.0134	0.0041		4.71	0.00346	4.16	<0.00002	173	0.306	117	<0.00001	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	6.2
RSEM-R6W-EOP	10/14/2020 15:10	YQ9244	D	C076027	0.00097	<0.01	<0.0002	0.0731	24.7	0.0089	<0.0000019	0.0136	0.0043		4.72	0.00341	4.18	<0.00002	177	0.304	117	<0.00001	<0.005	<0.005	0.0027	<0.005	<0.005	<0.0001	3.9
RSEM-R6W-EOP	10/15/2020 11:55	YR1303	M	C076291	0.00097	<0.01	<0.0002	0.0659	23.6	0.0101	<0.0000019	0.0145	0.0043		4.96	0.00387	4.23	<0.00002	178	0.321	124	0.000011	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	10/16/2020 12:10	YR1522	M	C076320	0.00089	<0.01	<0.0002	0.0723	23.7	0.0096	<0.0000019	0.0147	0.0043		5.02	0.00421	4.17	<0.00002	180	0.317	123	<0.00001	<0.005	<0.005	0.00267	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	10/17/2020 10:30	YR5392	M	C076925	0.00096	<0.01	<0.0002	0.0659	24.3	0.0083	<0.0000019	0.0161	0.0048		5.14	0.00446	4.62	<0.00002	185	0.323	130	<0.00001	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	10/18/2020 12:55	YR5380	M	C076923	0.00088	<0.01	<0.0002	0.0794	25.4	0.006	<0.0000019	0.0172	0.0048		5.57	0.00479	4.71	<0.00002	197	0.334	146	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	2.3
RSEM-R6W-EOP	10/18/2020 13:05	YR5381	D	C076923	0.00092	<0.01	<0.0002	0.0723	24.7	0.006	<0.0000019	0.0173	0.0048		5.38	0.00501	4.82	<0.00002	192	0.326	139	<0.00001	<0.005	<0.005	0.00286	<0.005	<0.005	<0.0001	2.1
RSEM-R6W-EOP	10/19/2020 10:20	YR5409	M	C076929	0.00086	<0.01	<0.0002	0.0717	24.1	0.0044	<0.0000019	0.0181	0.0048		5.51	0.0053	4.8	<0.00002	195	0.331	145	<0.00001	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	5.2
RSEM-R6W-EOP	10/20/2020 14:50	YR8829	M	C077551	0.00088	<0.01	<0.0002	0.0759	28.7	0.0046	<0.0000019	0.0184	0.0046		5.86	0.00589	4.37	<0.00002	223	0.349	155	<0.00001	<0.005	<0.005	0.00311	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	10/21/2020 16:10	YS1501	M	C077998	<0.001	<0.02	<0.0004	0.0787	28.6	0.0039	<0.0000019	0.0192	0.0049		5.93	0.00604	4.62	<0.00004	232	0.361	161	<0.00002	<0.01	<0.01	0.00322	<0.01	<0.01	<0.0002	0.85
RSEM-R6W-EOP	10/22/2020 12:40	YS3855	M	C078323	0.0009	<0.01	<0.0002	0.0782	29.4	0.0037	<0.0000019	0.0194	0.0045		6.01	0.00599	4.74	<0.00002	232	0.381	163	0.000012	<0.005	<0.005	0.00326	<0.005	<0.005	<0.0001	0.90
RSEM-R6W-EOP	10/23/2020 10:30	YS3574	M	C078301	0.00085	<0.01	<0.0002	0.0791	30.1	0.0038	<0.0000019	0.02	0.0045		6.35	0.00611	4.73	<0.00002	239	0.389	170	0.000013	<0.005	<0.005	0.00337	<0.005	<0.005	<0.0001	0.76
RSEM-R6W-EOP	10/24/2020 15:10	YS7916	M	C078871	0.00084	<0.01	<0.0002	0.0854	30.1	0.0027	<0.0000019	0.0203	0.0044		6.25	0.00639	4.92	<0.00002	237	0.38	186	<0.00001	<0.005	<0.005	0.00341	<0.005	<0.005	<0.0001	0.96
RSEM-R6W-EOP	10/25/2020 13:50	YS7914	M	C078870	0.00086	<0.01	<0.0002	0.0774	32.3	0.0034	<0.0000019	0.0187	0.0044		6.09	0.00589	4.87	<0.00002	237	0.373	187	<0.00001	<0.005	<0.005	0.00346	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	10/26/2020 14:45	YT0277	M	C079297	0.00095	<0.01	<0.0002	0.0829	34.2	0.0051	<0.0000019	0.0205	0.0043		6.10	0.00585	4.72	<0.00002	244	0.352	183	<0.00001	<0.005	<0.005	0.0035	<0.005	<0.005	<0.0001	2.1
RSEM-R6W-EOP	10/27/2020 12:40	YT3321	M	C079639	0.00084	<0.01	<0.0002	0.0731	32.4	0.0027	<0.0000019	0.0152	0.0036		5.53	0.00474	4.51	<0.00002	199	0.356	167	0.000011	<0.005	<0.005	0.00328	<0.005	<0.005	<0.0001	2.4
RSEM-R6W-EOP	10/28/2020 14:20	YT5233	M	C079984	0.00085	<0.01	<0.0002	0.0665	32.1	0.0063	<0.0000019	0.0138	0.0034		5.16	0.0044	4.64	<0.00002	182	0.337	154	0.00001	<0.005	<0.005	0.00318	<0.005	<0.005	<0.0001	3.9
RSEM-R6W-EOP	10/29/2020 14:30	YT7961	M	C080439	0.00098	<0.01	<0.0002	0.0707	33.9	0.0088	<0.0000019	0.0131	0.0037		5.21	0.0046	4.59	<0.00002	187	0.343	162	0.000011	<0.005	<0.005	0.0035	<0.005	<0.005	<0.0001	2.6
RSEM-R6W-EOP	10/30/2020 12:10	YT7955	M	C080436	0.00116	<0.01	<0.0002	0.0696	34.4	0.0078	<0.0000019	0.0122	0.0037		5.13	0.0043	4.52	<0.00002	179	0.324	152	<0.00001	<0.005	<0.005	0.00339	<0.005	<0.005	<0.0001	2.8
RSEM-R6W-EOP	10/31/2020 14:40	YU1485	M	C081008	0.00099	<0.01	<0.0002	0.0606	33.0	0.0068	<0.0000019	0.011	0.0031		4.71	0.00381	4.31	<0.00002	170	0.312	143	<0.00001	<0.005	<0.005	0.00313	<0.005	<0.005	<0.0001	2.6
RSEM-R6W-EOP	11/1/2020 13:00	YU1490	M	C081010	0.00098	<0.01	<0.0002	0.0607	33.1	0.0063	<0.0000019	0.0109	0.0031		4.74	0.00376	4.26	<0.00002	166	0.32	142	<0.00001	<0.005	<0.005	0.00313	<0.005	<0.005	<0.0001	3.0
RSEM-R6W-EOP	11/15/2020 13:00	YW2812	M	C084417	0.00098	<0.01	<0.0002	0.0912	31.1	0.007	<0.0000019	0.0134	0.0082		5.45	0.00516	5.45	<0.00002	221	0.317	168	0.000011	<0.005	<0.005	0.0037	0.0053	0.0059	<0.0001	1.9
RSEM-R6W-EOP	11/16/2020 10:30	YW2814	M	C084418	0.00098	<0.01	<0.0002	0.0885	31.4	0.0067	<0.0000019	0.0139	0.008		5.66	0.00506	5.42	<0.00002	222	0.313	168	0.000011	<0.005	<0.005	0.00368	0.0052	0.0061	<0.0001	1.0
RSEM-R6W-EOP	11/17/2020 13:00	YW6848	M	C085190	0.00092	<0.01	<0.0002	0.0943	31.8	0.0065	<0.0000019	0.0146	0.0078		5.45	0.00536	5.36	<0.00002	221	0.327	173	0.00001	<0.005	<0.005	0.00375	0.0051	0.0059	<0.0001	1.9
RSEM-R6W-EOP	11/18/2020 16:10	YW9289	M	C085621	0.00094	<0.01	<0.0002	0.0942	31.7	0.0059	<0.0000019	0.0151	0.0076		5.61	0.00526	5.49	<0.00002	230	0.331	177	0.00001	<0.005	<0.005	0.00372	0.0053	0.0062	<0.0001	1.7

Appendix 3-C: 2020 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	11/19/2020 13:50	YX1120	M	C085951	0.00095	<0.01	<0.0002	0.0912	33.0	0.0061	<0.0000019	0.0154	0.008		5.66	0.00534	5.39	<0.00002	241	0.339	185	0.000011	<0.005	<0.005	0.00382	0.0053	0.0063	<0.0001	1.5
RSEM-R6W-EOP	11/20/2020 11:40	YX1117	M	C085949	0.00089	<0.01	<0.0002	0.09	34.0	0.0048	<0.0000019	0.0163	0.0076		5.74	0.00515	5.5	<0.00002	254	0.335	190	0.000011	<0.005	<0.005	0.00373	0.0055	0.0065	<0.0001	1.6
RSEM-R6W-EOP	11/21/2020 13:40	YX3970	M	C086434	0.00088	<0.01	<0.0002	0.0935	35.0	0.0053	0.0000027	0.0168	0.0074		6.04	0.00534	5.92	<0.00002	260	0.327	195	<0.00001	<0.005	<0.005	0.00352	0.0055	0.0064	<0.0001	1.6
RSEM-R6W-EOP	11/22/2020 14:05	YX3966	M	C086433	0.00085	<0.01	<0.0002	0.0892	35.3	0.0056	<0.0000019	0.0167	0.0072		5.90	0.00514	6.31	<0.00002	264	0.314	188	<0.00001	<0.005	<0.005	0.00348	0.0055	0.0064	<0.0001	1.6
RSEM-R6W-EOP	11/23/2020 13:40	YX5757	M	C086734	0.00086	<0.01	<0.0002	0.0947	35.2	0.0055	<0.0000019	0.0172	0.0074		6.06	0.00491	6.37	<0.00002	258	0.32	188	<0.00001	<0.005	<0.005	0.00343	0.0055	0.0066	<0.0001	3.9
RSEM-R6W-EOP	11/24/2020 14:05	YX7834	M	C087146	0.00084	<0.01	<0.0002	0.0858	36.1	0.0052	<0.0000019	0.0171	0.0071		6.25	0.00484	6.49	<0.00002	264	0.32	189	<0.00001	<0.005	<0.005	0.00344	0.0055	0.007	<0.0001	1.8
RSEM-R6W-EOP	11/25/2020 14:10	YY0222	M	C087472	0.00087	<0.01	<0.0002	0.0906	32.9	0.0043	<0.0000019	0.0172	0.0068		6.05	0.00472	6.17	<0.00002	242	0.302	180	<0.00001	<0.005	<0.005	0.00341	0.0055	0.0069	<0.0001	2.0
RSEM-R6W-EOP	11/26/2020 12:10	YY2050	M	C087819	0.00085	<0.01	<0.0002	0.0836	34.5	0.0044	<0.0000019	0.0169	0.0067		6.06	0.00424	6.32	<0.00002	247	0.312	178	<0.00001	<0.005	<0.005	0.00336	0.0054	0.0074	<0.0001	1.4
RSEM-R6W-EOP	11/27/2020 11:30	YY2096	M	C087822	0.00085	<0.01	<0.0002	0.0869	34.4	0.0044	<0.0000019	0.0167	0.0064		5.91	0.00412	6.23	<0.00002	241	0.302	176	<0.00001	<0.005	<0.005	0.00339	0.0055	0.0077	<0.0001	1.5
RSEM-R6W-EOP	11/28/2020 13:10	YY5269	M	C088400	0.00088	<0.01	<0.0002	0.076	30.5	0.0043	<0.0000019	0.0157	0.0062		5.30	0.00363	5.73	<0.00002	215	0.278	155	<0.00001	<0.005	<0.005	0.00327	0.0054	0.008	<0.0001	2.0
RSEM-R6W-EOP	11/29/2020 12:45	YY5335	M	C088408	0.00087	<0.01	<0.0002	0.0797	30.8	0.0041	<0.0000019	0.0157	0.0064		5.51	0.00357	5.67	<0.00002	220	0.28	159	<0.00001	<0.005	<0.005	0.00331	0.0056	0.0087	<0.0001	1.9
RSEM-R6W-EOP	11/30/2020 14:20	YY7388	M	C088703	0.00082	<0.01	<0.0002	0.0849	32.7	0.0034	<0.0000019	0.0151	0.0065		5.52	0.00374	5.24	<0.00002	237	0.261	160	<0.00001	<0.005	<0.005	0.00346	0.0057	0.0094	<0.0001	1.9
RSEM-R6W-EOP	12/1/2020 13:55	YY9248	M	C089096	0.00084	<0.01	<0.0002	0.0867	32.4	0.0038	<0.0000019	0.0149	0.0066		5.53	0.00374	5.23	<0.00002	235	0.254	164	<0.00001	<0.005	<0.005	0.00349	0.0058	0.0099	<0.0001	1.9
RSEM-R6W-EOP	12/2/2020 13:20	YZ1567	M	C089572	0.00079	<0.01	<0.0002	0.0844	31.9	0.003	<0.0000019	0.0154	0.0065		5.76	0.00346	5.88	<0.00002	237	0.28	167	<0.00001	<0.005	<0.005	0.00338	0.0056	0.0094	<0.0001	1.7
RSEM-R6W-EOP	12/3/2020 12:50	YZ2307	M	C089704	0.0008	<0.01	<0.0002	0.0898	33.5	0.0035	<0.0000019	0.0159	0.0065		5.80	0.00354	5.86	<0.00002	245	0.301	176	<0.00001	<0.005	<0.005	0.00344	0.0056	0.0094	<0.0001	1.1
RSEM-R6W-EOP	12/4/2020 13:40	YZ4238	M	C089912	0.00082	<0.01	<0.0002	0.0818	34.8	0.0039	<0.0000019	0.0156	0.0064		5.71	0.00395	5.72	<0.00002	252	0.308	185	<0.00001	<0.005	<0.005	0.00336	0.0055	0.0097	<0.0001	1.3
RSEM-R6W-EOP	12/5/2020 13:30	YZ8274	M	C090368	0.00079	<0.01	<0.0002	0.0925	35.3	0.0037	<0.0000019	0.0153	0.0061		5.63	0.00342	6.06	<0.00002	255	0.314	185	<0.00001	<0.005	<0.005	0.00342	0.0053	0.0095	<0.0001	1.3
RSEM-R6W-EOP	12/6/2020 13:10	YZ8306	M	C090376	0.00084	<0.01	<0.0002	0.0943	34.7	0.0032	<0.0000019	0.0156	0.0057		6.00	0.00338	6.08	<0.00002	257	0.334	191	<0.00001	<0.005	<0.005	0.00336	0.0051	0.0089	<0.0001	1.6
RSEM-R6W-EOP	12/7/2020 10:15	YZ8153	M	C090358	0.00087	<0.01	<0.0002	0.0961	35.1	0.003	<0.0000019	0.0156	0.0057		6.09	0.00338	6.21	<0.00002	264	0.336	190	<0.00001	<0.005	<0.005	0.00335	0.0051	0.0093	<0.0001	2.0
RSEM-R6W-EOP	12/8/2020 15:20	ZA2150	M	C091061	0.001	<0.01	<0.0002	0.0819	34.6	0.003	<0.0000019	0.0152	0.0062		6.09	0.00397	5.45	<0.00002	268	0.356	203	<0.00001	<0.005	<0.005	0.00335	0.0052	0.0099	<0.0001	3.9
RSEM-R6W-EOP	12/9/2020 15:40	ZA6285	M	C091815	0.00098	<0.01	<0.0002	0.0836	35.7	0.0029	<0.0000019	0.0155	0.0066		6.34	0.00432	5.49	<0.00002	274	0.342	201	<0.00001	<0.005	<0.005	0.00346	0.0054	0.0098	<0.0001	2.9
RSEM-R6W-EOP	12/10/2020 14:40	ZA6278	M	C091812	0.00104	<0.01	<0.0002	0.0815	35.8	0.0031	<0.0000019	0.016	0.007		6.30	0.00439	5.49	<0.00002	279	0.345	200	0.00001	<0.005	<0.005	0.00351	0.0054	0.0101	<0.0001	2.4
RSEM-R6W-EOP	12/11/2020 23:50	ZA6281	M	C091813	0.00106	<0.01	<0.0002	0.0856	36.0	0.0033	<0.0000019	0.0161	0.0075		6.36	0.00459	5.5	<0.00002	278	0.343	200	<0.00001	<0.005	<0.005	0.00355	0.0054	0.0101	<0.0001	3.1
RSEM-R6W-EOP	12/13/2020 15:20	ZA8557	M	C092267	0.00105	<0.01	<0.0002	0.0915	36.9	0.0066	<0.0000019	0.0165	0.0096		6.16	0.00484	5.01	<0.00002	284	0.366	203	0.000011	<0.005	<0.005	0.00366	<0.005	0.0089	<0.0001	1.7
RSEM-R6W-EOP	12/13/2020 17:10	ZA8524	M	C092261	0.00098	<0.01	<0.0002	0.0875	36.1	0.0051	0.0000028	0.016	0.0077		6.13	0.00459	5.26	<0.00002	280	0.343	199	0.000011	<0.005	<0.005	0.00361	0.0051	0.0085	<0.0001	2.1
RSEM-R6W-EOP	12/14/2020 13:10	ZA8429	M	C092250	0.00115	<0.01	<0.0002	0.0918	38.0	0.0074	<0.0000019	0.0166	0.0144		6.50	0.00555	5.16	<0.00002	289	0.385	214	0.000012	<0.005	<0.005	0.0038	<0.005	0.011	<0.0001	3.0
RSEM-R6W-EOP	12/15/2020 15:30	ZB1649	M	C092932	0.00115	<0.01	<0.0002	0.112	38.5	0.0068	<0.0000019	0.0163	0.0182		6.71	0.00651	5.23	<0.00002	290	0.413	222	0.000013	<0.005	<0.005	0.00391	0.0051	0.0116	<0.0001	2.4
RSEM-R6W-EOP	12/16/2020 14:20	ZB3422	M	C093364	0.00105	<0.01	<0.0002	0.113	37.2	0.0048	<0.0000019	0.0168	0.018		6.78	0.00671	4.98	<0.00002	276	0.448	209	0.000013	<0.005	<0.005	0.00387	0.0052	0.0109	<0.0001	1.8
RSEM-R6W-EOP	12/17/2020 14:50	ZB5913	M	C093625	0.00104	<0.01	<0.0002	0.0995	38.1	0.005	<0.0000019	0.0166	0.0177		6.91	0.0071	5.21	<0.00002	273	0.432	223	0.000013	<0.005	<0.005	0.00385	0.0053	0.0107	<0.0001	1.8
RSEM-R6W-EOP	12/18/2020 13:35	ZB5853	M	C093610	0.00104	<0.01	<0.0002	0.0984	38.9	0.0043	<0.0000019	0.0169	0.0161		6.90	0.00704	5.43	<0.00002	265	0.443	217	0.000012	<0.005	<0.005	0.00385	0.0055	0.0108	<0.0001	2.3
RSEM-R6W-EOP	12/19/2020 13:00	ZB8419	M	C094046	0.001	<0.01	<0.0002	0.0978	38.8	0.0036	<0.0000019	0.0168	0.0142		6.69	0.00594	5.48	<0.00002	257	0.413	216	0.000011	<0.005	<0.005	0.00379	0.0059	0.0103	<0.0001	2.2
RSEM-R6W-EOP	12/20/2020 13:05	ZB8515	M	C094070	0.00098	<0.01	<0.0002	0.0913	37.8	0.003	0.0000021	0.0164	0.012		6.69	0.00554	5.37	<0.00002	248	0.389	208	0.000011	<0.005	<0.005	0.00373	0.0064	0.0103	<0.0001	2.5
RSEM-R6W-EOP	12/21/2020 10:50	ZB8329	M	C094023	0.00095	<0.01	<0.0002	0.0858	36.3	0.0025	<0.0000019	0.0162	0.01		6.24	0.0047	5.27	<0.00002	240	0.373	191	0.000011	<0.005	<0.005	0.00361	0.0065	0.0098	<0.0001	3.0
RSEM-R6W-EOP	12/22/2020 11:40	ZC0504	M	C094296	0.00088	<0.01	<0.0002	0.0858	33.5	0.0026	<0.0000019	0.0152	0.0084		5.81	0.00444	5.1	<0.00002	226	0.329	176	<0.00001	<0.005	<0.005	0.00335	0.0065	0.0094	<0.0001	4.0
RSEM-R6W-EOP	12/23/2020 13:10	ZC1951	M	C094642	0.00088	<0.01	<0.0002	0.0768	31.3	0.0018	<0.0000019	0.014	0.0071		5.29	0.00434	5	<0.00002	213	0.294	160	0.00001	<0.005	<0.005	0.00319	0.0065	0.0089	<0.0001	3.9
RSEM-R6W-EOP	12/24/2020 9:50	ZC3452	M	C094856	0.00085	<0.01	<0.0002	0.0741	31.2	0.0018	<0.0000019	0.0137	0.0065		5.04	0.00385	5.11	<0.00002	211	0.293	154	0.000016	<0.005	<0.005	0.00315	0.0066	0.009	<0.0001	2.3
RSEM-R6W-EOP	12/25/2020 15:10	ZC3694	M	C094909	0.00079	<0.01	<0.0002	0.0753	29.8	0.0015	<0.0000019	0.0126	0.0056		4.75	0.00347	5.05	<0.00002	198	0.271	142	0.000012	<0.005	<0.005	0.00303	0.0065	0.0089	<0.0001	2.6
RSEM-R6W-EOP	12/26/2020 16:10	ZC3700	M	C094911	0.00072	<0.01	<0.0002	0.0737	28.8	0.0017	<0.0000019	0.012	0.0052		4.39	0.00327	5.1	<0.00002	189	0.261	134	<0.00001	<0.005	<0.005	0.00298	0.0062	0.0083	<0.0001	2.8
RSEM-R6W-EOP	12/27/2020 16:30	ZC4644	M	C095191	0.00068	<0.01	<0.0002	0.0763	28.7	<0.001	<0.0000019	0.0117	0.0059		4.27	0.00332	4.47	<0.00002	196	0.263	129	<0.00001	<0.005	<0.005	0.00299	0.0064	0.008	<0.0001	2.3
RSEM-R6W-EOP	12/28/2020 9:40	ZC4619	M	C095179	0.00069	<0.01	<0.0002	0.0752	29.2	<0.001	<0.0000019	0.0114	0.0064		4.33	0.0034	4.33	<0.00002	197	0.267	136	<0.00001	<0.005	<0.005	0.003	0.0063	0.0081	<0.0001	2.3
RSEM-R6W-EOP	12/29/2020 13:45	ZC5603	M	C095537	0.00069	<0.01	<0.0002	0.0764	31.1	0.0027	<0.0000019	0.0116	0.0063		4.38	0.00353	5.03	<0.00002	202	0.271	150	<0.00001	<0.005	<0.005	0.0031	0.0062	0.0083	<0.0001	2.1
RSEM-R6W-EOP	12/30/2020 14:45	ZC6412	M	C100028	0.00063	<0.01	<0.0002	0.0738	30.1	0.0024	<0.0000019	0.0109	0.0059		4.07	0.00323	4.22	<0.00002	196	0.269	135	<0.00001	<0.005	<0.005	0.0029	0.006	0.008	<0.0001	2.1
RSEM-R6W-EOP	12/31/2020 14:35	ZC6409	M	C100027	0.00065	0.046	<0.0002	0.0724	31.0	0.0027	<0.0000019	0.0107	0.0068		4.17	0.00328	4.38	<0.00002	205	0.273	141	<0.00001	<0.005	<0.005	0.00302	0.006	0.0087	<0.0001	2.2
RSEM-R6W-SP	4/22/2020 15:05	XR6358	M	C027799	0.00092	<0.01	<0.0002	0.0174	7.51	<0.001	<0.0000019	0.0139	<0.001		4.20	0.00166	2.56	<0.00002	92.9	0.153	32.9	<0.00001	<0.005	<0.005	0.00115	<0.005	0.0053	<0.0001	26
RSEM-R6W-SP	4/26/2020 13:05	XR8993	M	C028429	0.00217	0.49	0.0003	0.0189	6.97	0.0143	<0.0000019	0.0133	0.0019		4.58	0.00191	4.82	<0.00002	88.7	0.157	35.3	<0.00001	<0.005	0.0216	0.00104	0.0054	<0.005	<0.0001	19
West-Buffer-Creek	4/28/2020 17:35	XS1883	M	C029097	0.00189	5.94	<0.0002	0.032	58.7	2.26	<0.0000019	<0.001	0.107		3.23	0.00042	1.07	<0.00002	152	0.663	341	0.000015	<0.005	<0.005	0.00045	<0.005	0.213	0.00022	12

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: 2020 Analytical Field Blank Water Quality Data

PEACE RIVER
HYDRO PARTNERS

Appendix 3-D: 2020 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	1/1/2020 15:40	XE7144	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/2/2020 11:55	XE7179	5.06	<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	<0.014	<0.0030
FIELDBLANK	1/3/2020 13:00	XE8697	5.83	<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	1/4/2020 14:40	XE9885	5.13	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.60	<0.050	<0.010	<1.0	<0.015				<0.0030
FIELDBLANK	1/5/2020 13:00	XE9853	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/6/2020 13:10	XF0707	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	<0.015				<0.0030
FIELDBLANK	1/7/2020 14:00	XF1932	5.15	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.55	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/8/2020 13:50	XF3042	5.21	<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	<0.014	<0.0030
FIELDBLANK	1/9/2020 11:40	XF4214	4.91	<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	<0.014	<0.0030
FIELDBLANK	1/10/2020 13:50	XF5142	5.74	<2.0	<0.10		<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	1/11/2020 12:00	XF5748	4.96	<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	<0.014	<0.0030
FIELDBLANK	1/12/2020 13:00	XF5772	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/13/2020 11:45	XF7160	5.31	<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	<0.014	<0.0030
FIELDBLANK	1/14/2020 12:00	XF8100	5.05	<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	<0.014	<0.0030
FIELDBLANK	1/15/2020 12:55	XF9571	5.24	<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	<0.014	0.0038
FIELDBLANK	1/16/2020 13:20	XG0617	4.59	<2.0	<0.10	<10	1.1	<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	1/17/2020 10:40	XG0613	5.25	<2.0	<0.10	22	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.51	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/18/2020 13:35	XG2775	4.35	<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	<0.014	<0.0030
FIELDBLANK	1/19/2020 17:00	XG2759	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/20/2020 10:35	XG2704	5.31	<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	<0.014	<0.0030
FIELDBLANK	1/21/2020 14:30	XG5824	5.20	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.64	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/22/2020 16:10	XG7454	5.22	<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	<0.014	<0.0030
FIELDBLANK	1/23/2020 15:40	XG9562	5.02	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.61	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/24/2020 11:00	XG9568	5.23	<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	<0.014	<0.0030
FIELDBLANK	1/25/2020 11:50	XH2063	5.23	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/26/2020 14:40	XH2027	4.87	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/27/2020 14:00	XH3886	5.21	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.52	<0.050	<0.010	<1.0	<0.015				<0.0030
FIELDBLANK	1/28/2020 13:05	XH5360	5.27	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.54	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/29/2020 12:00	XH6912	6.60	<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	<0.014	<0.0030
FIELDBLANK	1/30/2020 13:35	XH8748	5.49	<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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	1/31/2020 13:25	XH9851	4.98	<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	2/1/2020 11:55	XI1804	5.33	<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	<0.014	0.0039
FIELDBLANK	2/2/2020 14:10	XI1834	5.37	<2.0	<0.10	<10	1.1	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.91	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/3/2020 12:40	XI3481	5.23	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.55	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/4/2020 12:10	XI3462	5.13	<2.0	<0.10	<10	<1.0	7.12	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.96	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/5/2020 13:15	XI6887	5.45	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.2	<1.0	1.4	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	0.040	0.040	<0.0030
FIELDBLANK	2/6/2020 12:20	XI8759	5.23	<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	<0.014	<0.0030
FIELDBLANK	2/7/2020 11:35	XI8781	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	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/8/2020 12:10	XJ1672	5.22	<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	<0.014	<0.0030
FIELDBLANK	2/9/2020 13:30	XJ1692	4.91	<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	<0.014	<0.0030
FIELDBLANK	2/10/2020 11:30	XJ1716	4.91	<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	<0.014	<0.0030
FIELDBLANK	2/11/2020 15:20	XJ6271	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	<0.014	<0.0030
FIELDBLANK	2/12/2020 15:10	XJ8071	4.94	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.57	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/13/2020 14:10	XJ9467	5.20	<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	<0.014	<0.0030
FIELDBLANK	2/14/2020 11:20	XJ9492	4.13	<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	<0.014	<0.0030
FIELDBLANK	2/15/2020 12:00	XK0371	5.57	<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	2/16/2020 13:50	XK3306	5.69	<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	<0.014	0.0030
FIELDBLANK	2/17/2020 16:10	XK3288	5.29	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.1	<1.0	1.4	<1.0	<1.0	0.70	<0.050	<0.010	<1.0	<0.015				<0.0030
FIELDBLANK	2/18/2020 13:00	XK4684	5.69	<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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/19/2020 11:55	XK6001	5.20	<2.0	<0.10	<10	1.3	<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	2/20/2020 12:50	XK7911	4.73	<2.0	0.12	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.76	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/21/2020 12:00	XK7933	5.08	<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	<0.014	<0.0030
FIELDBLANK	2/22/2020 13:40	XL1357	5.11	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.92	<0.050	<0.010	<1.0	<0.015	0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/23/2020 12:00	XL1344	5.30	<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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/24/2020 10:50	XL1316	7.26	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.54	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	2/25/2020 11:20	XL5024	5.56	<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	<0.014	<0.0030
FIELDBLANK	2/26/2020 11:10	XL6613	5.23	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.61	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030

Appendix 3-D: 2020 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	2/27/2020 11:00	XL6656	5.33	<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	<0.014	<0.0030
FIELDBLANK	2/28/2020 11:30	XL8819	5.63	<2.0	<0.10	<10	1.1	<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	2/29/2020 13:50	XM2601	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	<0.014	<0.0030
FIELDBLANK	3/1/2020 12:10	XM2633	5.30	<2.0	<0.10	<10	1.3	<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	3/2/2020 19:40	XM6321	5.12	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.62	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	0.0061
FIELDBLANK	3/3/2020 11:40	XM6547	4.95	<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	<0.014	<0.0030
FIELDBLANK	3/4/2020 16:10	XM8003	4.96	<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	<0.014	<0.0030
FIELDBLANK	3/5/2020 15:10	XN0419	4.80	<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	<0.014	<0.0030
FIELDBLANK	3/6/2020 11:10	XN0415	4.96	<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	<0.014	<0.0030
FIELDBLANK	3/7/2020 11:10	XN3071	4.77	<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	<0.014	<0.0030
FIELDBLANK	3/8/2020 11:20	XN2024	5.39	<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	<0.014	<0.0030
FIELDBLANK	3/9/2020 14:30	XN3892	5.06	<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	<0.014	<0.0030
FIELDBLANK	3/10/2020 13:05	XN6091	4.26	<2.0	<0.10	<10	1.1	<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	3/11/2020 14:45	XN7893	5.77	<2.0	0.13	<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	<0.014	<0.0030
FIELDBLANK	3/12/2020 12:20	XN8896	5.23	<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	<0.014	<0.0030
FIELDBLANK	3/13/2020 11:50	XN9531	4.68	<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	3/14/2020 12:45	XO0538	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	3/15/2020 13:20	XO0655	4.86	<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	<0.014	<0.0030
FIELDBLANK	3/16/2020 13:10	XO2544	5.15	<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	<0.014	<0.0030
FIELDBLANK	3/17/2020 12:25	XO3908	4.98	<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	<0.014	0.0036
FIELDBLANK	3/18/2020 12:00	XO5559	5.76	<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	<0.014	<0.0030
FIELDBLANK	3/19/2020 11:50	XO7001	5.07	<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	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	3/20/2020 12:35	XO7004	5.19	<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	0.054	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	3/21/2020 11:50	XO8299	4.41	<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	<0.014	<0.0030
FIELDBLANK	3/22/2020 11:40	XO8421	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	0.078	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	3/23/2020 11:25	XO8464	4.79	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.55	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	0.0045
FIELDBLANK	3/24/2020 13:00	XP0442	5.54	<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	1.6	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	3/25/2020 12:40	XP1313	6.03	<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	<0.014	<0.0030
FIELDBLANK	3/26/2020 14:00	XP2432	5.80	<2.0	<0.10	<10	1.1	<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	<0.014	<0.0030
FIELDBLANK	3/27/2020 10:40	XP2502	5.84	<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	<0.014	<0.0030
FIELDBLANK	3/28/2020 14:00	XP3711	5.70	<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	<0.010	<0.014	<0.0030
FIELDBLANK	3/31/2020 12:20	XP6325	5.44	<2.0	0.16	<10	<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	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/1/2020 12:30	XP6346	4.62	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.53	<0.050	<0.010	<1.0	0.018	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/2/2020 11:20	XP7673	5.40	<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	0.018	<0.010	<0.010	<0.014	0.0038
FIELDBLANK	4/3/2020 11:30	XP9113	5.40	<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				<0.0030
FIELDBLANK	4/4/2020 11:50	XQ0609	5.64	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.56	<0.050	<0.010	<1.0	<0.015	<0.010	0.015	0.015	<0.0030
FIELDBLANK	4/5/2020 12:40	XQ0579	5.19	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.58	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/6/2020 12:45	XQ1947	5.59	<2.0	<0.10	<10	<1.0	0.57	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.71	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/7/2020 12:10	XQ3414	6.06	<2.0	<0.10	<10	1.9	<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	4/8/2020 11:50	XQ4589	6.05	<2.0	<0.10	<10	1.9	0.72	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.57	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/9/2020 11:20	XQ4585	5.26	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.64	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/10/2020 11:50	XQ5869	4.33	<2.0	<0.10	<10	<1.0	0.70	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.63	<0.050	<0.010	<1.0	0.062	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/11/2020 18:30	XQ5965	4.95	<2.0	<0.10	<10	<1.0	0.57	0.97	<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	4/12/2020 13:55	XQ6095	5.33	<2.0	<0.10	<10	<0.97	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.55	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/13/2020 10:30	XQ5691	5.52	<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	<0.014	<0.0030
FIELDBLANK	4/14/2020 11:05	XS8669																					
FIELDBLANK	4/14/2020 11:05	XQ8326	4.30	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.55	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/15/2020 13:25	XQ9339	5.44	<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	<0.014	<0.0030
FIELDBLANK	4/16/2020 12:50	XR0408	4.74	<2.0	<0.10	<10	<1.0	0.58	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.90	<0.050	<0.010	<1.0	<0.015	<0.010	0.020	0.020	<0.0030
FIELDBLANK	4/17/2020 10:50	XR0397	3.80	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.67	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/18/2020 10:50	XR2301	4.64	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.67	<0.050	<0.010	<1.0	0.074	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/20/2020 14:40	XR3424	5.22	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.76	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/21/2020 11:40	XR4952	5.38	<2.0	<0.10	<10	<1.0	0.57	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.80	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/22/2020 11:50	XR6355	5.15	<2.0	<0.10	<10	1.7	0.63	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.85	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/23/2020 12:00	XR7181	4.48	<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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/24/2020 11:25	XR7268	4.94	<2.0	<0.10	<10	<1.0	1.24	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.54	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/25/2020 11:25	XR8895	5.62	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.79	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030

Appendix 3-D: 2020 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	4/26/2020 12:10	XR8992	5.80	<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	<0.014	<0.0030
FIELDBLANK	4/27/2020 10:15	XS0058	4.92	<2.0	<0.10	<10	1.3	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.77	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/28/2020 12:35	XS2086	4.92	<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	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	4/29/2020 11:20	XS3518	5.31	<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	<0.014	<0.0030
FIELDBLANK	4/30/2020 11:00	XS4882	5.66	<2.0	<0.10	<10	1.3	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.79	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/1/2020 11:45	XS5997	4.73	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.86	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/2/2020 12:00	XS7462	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/3/2020 8:00	XS7391	5.27	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.94	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/6/2020 14:30	XT1602	4.80	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.70	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/9/2020 12:30	XT4489	5.45	<2.0	<0.10	<10	1.1	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.84	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/12/2020 13:15	XT7072	5.33	<2.0	<0.10	<10	1.4	<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	5/13/2020 13:40	XT8155	5.60	<2.0	<0.10	<10	<1.0	0.60	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.76	<0.050	0.014	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/14/2020 13:00	XU0100	4.94	<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	<0.014	<0.0030
FIELDBLANK	5/15/2020 9:25	XU0132	4.38	<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	<0.014	<0.0030
FIELDBLANK	5/16/2020 13:50	XU2652	4.21	<2.0	<0.10	<10	1.6	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.60	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/17/2020 12:30	XU2518	5.11	<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	<0.014	<0.0030
FIELDBLANK	5/18/2020 14:10	XU2639	5.02	<2.0	<0.10	<10	1.1	<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	5/19/2020 14:40	XU3587	4.63	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.59	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/20/2020 13:10	XU5560	5.36	<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	<0.014	<0.0030
FIELDBLANK	5/21/2020 12:15	XU6999	5.08	<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	<0.014	<0.0030
FIELDBLANK	5/22/2020 12:40	XU8401	5.66	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.1	<1.0	1.3	<1.0	<1.0	0.57	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/23/2020 14:00	XU8586	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/24/2020 13:20	XU8648	5.53	<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	<0.014	<0.0030
FIELDBLANK	5/25/2020 9:20	XU8666	5.50	<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	<0.014	<0.0030
FIELDBLANK	5/28/2020 14:50	XV5621	4.91	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.91	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	5/31/2020 13:30	XV8402	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/3/2020 13:10	XW5135	5.41	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.6	<1.0	2.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/4/2020 12:40	XW6863	4.72	<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	<0.014	<0.0030
FIELDBLANK	6/5/2020 17:00	XW9911	5.09	<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	<0.014	<0.0030
FIELDBLANK	6/6/2020 12:00	XX0127	4.53	<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	<0.014	<0.0030
FIELDBLANK	6/7/2020 12:40	XW9326	4.96	<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	<0.014	<0.0030
FIELDBLANK	6/8/2020 16:10	XX1069	5.01	<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	0.054	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/9/2020 15:50	XX3627	5.05	<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	<0.014	<0.0030
FIELDBLANK	6/10/2020 12:15	XX4752	5.18	<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	<0.014	<0.0030
FIELDBLANK	6/11/2020 14:00	XX7042	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/12/2020 14:25	XX9583	4.61	<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	<0.014	<0.0030
FIELDBLANK	6/13/2020 15:05	XX9601	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	<0.014	<0.0030
FIELDBLANK	6/14/2020 13:20	XX9645	3.99	<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	<0.014	<0.0030
FIELDBLANK	6/15/2020 15:15	XY1605	5.61	<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	<0.014	<0.0030
FIELDBLANK	6/20/2020 13:30	XY9030	5.19	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.57	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/22/2020 13:40	XZ0408	5.06	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	1.12	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/24/2020 12:00	XZ5351	5.31	<2.0	<0.10		<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.81	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/25/2020 15:50	XZ5984	5.42	<2.0	<0.10	<10	2.0	<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	<0.014	<0.0030
FIELDBLANK	6/27/2020 19:35	XZ9072	5.53	<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	<0.014	<0.0030
FIELDBLANK	6/28/2020 13:00	XZ9161	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	6/29/2020 15:20	YA0782	5.61	<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	<0.014	<0.0030
FIELDBLANK	6/30/2020 14:10	YA2740	5.79	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.77	<0.050	<0.010	<1.0	0.019	<0.010	<0.010	<0.014	0.0030
FIELDBLANK	7/1/2020 12:00	YA2709	4.73	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.80	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	7/2/2020 13:50	YA4190	5.94	<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	<0.014	<0.0030
FIELDBLANK	7/4/2020 13:05	YA6733	5.78	<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	<0.014	0.0043
FIELDBLANK	7/5/2020 10:35	YA6919	5.94	<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	<0.014	<0.0030
FIELDBLANK	7/10/2020 10:20	YB4119	6.30	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.3	<1.0	1.6	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	7/15/2020 13:15	YC2140	5.26	<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	<0.014	<0.0030
FIELDBLANK	7/17/2020 14:05	YC5483	4.90	<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	7/19/2020 12:50	YC7535	6.09	<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	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	7/21/2020 14:05	YD0797	5.96	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.5	<1.0	1.9	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	7/23/2020 15:00	YD4258	5.42	<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	<0.014	<0.0030

Appendix 3-D: 2020 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	7/26/2020 14:35	YD7715	6.04	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.63	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	7/31/2020 12:00	YE5653	6.03	<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	<0.014	<0.0030
FIELDBLANK	8/5/2020 12:50	YF2979	4.27	<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	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	8/7/2020 12:25	YF4859	5.53	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.2	<1.0	1.5	<1.0	<1.0	0.63	<0.050	<0.010	<1.0	<0.015			<0.010	0.0398
FIELDBLANK	8/9/2020 14:30	YF8363	5.97	<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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	8/11/2020 13:30	YG2368	5.28	<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	<0.014	<0.0030
FIELDBLANK	8/13/2020 13:50	YG7263	5.33	<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	8/15/2020 15:00	YH0062	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	8/24/2020 13:30	YI2201	5.40	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.65	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	8/25/2020 12:40	YI3997	6.36	2.4	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.72	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	8/27/2020 13:00	YI7775	6.40	4.1	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.55	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	0.0031
FIELDBLANK	9/2/2020 15:45	YJ7834	5.20	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.53	<0.050	<0.010	<1.0	0.016	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/3/2020 15:35	YK0034	5.34	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.53	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/5/2020 13:40	YK1347	5.36	<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	9/6/2020 11:20	YK2532	5.86	<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	<0.014	<0.0030
FIELDBLANK	9/10/2020 11:30	YK8216	5.95	<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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/12/2020 14:00	YL1187	5.96	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.5	<1.0	1.9	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	9/15/2020 15:10	YL6688	5.87	<2.0	<0.10	12	<1.0	<0.50	<0.50	1.5	<1.0	1.8	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/17/2020 13:20	YL8050	5.98	3.4	<0.10	<10	<1.0	<0.50	<0.50	1.6	<1.0	1.9	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/19/2020 13:00	YM3345	6.01	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.4	<1.0	1.8	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/21/2020 13:00	YM6394	5.78	2.7	<0.10	<10	<1.0	<0.50	<0.50	1.2	<1.0	1.4	<1.0	<1.0	0.64	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	9/23/2020 16:40	YN0390	5.67	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.1	<1.0	1.4	<1.0	<1.0	<0.50	<0.050	<0.010	1.8	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/25/2020 13:40	YN2675	5.72	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.2	<1.0	1.5	<1.0	<1.0	0.72	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	9/27/2020 16:30	YN7531	4.80	<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	<0.014	<0.0030
FIELDBLANK	10/1/2020 11:45	YO6614	5.31	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.71	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	10/4/2020 16:30	YP0013	5.18	<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	10/6/2020 15:20	YP5780	5.34	<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	<0.014	<0.0030
FIELDBLANK	10/8/2020 11:40	YP9904	5.90	<2.0	<0.10	68	<1.0	<0.50	<0.50	1.8	<1.0	2.2	<1.0	<1.0	0.72	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	0.0033
FIELDBLANK	10/10/2020 12:20	YQ1629	4.95	<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	10/12/2020 14:00	YQ4368	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	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	10/14/2020 15:20	YQ9245	5.01	<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	<0.014	<0.0030
FIELDBLANK	10/16/2020 12:20	YR1523	5.33	<2.0	<0.10	<10	1.8	<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	10/18/2020 13:15	YR5382	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	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	10/22/2020 12:10	YS3857	5.22	<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	<0.014	<0.0030
FIELDBLANK	10/26/2020 14:15	YT0279	5.76	<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	<0.014	<0.0030
FIELDBLANK	10/31/2020 14:10	YU1486	5.04	<2.0				<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	11/3/2020 14:30	YU4783	5.34	<2.0	<0.10	16	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.62	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/5/2020 13:40	YU9365	4.85	<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	<0.014	<0.0030
FIELDBLANK	11/7/2020 13:30	YV3093	5.41	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.5	<1.0	1.9	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/9/2020 10:50	YV4613	5.58	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.52	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/11/2020 13:10	YV8318	5.45	<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	<0.014	<0.0030
FIELDBLANK	11/13/2020 10:00	YV9730	5.53	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.60	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/15/2020 12:50	YW2811	4.85	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.70	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/19/2020 14:00	YX1122	5.38	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.56	<0.050	<0.010	<1.0	0.016	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/22/2020 13:30	YX3967	5.01	<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	<0.014	<0.0030
FIELDBLANK	11/24/2020 14:15	YX7835	4.90	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	0.024	<0.010	<0.010	<0.014	0.0030
FIELDBLANK	11/26/2020 12:00	YY2049	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	0.026	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/28/2020 13:20	YY5270	5.21	<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	<0.014	<0.0030
FIELDBLANK	11/30/2020 14:30	YY7389	4.95	<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	<0.014	<0.0030
FIELDBLANK	12/2/2020 13:30	YZ1568	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	<0.014	<0.0030
FIELDBLANK	12/4/2020 13:50	YZ4239	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	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	12/6/2020 13:20	YZ8307	5.45	<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	0.030	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	12/11/2020 11:30	ZA6279	5.33	<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	<0.014	<0.0030
FIELDBLANK	12/15/2020 15:40	ZB1650	5.41	2.4	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.61	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/17/2020 15:00	ZB5914	5.30	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.51	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	12/20/2020 13:15	ZB8516	5.17	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.51	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	12/24/2020 9:20	ZC3449	5.06	<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	0.048	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	12/27/2020 4:00	ZC4642	4.89	<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	<0.014	<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: 2020 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-K	T-Se
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	1/1/2020 15:40	XE7144	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.062	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/2/2020 11:55	XE7179	<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	0.0000026	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/3/2020 13:00	XE8697	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.052	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	0.0000032	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/4/2020 14:40	XE9885	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.062	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/5/2020 13:00	XE9853	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/6/2020 13:10	XF0707	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/7/2020 14:00	XF1932	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/8/2020 13:50	XF3042	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/9/2020 11:40	XF4214	0.54	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/10/2020 13:50	XF5142	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/11/2020 12:00	XF5748	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/12/2020 13:00	XF5772	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/13/2020 11:45	XF7160	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/14/2020 12:00	XF8100	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.051	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/15/2020 12:55	XF9571	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/16/2020 13:20	XG0617	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/17/2020 10:40	XG0613	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/18/2020 13:35	XG2775	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/19/2020 17:00	XG2759	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/20/2020 10:35	XG2704	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/21/2020 14:30	XG5824	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.051	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/22/2020 16:10	XG7454	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/23/2020 15:40	XG9562	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/24/2020 11:00	XG9568	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/25/2020 11:50	XH2063	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/26/2020 14:40	XH2027	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/27/2020 14:00	XH3886	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/28/2020 13:05	XH5360	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000014	0.075	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/29/2020 12:00	XH6912	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/30/2020 13:35	XH8748	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	1/31/2020 13:25	XH9851	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/1/2020 11:55	XI1804	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/2/2020 14:10	XI1834	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/3/2020 12:40	XI3481	<0.50	0.74	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/4/2020 12:10	XI3462	<0.50	<0.50	0.0195	<0.0005	<0.0001	0.0274	<0.0001	<0.001	<0.05	<0.00001	2.69	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	0.098	<0.001	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/5/2020 13:15	XI6887	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/6/2020 12:20	XI8759	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/7/2020 11:35	XI8781	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/8/2020 12:10	XJ1672	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/9/2020 13:30	XJ1692	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/10/2020 11:30	XJ1716	<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	<0.000002	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/11/2020 15:20	XJ6271	<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	<0.050	<0.0001
FIELDBLANK	2/12/2020 15:10	XJ8071	<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	<0.050	<0.0001
FIELDBLANK	2/13/2020 14:10	XJ9467	<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	<0.050	<0.0001
FIELDBLANK	2/14/2020 11:20	XJ9492	<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	<0.050	<0.0001
FIELDBLANK	2/15/2020 12:00	XK0371	<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	<0.050	<0.0001
FIELDBLANK	2/16/2020 13:50	XK3306	<0.50	0.64	<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	<0.050	<0.0001
FIELDBLANK	2/17/2020 16:10	XK3288	<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	<0.050	<0.0001
FIELDBLANK	2/18/2020 13:00	XK4684	<0.50	<0.50	0.0051	<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	<0.050	<0.0001
FIELDBLANK	2/19/2020 11:55	XK6001	<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	<0.050	<0.0001
FIELDBLANK	2/20/2020 12:50	XK7911	<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	<0.050	<0.0001
FIELDBLANK	2/21/2020 12:00	XK7933	<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	<0.050	<0.0001
FIELDBLANK	2/22/2020 13:40	XL1357	<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	<0.050	<0.0001
FIELDBLANK	2/23/2020 12:00	XL1344	<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	<0.050	<0.0001
FIELDBLANK	2/24/2020 10:50	XL1316	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.051	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	2/25/2020 11:20	XL5024	<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	<0.050	<0.0001
FIELDBLANK	2/26/2020 11:10	XL6613	<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	<0.050	<0.0001

Appendix 3-D: 2020 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-K	T-Se
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	2/27/2020 11:00	XL6656	<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	<0.050	<0.0001
FIELDBLANK	2/28/2020 11:30	XL8819	<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	<0.050	<0.0001
FIELDBLANK	2/29/2020 13:50	XM2601	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.057	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	3/1/2020 12:10	XM2633	<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	<0.050	<0.0001
FIELDBLANK	3/2/2020 19:40	XM6321	0.51	<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	<0.050	<0.0001
FIELDBLANK	3/3/2020 11:40	XM6547	<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	<0.050	<0.0001
FIELDBLANK	3/4/2020 16:10	XM8003	<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	<0.050	<0.0001
FIELDBLANK	3/5/2020 15:10	XN0419	<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	<0.050	<0.0001
FIELDBLANK	3/6/2020 11:10	XN0415	<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	<0.050	<0.0001
FIELDBLANK	3/7/2020 11:10	XN3071	<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	<0.050	<0.0001
FIELDBLANK	3/8/2020 11:20	XN2024	<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	<0.050	<0.0001
FIELDBLANK	3/9/2020 14:30	XN3892	<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	<0.050	<0.0001
FIELDBLANK	3/10/2020 13:05	XN6091	<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	<0.050	<0.0001
FIELDBLANK	3/11/2020 14:45	XN7893	<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	<0.050	<0.0001
FIELDBLANK	3/12/2020 12:20	XN8896	<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	<0.050	<0.0001
FIELDBLANK	3/13/2020 11:50	XN9531	<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	<0.050	<0.0001
FIELDBLANK	3/14/2020 12:45	XO0538	<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	<0.050	<0.0001
FIELDBLANK	3/15/2020 13:20	XO0655	<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	<0.050	<0.0001
FIELDBLANK	3/16/2020 13:10	XO2544	<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	<0.050	<0.0001
FIELDBLANK	3/17/2020 12:25	XO3908	<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	<0.050	<0.0001
FIELDBLANK	3/18/2020 12:00	XO5559	<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	<0.050	<0.0001
FIELDBLANK	3/19/2020 11:50	XO7001	<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	<0.050	<0.0001
FIELDBLANK	3/20/2020 12:35	XO7004	<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	<0.050	<0.0001
FIELDBLANK	3/21/2020 11:50	XO8299	<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	<0.050	<0.0001
FIELDBLANK	3/22/2020 11:40	XO8421	<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	<0.050	<0.0001
FIELDBLANK	3/23/2020 11:25	XO8464	<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	<0.050	<0.0001
FIELDBLANK	3/24/2020 13:00	XP0442	<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	<0.050	<0.0001
FIELDBLANK	3/25/2020 12:40	XP1313	<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	<0.050	<0.0001
FIELDBLANK	3/26/2020 14:00	XP2432	<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	<0.050	<0.0001
FIELDBLANK	3/27/2020 10:40	XP2502	0.66	<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	<0.050	<0.0001
FIELDBLANK	3/28/2020 14:00	XP3711	<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	<0.050	<0.0001
FIELDBLANK	3/31/2020 12:20	XP6325	<0.50	<0.50	0.0037	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.137	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/1/2020 12:30	XP6346	<0.50	<0.50	0.0041	<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	<0.050	<0.0001
FIELDBLANK	4/2/2020 11:20	XP7673	<0.50	<0.50	0.004	<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	<0.050	<0.0001
FIELDBLANK	4/3/2020 11:30	XP9113	<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	<0.050	<0.0001
FIELDBLANK	4/4/2020 11:50	XQ0609	<0.50	<0.50	0.005	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.079	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/5/2020 12:40	XQ0579	<0.50	<0.50	0.0035	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.053	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/6/2020 12:45	XQ1947	<0.50	<0.50	<0.003	<0.0005	<0.0001	0.0013	<0.0001	<0.001	<0.05	<0.00001	0.229	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/7/2020 12:10	XQ3414	<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	<0.050	<0.0001
FIELDBLANK	4/8/2020 11:50	XQ4589	<0.50	<0.50	<0.003	<0.0005	<0.0001	0.0017	<0.0001	<0.001	<0.05	<0.00001	0.287	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/9/2020 11:20	XQ4585	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.152	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/10/2020 11:50	XQ5869	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.178	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	0.063	0.0011	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/11/2020 18:30	XQ5965	<0.50	<0.50	<0.003	<0.0005	0.00012	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.146	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/12/2020 13:55	XQ6095	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.152	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/13/2020 10:30	XQ5691	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.192	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/14/2020 11:05	XS8669											<0.05													
FIELDBLANK	4/14/2020 11:05	XQ8326	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.132	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/15/2020 13:25	XQ9339	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.169	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/16/2020 12:50	XR0408	<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	<0.050	<0.0001
FIELDBLANK	4/17/2020 10:50	XR0397	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.098	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/18/2020 10:50	XR2301	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.096	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/20/2020 14:40	XR3424	<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	0.0013	<0.001	<0.050	<0.0001
FIELDBLANK	4/21/2020 11:40	XR4952	<0.50	<0.50	<0.003	<0.0005	<0.0001	0.0017	<0.0001	<0.001	<0.05	<0.00001	0.131	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	0.058	0.0018	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/22/2020 11:50	XR6355	<0.50	<0.50	0.0059	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000013	0.119	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	0.082	0.0018	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/23/2020 12:00	XR7181	<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	0.0013	<0.050	<0.0001
FIELDBLANK	4/24/2020 11:25	XR7268	<0.50	<0.50	0.0031	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000011	0.166	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	0.059	<0.001	<0.0000019	<0.001	0.0017	<0.050	<0.0001
FIELDBLANK	4/25/2020 11:25	XR8895	<0.50	<0.50	0.0048	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.076	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001

Appendix 3-D: 2020 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-K	T-Se
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	4/26/2020 12:10	XR8992	<0.50	<0.50	0.0047	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.058	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/27/2020 10:15	XS0058	<0.50	<0.50	0.0035	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.077	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/28/2020 12:35	XS2086	<0.50	<0.50	0.0049	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.075	0.0012	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	4/29/2020 11:20	XS3518	<0.50	<0.50	0.0051	<0.0005	<0.0001	0.0014	<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	<0.050	<0.0001
FIELDBLANK	4/30/2020 11:00	XS4882	<0.50	<0.50	<0.003	<0.0005	<0.0001	0.0011	<0.0001	<0.001	<0.05	<0.00001	<0.050	0.0017	<0.0002	0.00053	<0.01	<0.0002	<0.002	<0.050	0.0011	<0.0000019	<0.001	<0.001	0.062	<0.0001
FIELDBLANK	5/1/2020 11:45	XS5997	0.65	<0.50	<0.003	<0.0005	<0.0001	0.0013	<0.0001	<0.001	<0.05	<0.00001	0.163	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	0.0014	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/2/2020 12:00	XS7462	<0.50	<0.50	<0.003	<0.0005	<0.0001	0.0011	<0.0001	<0.001	<0.05	<0.00001	0.174	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/3/2020 8:00	XS7391	<0.50	<0.50	<0.003	<0.0005	0.00014	0.0018	<0.0001	<0.001	<0.05	<0.00001	0.128	0.0011	<0.0002	0.00067	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.075	<0.0001
FIELDBLANK	5/6/2020 14:30	XT1602	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.111	<0.001	<0.0002	<0.0005	0.012	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/9/2020 12:30	XT4489	<0.50	<0.50	0.0038	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.051	<0.001	<0.0002	<0.0005	0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/12/2020 13:15	XT7072	<0.50	<0.50	0.0034	<0.0005	<0.0001	0.0015	<0.0001	<0.001	<0.05	<0.00001	0.079	0.0019	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/13/2020 13:40	XT8155	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.240	0.0011	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/14/2020 13:00	XU0100	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.062	<0.001	<0.0002	<0.0005	0.011	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/15/2020 9:25	XU0132	<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	<0.050	<0.0001
FIELDBLANK	5/16/2020 13:50	XU2652	<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	0.157	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/17/2020 12:30	XU2518	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.057	<0.001	<0.0002	<0.0005	0.012	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/18/2020 14:10	XU2639	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.193	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/19/2020 14:40	XU3587	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.051	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/20/2020 13:10	XU5560	<0.50	<0.50	0.0067	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	0.013	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	5/21/2020 12:15	XU6999	<0.50	<0.50	0.0037	<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	0.0023	<0.050	<0.0001
FIELDBLANK	5/22/2020 12:40	XU8401	<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	<0.050	<0.0001
FIELDBLANK	5/23/2020 14:00	XU8586	<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	<0.050	<0.0001
FIELDBLANK	5/24/2020 13:20	XU8648	<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	<0.050	<0.0001
FIELDBLANK	5/25/2020 9:20	XU8666	<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	<0.050	<0.0001
FIELDBLANK	5/28/2020 14:50	XV5621	<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	<0.050	<0.0001
FIELDBLANK	5/31/2020 13:30	XV8402	<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	<0.050	<0.0001
FIELDBLANK	6/3/2020 13:10	XW5135	<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	<0.050	<0.0001
FIELDBLANK	6/4/2020 12:40	XW6863	<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	<0.050	<0.0001
FIELDBLANK	6/5/2020 17:00	XW9911	<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	<0.050	<0.0001
FIELDBLANK	6/6/2020 12:00	XX0127	<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	<0.050	<0.0001
FIELDBLANK	6/7/2020 12:40	XW9326	<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	<0.050	<0.0001
FIELDBLANK	6/8/2020 16:10	XX1069	0.69	<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	<0.050	<0.0001
FIELDBLANK	6/9/2020 15:50	XX3627	<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	<0.050	<0.0001
FIELDBLANK	6/10/2020 12:15	XX4752	<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	<0.050	<0.0001
FIELDBLANK	6/11/2020 14:00	XX7042	<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	<0.050	<0.0001
FIELDBLANK	6/12/2020 14:25	XX9583	<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	<0.050	<0.0001
FIELDBLANK	6/13/2020 15:05	XX9601	<0.50	0.56	<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	<0.050	<0.0001
FIELDBLANK	6/14/2020 13:20	XX9645	<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	<0.050	<0.0001
FIELDBLANK	6/15/2020 15:15	XY1605	<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	<0.050	<0.0001
FIELDBLANK	6/20/2020 13:30	XY9030	<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	<0.050	<0.0001
FIELDBLANK	6/22/2020 13:40	XZ0408	<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	<0.050	<0.0001
FIELDBLANK	6/24/2020 12:00	XZ5351	<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	<0.050	<0.0001
FIELDBLANK	6/25/2020 15:50	XZ5984	<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	<0.050	<0.0001
FIELDBLANK	6/27/2020 19:35	XZ9072	<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	<0.050	<0.0001
FIELDBLANK	6/28/2020 13:00	XZ9161	<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	<0.050	<0.0001
FIELDBLANK	6/29/2020 15:20	YA0782	<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	<0.050	<0.0001
FIELDBLANK	6/30/2020 14:10	YA2740	<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	<0.050	<0.0001
FIELDBLANK	7/1/2020 12:00	YA2709	<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	<0.050	<0.0001
FIELDBLANK	7/2/2020 13:50	YA4190	<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	<0.050	<0.0001
FIELDBLANK	7/4/2020 13:05	YA6733	<2.0	<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	<0.050	<0.0001
FIELDBLANK	7/5/2020 10:35	YA6919	<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	<0.050	<0.0001
FIELDBLANK	7/10/2020 10:20	YB4119	<0.50	<1.0	<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	<0.050	<0.0001
FIELDBLANK	7/15/2020 13:15	YC2140	<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	<0.050	<0.0001
FIELDBLANK	7/17/2020 14:05	YC5483	<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	<0.050	<0.0001
FIELDBLANK	7/19/2020 12:50	YC7535	<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	<0.050	<0.0001
FIELDBLANK	7/21/2020 14:05	YD0797	<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	<0.050	<0.0001
FIELDBLANK	7/23/2020 15:00	YD4258	<0.50	<0.50	0.0087	<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	<0.050	<0.0001

Appendix 3-D: 2020 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-K	T-Se
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	7/26/2020 14:35	YD7715	<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	<0.050	<0.0001
FIELDBLANK	7/31/2020 12:00	YE5653	<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	<0.050	<0.0001
FIELDBLANK	8/5/2020 12:50	YF2979	<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	<0.050	<0.0001
FIELDBLANK	8/7/2020 12:25	YF4859	<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	<0.050	<0.0001
FIELDBLANK	8/9/2020 14:30	YF8363	<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	<0.050	<0.0001
FIELDBLANK	8/11/2020 13:30	YG2368	<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	<0.050	<0.0001
FIELDBLANK	8/13/2020 13:50	YG7263	<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	<0.050	<0.0001
FIELDBLANK	8/15/2020 15:00	YH0062	<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	<0.050	<0.0001
FIELDBLANK	8/24/2020 13:30	YI2201	<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	<0.050	<0.0001
FIELDBLANK	8/25/2020 12:40	YI3997	<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	<0.050	<0.0001
FIELDBLANK	8/27/2020 13:00	YI7775	<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	<0.050	<0.0001
FIELDBLANK	9/2/2020 15:45	YJ7834	<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	<0.050	<0.0001
FIELDBLANK	9/3/2020 15:35	YK0034	<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	<0.050	<0.0001
FIELDBLANK	9/5/2020 13:40	YK1347	<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	<0.050	<0.0001
FIELDBLANK	9/6/2020 11:20	YK2532	<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	<0.050	<0.0001
FIELDBLANK	9/10/2020 11:30	YK8216	<0.50	0.55	<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	<0.050	<0.0001
FIELDBLANK	9/12/2020 14:00	YL1187	<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	<0.050	<0.0001
FIELDBLANK	9/15/2020 15:10	YL6688	<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	<0.050	<0.0001
FIELDBLANK	9/17/2020 13:20	YL8050	<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	<0.050	<0.0001
FIELDBLANK	9/19/2020 13:00	YM3345	<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	<0.050	<0.0001
FIELDBLANK	9/21/2020 13:00	YM6394	<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	<0.050	<0.0001
FIELDBLANK	9/23/2020 16:40	YN0390	<0.50	<0.50	0.0043	<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	<0.050	<0.0001
FIELDBLANK	9/25/2020 13:40	YN2675	<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	<0.050	<0.0001
FIELDBLANK	9/27/2020 16:30	YN7531	<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	<0.050	<0.0001
FIELDBLANK	10/1/2020 11:45	YO6614	<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	<0.050	<0.0001
FIELDBLANK	10/4/2020 16:30	YP0013	<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	0.00023	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001
FIELDBLANK	10/6/2020 15:20	YP5780	<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	<0.050	<0.0001
FIELDBLANK	10/8/2020 11:40	YP9904	<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	<0.050	<0.0001
FIELDBLANK	10/10/2020 12:20	YQ1629	<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	<0.050	<0.0001
FIELDBLANK	10/12/2020 14:00	YQ4368	<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	<0.050	<0.0001
FIELDBLANK	10/14/2020 15:20	YQ9245	<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	<0.050	<0.0001
FIELDBLANK	10/16/2020 12:20	YR1523	<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	<0.050	<0.0001
FIELDBLANK	10/18/2020 13:15	YR5382	<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	<0.050	<0.0001
FIELDBLANK	10/22/2020 12:10	YS3857	<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	<0.050	<0.0001
FIELDBLANK	10/26/2020 14:15	YT0279	<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	<0.050	<0.0001
FIELDBLANK	10/31/2020 14:10	YU1486	<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	<0.050	<0.0001
FIELDBLANK	11/3/2020 14:30	YU4783	<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	<0.050	<0.0001
FIELDBLANK	11/5/2020 13:40	YU9365	<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	<0.050	<0.0001
FIELDBLANK	11/7/2020 13:30	YV3093	<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	<0.050	<0.0001
FIELDBLANK	11/9/2020 10:50	YV4613	<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	<0.050	<0.0001
FIELDBLANK	11/11/2020 13:10	YV8318	<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	<0.050	<0.0001
FIELDBLANK	11/13/2020 10:00	YV9730	<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	<0.050	<0.0001
FIELDBLANK	11/15/2020 12:50	YW2811	<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	<0.050	<0.0001
FIELDBLANK	11/19/2020 14:00	YX1122	<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	<0.050	<0.0001
FIELDBLANK	11/22/2020 13:30	YX3967	<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	<0.050	<0.0001
FIELDBLANK	11/24/2020 14:15	YX7835	1.68	<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	<0.050	<0.0001
FIELDBLANK	11/26/2020 12:00	YY2049	<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	<0.050	<0.0001
FIELDBLANK	11/28/2020 13:20	YY5270	<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	<0.050	<0.0001
FIELDBLANK	11/30/2020 14:30	YY7389	<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	<0.050	<0.0001
FIELDBLANK	12/2/2020 13:30	YZ1568	<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	<0.050	<0.0001
FIELDBLANK	12/4/2020 13:50	YZ4239	<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	<0.050	<0.0001
FIELDBLANK	12/6/2020 13:20	YZ8307	<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	<0.050	<0.0001
FIELDBLANK	12/11/2020 11:30	ZA6279	<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	<0.050	<0.0001
FIELDBLANK	12/15/2020 15:40	ZB1650	<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	<0.050	<0.0001
FIELDBLANK	12/17/2020 15:00	ZB5914	<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	<0.050	<0.0001
FIELDBLANK	12/20/2020 13:15	ZB8516	<0.50	0.54	<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	<0.050	<0.0001
FIELDBLANK	12/24/2020 9:20	ZC3449	<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	<0.050	<0.0001
FIELDBLANK	12/27/2020 4:00	ZC4642	<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	<0.050	<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-D: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	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	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	1/1/2020 15:40	XE7144	<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	<0.0002	<0.0005
FIELDBLANK	1/2/2020 11:55	XE7179	<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	<0.0002	<0.0005
FIELDBLANK	1/3/2020 13:00	XE8697	<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	<0.0002	<0.0005
FIELDBLANK	1/4/2020 14:40	XE9885	<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	<0.0002	<0.0005
FIELDBLANK	1/5/2020 13:00	XE9853	<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	<0.0002	<0.0005
FIELDBLANK	1/6/2020 13:10	XF0707	<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	<0.0002	<0.0005
FIELDBLANK	1/7/2020 14:00	XF1932	<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	<0.0002	<0.0005
FIELDBLANK	1/8/2020 13:50	XF3042	<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	<0.0002	<0.0005
FIELDBLANK	1/9/2020 11:40	XF4214	<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	<0.0002	<0.0005
FIELDBLANK	1/10/2020 13:50	XF5142	<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	<0.0002	<0.0005
FIELDBLANK	1/11/2020 12:00	XF5748	<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	<0.0002	<0.0005
FIELDBLANK	1/12/2020 13:00	XF5772	<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	<0.0002	<0.0005
FIELDBLANK	1/13/2020 11:45	XF7160	<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	<0.0002	<0.0005
FIELDBLANK	1/14/2020 12:00	XF8100	<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	<0.0002	<0.0005
FIELDBLANK	1/15/2020 12:55	XF9571	<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	<0.0002	<0.0005
FIELDBLANK	1/16/2020 13:20	XG0617	<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	<0.0002	<0.0005
FIELDBLANK	1/17/2020 10:40	XG0613	<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	<0.0002	<0.0005
FIELDBLANK	1/18/2020 13:35	XG2775	<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	<0.0002	<0.0005
FIELDBLANK	1/19/2020 17:00	XG2759	<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	<0.0002	<0.0005
FIELDBLANK	1/20/2020 10:35	XG2704	<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	<0.0002	<0.0005
FIELDBLANK	1/21/2020 14:30	XG5824	<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	<0.0002	<0.0005
FIELDBLANK	1/22/2020 16:10	XG7454	<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	<0.0002	<0.0005
FIELDBLANK	1/23/2020 15:40	XG9562	<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	<0.0002	<0.0005
FIELDBLANK	1/24/2020 11:00	XG9568	<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	<0.0002	<0.0005
FIELDBLANK	1/25/2020 11:50	XH2063	<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	<0.0002	<0.0005
FIELDBLANK	1/26/2020 14:40	XH2027	<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	<0.0002	<0.0005
FIELDBLANK	1/27/2020 14:00	XH3886	<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	<0.0002	<0.0005
FIELDBLANK	1/28/2020 13:05	XH5360	<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	<0.0002	<0.0005
FIELDBLANK	1/29/2020 12:00	XH6912	<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	<0.0002	<0.0005
FIELDBLANK	1/30/2020 13:35	XH8748	<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	<0.0002	<0.0005
FIELDBLANK	1/31/2020 13:25	XH9851	<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	<0.0002	<0.0005
FIELDBLANK	2/1/2020 11:55	XI1804	<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	<0.0002	<0.0005
FIELDBLANK	2/2/2020 14:10	XI1834	<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	<0.0002	<0.0005
FIELDBLANK	2/3/2020 12:40	XI3481	<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	0.131	<0.001	<0.0002	<0.0005
FIELDBLANK	2/4/2020 12:10	XI3462	<0.1	<0.00002	<0.050	0.0017	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0298	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	2/5/2020 13:15	XI6887	<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	<0.0002	<0.0005
FIELDBLANK	2/6/2020 12:20	XI8759	<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	<0.0002	<0.0005
FIELDBLANK	2/7/2020 11:35	XI8781	<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	<0.0002	<0.0005
FIELDBLANK	2/8/2020 12:10	XJ1672	<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	<0.0002	<0.0005
FIELDBLANK	2/9/2020 13:30	XJ1692	<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	<0.0002	<0.0005
FIELDBLANK	2/10/2020 11:30	XJ1716	<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	<0.0002	<0.0005
FIELDBLANK	2/11/2020 15:20	XJ6271	<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	<0.0002	<0.0005
FIELDBLANK	2/12/2020 15:10	XJ8071	<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	<0.0002	<0.0005
FIELDBLANK	2/13/2020 14:10	XJ9467	<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	<0.0002	<0.0005
FIELDBLANK	2/14/2020 11:20	XJ9492	<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	<0.0002	<0.0005
FIELDBLANK	2/15/2020 12:00	XK0371	<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	<0.0002	<0.0005
FIELDBLANK	2/16/2020 13:50	XK3306	<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	<0.0002	<0.0005
FIELDBLANK	2/17/2020 16:10	XK3288	<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	<0.0002	<0.0005
FIELDBLANK	2/18/2020 13:00	XK4684	<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	<0.0002	<0.0005
FIELDBLANK	2/19/2020 11:55	XK6001	<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	<0.0002	<0.0005
FIELDBLANK	2/20/2020 12:50	XK7911	<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	<0.0002	<0.0005
FIELDBLANK	2/21/2020 12:00	XK7933	<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	<0.0002	<0.0005
FIELDBLANK	2/22/2020 13:40	XL1357	<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	<0.0002	<0.0005
FIELDBLANK	2/23/2020 12:00	XL1344	<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	<0.0002	<0.0005
FIELDBLANK	2/24/2020 10:50	XL1316	<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	<0.0002	<0.0005
FIELDBLANK	2/25/2020 11:20	XL5024	<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	<0.0002	<0.0005
FIELDBLANK	2/26/2020 11:10	XL6613	<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	<0.0002	<0.0005

Appendix 3-D: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	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	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	2/27/2020 11:00	XL6656	<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	<0.0002	<0.0005
FIELDBLANK	2/28/2020 11:30	XL8819	<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	<0.0002	<0.0005
FIELDBLANK	2/29/2020 13:50	XM2601	<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	<0.0002	<0.0005
FIELDBLANK	3/1/2020 12:10	XM2633	<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	<0.0002	<0.0005
FIELDBLANK	3/2/2020 19:40	XM6321	<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	<0.0002	<0.0005
FIELDBLANK	3/3/2020 11:40	XM6547	<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	<0.0002	<0.0005
FIELDBLANK	3/4/2020 16:10	XM8003	<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	<0.0002	<0.0005
FIELDBLANK	3/5/2020 15:10	XN0419	<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	<0.0002	<0.0005
FIELDBLANK	3/6/2020 11:10	XN0415	<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	<0.0002	<0.0005
FIELDBLANK	3/7/2020 11:10	XN3071	<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	<0.0002	<0.0005
FIELDBLANK	3/8/2020 11:20	XN2024	<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	<0.0002	<0.0005
FIELDBLANK	3/9/2020 14:30	XN3892	<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	<0.0002	<0.0005
FIELDBLANK	3/10/2020 13:05	XN6091	<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	<0.0002	<0.0005
FIELDBLANK	3/11/2020 14:45	XN7893	<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	<0.0002	<0.0005
FIELDBLANK	3/12/2020 12:20	XN8896	<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	<0.0002	<0.0005
FIELDBLANK	3/13/2020 11:50	XN9531	<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	<0.0002	<0.0005
FIELDBLANK	3/14/2020 12:45	XO0538	<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	<0.0002	<0.0005
FIELDBLANK	3/15/2020 13:20	XO0655	<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	<0.0002	<0.0005
FIELDBLANK	3/16/2020 13:10	XO2544	<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	<0.0002	<0.0005
FIELDBLANK	3/17/2020 12:25	XO3908	<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	<0.0002	<0.0005
FIELDBLANK	3/18/2020 12:00	XO5559	<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	<0.0002	<0.0005
FIELDBLANK	3/19/2020 11:50	XO7001	<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	<0.0002	<0.0005
FIELDBLANK	3/20/2020 12:35	XO7004	<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	<0.0002	<0.0005
FIELDBLANK	3/21/2020 11:50	XO8299	<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	<0.0002	<0.0005
FIELDBLANK	3/22/2020 11:40	XO8421	<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	<0.0002	<0.0005
FIELDBLANK	3/23/2020 11:25	XO8464	<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	<0.0002	<0.0005
FIELDBLANK	3/24/2020 13:00	XP0442	<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	<0.0002	<0.0005
FIELDBLANK	3/25/2020 12:40	XP1313	<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	<0.0002	<0.0005
FIELDBLANK	3/26/2020 14:00	XP2432	<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	<0.0002	<0.0005
FIELDBLANK	3/27/2020 10:40	XP2502	<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	<0.0002	<0.0005
FIELDBLANK	3/28/2020 14:00	XP3711	<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	<0.0002	<0.0005
FIELDBLANK	3/31/2020 12:20	XP6325	<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	<0.0002	<0.0005
FIELDBLANK	4/1/2020 12:30	XP6346	<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	<0.0002	<0.0005
FIELDBLANK	4/2/2020 11:20	XP7673	<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	<0.0002	<0.0005
FIELDBLANK	4/3/2020 11:30	XP9113	<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	<0.0002	<0.0005
FIELDBLANK	4/4/2020 11:50	XQ0609	<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	<0.0002	<0.0005
FIELDBLANK	4/5/2020 12:40	XQ0579	<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	<0.0002	<0.0005
FIELDBLANK	4/6/2020 12:45	XQ1947	<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	0.00015	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	4/7/2020 12:10	XQ3414	<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	<0.0002	<0.0005
FIELDBLANK	4/8/2020 11:50	XQ4589	<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	<0.0002	<0.0005
FIELDBLANK	4/9/2020 11:20	XQ4585	0.159	<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	<0.0002	<0.0005
FIELDBLANK	4/10/2020 11:50	XQ5869	0.189	0.000023	0.061	<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	<0.0002	<0.0005
FIELDBLANK	4/11/2020 18:30	XQ5965	0.189	<0.00002	0.052	<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	0.096	<0.001	<0.0002	<0.0005
FIELDBLANK	4/12/2020 13:55	XQ6095	0.188	<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	<0.0002	<0.0005
FIELDBLANK	4/13/2020 10:30	XQ5691	<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	<0.0002	<0.0005
FIELDBLANK	4/14/2020 11:05	XS8669																								
FIELDBLANK	4/14/2020 11:05	XQ8326	<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	0.00014	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	4/15/2020 13:25	XQ9339	<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	<0.0002	<0.0005
FIELDBLANK	4/16/2020 12:50	XR0408	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0034	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	4/17/2020 10:50	XR0397	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0039	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	4/18/2020 10:50	XR2301	<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	0.093	<0.001	<0.0002	<0.0005
FIELDBLANK	4/20/2020 14:40	XR3424	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0039	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	4/21/2020 11:40	XR4952	<0.1	<0.00002	<0.050	<0.001	3.1	<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	<0.0002	<0.0005
FIELDBLANK	4/22/2020 11:50	XR6355	0.183	<0.00002	0.071	<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	<0.0002	<0.0005
FIELDBLANK	4/23/2020 12:00	XR7181	<0.1	<0.00002	0.077	<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	<0.0002	<0.0005
FIELDBLANK	4/24/2020 11:25	XR7268	<0.1	<0.00002	0.052	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00012	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.069	<0.001	<0.0002	<0.0005
FIELDBLANK	4/25/2020 11:25	XR8895	<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	<0.0002	<0.0005

Appendix 3-D: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	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	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	4/26/2020 12:10	XR8992	<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	<0.0002	<0.0005
FIELDBLANK	4/27/2020 10:15	XS0058	<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	<0.0002	<0.0005
FIELDBLANK	4/28/2020 12:35	XS2086	<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	<0.0002	<0.0005
FIELDBLANK	4/29/2020 11:20	XS3518	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0093	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	4/30/2020 11:00	XS4882	<0.1	<0.00002	0.081	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0056	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	5/1/2020 11:45	XS5997	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0062	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	5/2/2020 12:00	XS7462	<0.1	<0.00002	0.052	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0073	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	5/3/2020 8:00	XS7391	<0.1	<0.00002	0.070	<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	<0.0002	<0.0005
FIELDBLANK	5/6/2020 14:30	XT1602	0.151	<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	<0.0002	<0.0005
FIELDBLANK	5/9/2020 12:30	XT4489	<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	<0.0002	<0.0005
FIELDBLANK	5/12/2020 13:15	XT7072	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0091	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	5/13/2020 13:40	XT8155	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	0.00023	<0.003	<0.0005	0.0002	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	5/14/2020 13:00	XU0100	<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	<0.0002	<0.0005
FIELDBLANK	5/15/2020 9:25	XU0132	<0.1	<0.00002	<0.050	<0.001	<3.0	0.000012	<0.005	<0.005	<0.0001	<0.005	<0.005	0.00016	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	5/16/2020 13:50	XU2652	<0.1	0.000036	<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	<0.0002	<0.0005
FIELDBLANK	5/17/2020 12:30	XU2518	<0.1	<0.00002	0.054	<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	<0.0002	<0.0005
FIELDBLANK	5/18/2020 14:10	XU2639	<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	<0.0002	<0.0005
FIELDBLANK	5/19/2020 14:40	XU3587	<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	<0.0002	<0.0005
FIELDBLANK	5/20/2020 13:10	XU5560	<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	<0.0002	<0.0005
FIELDBLANK	5/21/2020 12:15	XU6999	<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	<0.0002	<0.0005
FIELDBLANK	5/22/2020 12:40	XU8401	<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	<0.0002	<0.0005
FIELDBLANK	5/23/2020 14:00	XU8586	<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	<0.0002	<0.0005
FIELDBLANK	5/24/2020 13:20	XU8648	<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	<0.0002	<0.0005
FIELDBLANK	5/25/2020 9:20	XU8666	<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	<0.0002	<0.0005
FIELDBLANK	5/28/2020 14:50	XV5621	<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	<0.0002	<0.0005
FIELDBLANK	5/31/2020 13:30	XV8402	<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	<0.0002	<0.0005
FIELDBLANK	6/3/2020 13:10	XW5135	<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	<0.0002	<0.0005
FIELDBLANK	6/4/2020 12:40	XW6863	<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	<0.0002	<0.0005
FIELDBLANK	6/5/2020 17:00	XW9911	<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	<0.0002	<0.0005
FIELDBLANK	6/6/2020 12:00	XX0127	<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	<0.0002	<0.0005
FIELDBLANK	6/7/2020 12:40	XW9326	<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	<0.0002	<0.0005
FIELDBLANK	6/8/2020 16:10	XX1069	<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	<0.0002	<0.0005
FIELDBLANK	6/9/2020 15:50	XX3627	<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	<0.0002	<0.0005
FIELDBLANK	6/10/2020 12:15	XX4752	<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	<0.0002	<0.0005
FIELDBLANK	6/11/2020 14:00	XX7042	<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	<0.0002	<0.0005
FIELDBLANK	6/12/2020 14:25	XX9583	<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	<0.0002	<0.0005
FIELDBLANK	6/13/2020 15:05	XX9601	<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	<0.0002	<0.0005
FIELDBLANK	6/14/2020 13:20	XX9645	<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	<0.0002	<0.0005
FIELDBLANK	6/15/2020 15:15	XY1605	<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	<0.0002	<0.0005
FIELDBLANK	6/20/2020 13:30	XY9030	<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	<0.0002	<0.0005
FIELDBLANK	6/22/2020 13:40	XZ0408	<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	<0.0002	<0.0005
FIELDBLANK	6/24/2020 12:00	XZ5351	<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	<0.0002	<0.0005
FIELDBLANK	6/25/2020 15:50	XZ5984	<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	<0.0002	<0.0005
FIELDBLANK	6/27/2020 19:35	XZ9072	<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	<0.0002	<0.0005
FIELDBLANK	6/28/2020 13:00	XZ9161	<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	<0.0002	<0.0005
FIELDBLANK	6/29/2020 15:20	YA0782	<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	<0.0002	<0.0005
FIELDBLANK	6/30/2020 14:10	YA2740	<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	<0.0002	<0.0005
FIELDBLANK	7/1/2020 12:00	YA2709	<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	<0.0002	<0.0005
FIELDBLANK	7/2/2020 13:50	YA4190	<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	<0.0002	<0.0005
FIELDBLANK	7/4/2020 13:05	YA6733	<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	<0.0002	<0.0005
FIELDBLANK	7/5/2020 10:35	YA6919	<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	<0.0002	<0.0005
FIELDBLANK	7/10/2020 10:20	YB4119	<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	<0.0002	<0.0005
FIELDBLANK	7/15/2020 13:15	YC2140	<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	<0.0002	<0.0005
FIELDBLANK	7/17/2020 14:05	YC5483	<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	<0.0002	<0.0005
FIELDBLANK	7/19/2020 12:50	YC7535	<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	<0.0002	<0.0005
FIELDBLANK	7/21/2020 14:05	YD0797	<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	<0.0002	<0.0005
FIELDBLANK	7/23/2020 15:00	YD4258	<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	<0.0002	<0.0005

Appendix 3-D: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	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	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	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	7/26/2020 14:35	YD7715	<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	<0.0002	<0.0005
FIELDBLANK	7/31/2020 12:00	YE5653	<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	<0.0002	<0.0005
FIELDBLANK	8/5/2020 12:50	YF2979	<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	<0.0002	<0.0005
FIELDBLANK	8/7/2020 12:25	YF4859	<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	<0.0002	<0.0005
FIELDBLANK	8/9/2020 14:30	YF8363	<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	<0.0002	<0.0005
FIELDBLANK	8/11/2020 13:30	YG2368	<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	<0.0002	<0.0005
FIELDBLANK	8/13/2020 13:50	YG7263	<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	<0.0002	<0.0005
FIELDBLANK	8/15/2020 15:00	YH0062	<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	<0.0002	<0.0005
FIELDBLANK	8/24/2020 13:30	YI2201	<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	<0.0002	<0.0005
FIELDBLANK	8/25/2020 12:40	YI3997	<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	<0.0002	<0.0005
FIELDBLANK	8/27/2020 13:00	YI7775	<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	0.098	<0.001	<0.0002	<0.0005
FIELDBLANK	9/2/2020 15:45	YJ7834	<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	<0.0002	<0.0005
FIELDBLANK	9/3/2020 15:35	YK0034	<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	<0.0002	<0.0005
FIELDBLANK	9/5/2020 13:40	YK1347	<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	<0.0002	<0.0005
FIELDBLANK	9/6/2020 11:20	YK2532	<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	<0.0002	<0.0005
FIELDBLANK	9/10/2020 11:30	YK8216	<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	<0.0002	<0.0005
FIELDBLANK	9/12/2020 14:00	YL1187	<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	<0.0002	<0.0005
FIELDBLANK	9/15/2020 15:10	YL6688	<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	<0.0002	<0.0005
FIELDBLANK	9/17/2020 13:20	YL8050	<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	<0.0002	<0.0005
FIELDBLANK	9/19/2020 13:00	YM3345	<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	<0.0002	<0.0005
FIELDBLANK	9/21/2020 13:00	YM6394	<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	<0.0002	<0.0005
FIELDBLANK	9/23/2020 16:40	YN0390	<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	<0.0002	<0.0005
FIELDBLANK	9/25/2020 13:40	YN2675	<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	<0.0002	<0.0005
FIELDBLANK	9/27/2020 16:30	YN7531	<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	<0.0002	<0.0005
FIELDBLANK	10/1/2020 11:45	YO6614	<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	<0.0002	<0.0005
FIELDBLANK	10/4/2020 16:30	YP0013	<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	<0.0002	<0.0005
FIELDBLANK	10/6/2020 15:20	YP5780	<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	<0.0002	<0.0005
FIELDBLANK	10/8/2020 11:40	YP9904	<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	<0.0002	<0.0005
FIELDBLANK	10/10/2020 12:20	YQ1629	<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	<0.0002	<0.0005
FIELDBLANK	10/12/2020 14:00	YQ4368	<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	<0.0002	<0.0005
FIELDBLANK	10/14/2020 15:20	YQ9245	<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	<0.0002	<0.0005
FIELDBLANK	10/16/2020 12:20	YR1523	<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	<0.0002	<0.0005
FIELDBLANK	10/18/2020 13:15	YR5382	<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	<0.0002	<0.0005
FIELDBLANK	10/22/2020 12:10	YS3857	<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	<0.0002	<0.0005
FIELDBLANK	10/26/2020 14:15	YT0279	<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	<0.0002	<0.0005
FIELDBLANK	10/31/2020 14:10	YU1486	<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	<0.0002	<0.0005
FIELDBLANK	11/3/2020 14:30	YU4783	<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	<0.0002	<0.0005
FIELDBLANK	11/5/2020 13:40	YU9365	<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	<0.0002	<0.0005
FIELDBLANK	11/7/2020 13:30	YV3093	<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	<0.0002	<0.0005
FIELDBLANK	11/9/2020 10:50	YV4613	<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	<0.0002	<0.0005
FIELDBLANK	11/11/2020 13:10	YV8318	<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	<0.0002	<0.0005
FIELDBLANK	11/13/2020 10:00	YV9730	<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	<0.0002	<0.0005
FIELDBLANK	11/15/2020 12:50	YW2811	<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	<0.0002	<0.0005
FIELDBLANK	11/19/2020 14:00	YX1122	<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	<0.0002	<0.0005
FIELDBLANK	11/22/2020 13:30	YX3967	<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	<0.0002	<0.0005
FIELDBLANK	11/24/2020 14:15	YX7835	<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	<0.0002	<0.0005
FIELDBLANK	11/26/2020 12:00	YY2049	<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	<0.0002	<0.0005
FIELDBLANK	11/28/2020 13:20	YY5270	<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	<0.0002	<0.0005
FIELDBLANK	11/30/2020 14:30	YY7389	<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	<0.0002	<0.0005
FIELDBLANK	12/2/2020 13:30	YZ1568	<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	<0.0002	<0.0005
FIELDBLANK	12/4/2020 13:50	YZ4239	<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	<0.0002	<0.0005
FIELDBLANK	12/6/2020 13:20	YZ8307	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0413	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	12/11/2020 11:30	ZA6279	<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	<0.0002	<0.0005
FIELDBLANK	12/15/2020 15:40	ZB1650	<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	<0.0002	<0.0005
FIELDBLANK	12/17/2020 15:00	ZB5914	<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	<0.0002	<0.0005
FIELDBLANK	12/20/2020 13:15	ZB8516	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0134	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005
FIELDBLANK	12/24/2020 9:20	ZC3449	<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	<0.0002	<0.0005
FIELDBLANK	12/27/2020 4:00	ZC4642	<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	<0.0002	<0.0005

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: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	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
FIELDBLANK	1/1/2020 15:40	XE7144	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/2/2020 11:55	XE7179	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/3/2020 13:00	XE8697	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/4/2020 14:40	XE9885	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/5/2020 13:00	XE9853	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/6/2020 13:10	XF0707	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/7/2020 14:00	XF1932	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/8/2020 13:50	XF3042	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/9/2020 11:40	XF4214	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/10/2020 13:50	XF5142	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/11/2020 12:00	XF5748	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/12/2020 13:00	XF5772	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/13/2020 11:45	XF7160	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/14/2020 12:00	XF8100	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/15/2020 12:55	XF9571	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/16/2020 13:20	XG0617	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/17/2020 10:40	XG0613	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/18/2020 13:35	XG2775	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/19/2020 17:00	XG2759	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/20/2020 10:35	XG2704	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/21/2020 14:30	XG5824	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/22/2020 16:10	XG7454	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/23/2020 15:40	XG9562	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/24/2020 11:00	XG9568	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/25/2020 11:50	XH2063	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/26/2020 14:40	XH2027	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/27/2020 14:00	XH3886	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/28/2020 13:05	XH5360	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/29/2020 12:00	XH6912	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/30/2020 13:35	XH8748	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	1/31/2020 13:25	XH9851	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/1/2020 11:55	XI1804	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/2/2020 14:10	XI1834	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/3/2020 12:40	XI3481	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	0.085	<0.0001	<0.1	<0.00002	0.066	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	2/4/2020 12:10	XI3462	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/5/2020 13:15	XI6887	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/6/2020 12:20	XI8759	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/7/2020 11:35	XI8781	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/8/2020 12:10	XJ1672	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/9/2020 13:30	XJ1692	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/10/2020 11:30	XJ1716	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001	<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	2/11/2020 15:20	XJ6271	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/12/2020 15:10	XJ8071	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/13/2020 14:10	XJ9467	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/14/2020 11:20	XJ9492	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/15/2020 12:00	XK0371	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/16/2020 13:50	XK3306	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/17/2020 16:10	XK3288	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/18/2020 13:00	XK4684	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/19/2020 11:55	XK6001	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	0.056	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	2/20/2020 12:50	XK7911	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/21/2020 12:00	XK7933	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/22/2020 13:40	XL1357	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/23/2020 12:00	XL1344	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/24/2020 10:50	XL1316	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/25/2020 11:20	XL5024	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/26/2020 11:10	XL6613	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	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
FIELDBLANK	2/27/2020 11:00	XL6656	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/28/2020 11:30	XL8819	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	2/29/2020 13:50	XM2601	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/1/2020 12:10	XM2633	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/2/2020 19:40	XM6321	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/3/2020 11:40	XM6547	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/4/2020 16:10	XM8003	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/5/2020 15:10	XN0419	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/6/2020 11:10	XN0415	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/7/2020 11:10	XN3071	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/8/2020 11:20	XN2024	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/9/2020 14:30	XN3892	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/10/2020 13:05	XN6091	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/11/2020 14:45	XN7893	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/12/2020 12:20	XN8896	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/13/2020 11:50	XN9531	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/14/2020 12:45	XO0538	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/15/2020 13:20	XO0655	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/16/2020 13:10	XO2544	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/17/2020 12:25	XO3908	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/18/2020 12:00	XO5559	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/19/2020 11:50	XO7001	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/20/2020 12:35	XO7004	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/21/2020 11:50	XO8299	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/22/2020 11:40	XO8421	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/23/2020 11:25	XO8464	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/24/2020 13:00	XP0442	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/25/2020 12:40	XP1313	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/26/2020 14:00	XP2432	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/27/2020 10:40	XP2502	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/28/2020 14:00	XP3711	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	3/31/2020 12:20	XP6325	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/1/2020 12:30	XP6346	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/2/2020 11:20	XP7673	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/3/2020 11:30	XP9113	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/4/2020 11:50	XQ0609	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/5/2020 12:40	XQ0579	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/6/2020 12:45	XQ1947	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/7/2020 12:10	XQ3414	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/8/2020 11:50	XQ4589	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0057	<0.0001
FIELDBLANK	4/9/2020 11:20	XQ4585	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/10/2020 11:50	XQ5869	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/11/2020 18:30	XQ5965	<0.01	<0.0002	<0.002	0.051	<0.001	<0.0000019	<0.001	<0.001	<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	4/12/2020 13:55	XQ6095	<0.01	<0.0002	<0.002	0.059	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	<0.050	0.0013	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/13/2020 10:30	XQ5691	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/14/2020 11:05	XS8669																						
FIELDBLANK	4/14/2020 11:05	XQ8326	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/15/2020 13:25	XQ9339	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/16/2020 12:50	XR0408	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.054	<0.0001	<0.1	<0.00002	0.051	<0.001	3.3	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/17/2020 10:50	XR0397	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.057	0.00013	<0.1	<0.00002	0.058	<0.001	3.1	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/18/2020 10:50	XR2301	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.058	<0.0001	<0.1	<0.00002	0.065	<0.001	3.8	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/20/2020 14:40	XR3424	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	0.0014	<0.001	0.065	<0.0001	<0.1	<0.00002	0.092	<0.001	3.8	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/21/2020 11:40	XR4952	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/22/2020 11:50	XR6355	<0.01	0.00021	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	3.6	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/23/2020 12:00	XR7181	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/24/2020 11:25	XR7268	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/25/2020 11:25	XR8895	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	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
FIELDBLANK	4/26/2020 12:10	XR8992	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/27/2020 10:15	XS0058	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/28/2020 12:35	XS2086	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/29/2020 11:20	XS3518	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	4/30/2020 11:00	XS4882	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/1/2020 11:45	XS5997	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	0.00013
FIELDBLANK	5/2/2020 12:00	XS7462	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/3/2020 8:00	XS7391	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/6/2020 14:30	XT1602	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/9/2020 12:30	XT4489	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/12/2020 13:15	XT7072	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/13/2020 13:40	XT8155	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	3.3	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	0.0002
FIELDBLANK	5/14/2020 13:00	XU0100	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/15/2020 9:25	XU0132	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	0.00011
FIELDBLANK	5/16/2020 13:50	XU2652	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	0.00014
FIELDBLANK	5/17/2020 12:30	XU2518	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	0.000021	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	5/18/2020 14:10	XU2639	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/19/2020 14:40	XU3587	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	0.000034	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	0.0002
FIELDBLANK	5/20/2020 13:10	XU5560	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	0.000011	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	5/21/2020 12:15	XU6999	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/22/2020 12:40	XU8401	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	0.000016	<0.005	<0.005	<0.0001	<0.005	<0.005	0.0001
FIELDBLANK	5/23/2020 14:00	XU8586	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/24/2020 13:20	XU8648	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/25/2020 9:20	XU8666	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/28/2020 14:50	XV5621	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	5/31/2020 13:30	XV8402	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/3/2020 13:10	XW5135	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/4/2020 12:40	XW6863	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/5/2020 17:00	XW9911	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/6/2020 12:00	XX0127	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/7/2020 12:40	XW9326	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/8/2020 16:10	XX1069	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/9/2020 15:50	XX3627	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/10/2020 12:15	XX4752	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/11/2020 14:00	XX7042	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/12/2020 14:25	XX9583	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/13/2020 15:05	XX9601	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/14/2020 13:20	XX9645	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/15/2020 15:15	XY1605	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/20/2020 13:30	XY9030	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/22/2020 13:40	XZ0408	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/24/2020 12:00	XZ5351	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/25/2020 15:50	XZ5984	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/27/2020 19:35	XZ9072	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/28/2020 13:00	XZ9161	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/29/2020 15:20	YA0782	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	6/30/2020 14:10	YA2740	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/1/2020 12:00	YA2709	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/2/2020 13:50	YA4190	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/4/2020 13:05	YA6733	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/5/2020 10:35	YA6919	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/10/2020 10:20	YB4119	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/15/2020 13:15	YC2140	<0.01	<0.0002	<0.002	<0.050	<0.001	0.0000033	<0.001	<0.001	<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	7/17/2020 14:05	YC5483	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/19/2020 12:50	YC7535	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/21/2020 14:05	YD0797	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/23/2020 15:00	YD4258	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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: 2020 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	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
FIELDBLANK	7/26/2020 14:35	YD7715	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	7/31/2020 12:00	YE5653	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/5/2020 12:50	YF2979	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/7/2020 12:25	YF4859	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/9/2020 14:30	YF8363	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/11/2020 13:30	YG2368	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/13/2020 13:50	YG7263	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/15/2020 15:00	YH0062	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/24/2020 13:30	YI2201	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/25/2020 12:40	YI3997	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	8/27/2020 13:00	YI7775	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/2/2020 15:45	YJ7834	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/3/2020 15:35	YK0034	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/5/2020 13:40	YK1347	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/6/2020 11:20	YK2532	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/10/2020 11:30	YK8216	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/12/2020 14:00	YL1187	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/15/2020 15:10	YL6688	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/17/2020 13:20	YL8050	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/19/2020 13:00	YM3345	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/21/2020 13:00	YM6394	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/23/2020 16:40	YN0390	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/25/2020 13:40	YN2675	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	9/27/2020 16:30	YN7531	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/1/2020 11:45	YO6614	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/4/2020 16:30	YP0013	<0.01	<0.0002	<0.002	<0.050	<0.001	0.0000021	<0.001	<0.001	<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	10/6/2020 15:20	YP5780	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/8/2020 11:40	YP9904	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/10/2020 12:20	YQ1629	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/12/2020 14:00	YQ4368	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.050	<0.0001	<0.1	<0.00002	0.101	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/14/2020 15:20	YQ9245	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/16/2020 12:20	YR1523	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/18/2020 13:15	YR5382	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/22/2020 12:10	YS3857	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/26/2020 14:15	YT0279	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	10/31/2020 14:10	YU1486	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/3/2020 14:30	YU4783	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/5/2020 13:40	YU9365	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/7/2020 13:30	YV3093	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/9/2020 10:50	YV4613	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/11/2020 13:10	YV8318	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/13/2020 10:00	YV9730	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/15/2020 12:50	YW2811	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/19/2020 14:00	YX1122	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/22/2020 13:30	YX3967	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/24/2020 14:15	YX7835	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/26/2020 12:00	YY2049	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/28/2020 13:20	YY5270	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	11/30/2020 14:30	YY7389	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/2/2020 13:30	YZ1568	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/4/2020 13:50	YZ4239	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/6/2020 13:20	YZ8307	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/11/2020 11:30	ZA6279	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/15/2020 15:40	ZB1650	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/17/2020 15:00	ZB5914	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/20/2020 13:15	ZB8516	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/24/2020 9:20	ZC3449	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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	12/27/2020 4:00	ZC4642	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<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 Lu

Address: 4606 Canada Way, Burnaby, BC. V5G 1K5

Telephone: +1 604 734-7276

Fax: +1 604 731-2386

Website: www.bvlabs.com

Email: Alice.A.Lu@bvlabs.com

SCC File Number:	15188
Accreditation Standard(s):	ISO/IEC 17025:2005
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:	2020-05-30
Accreditation Valid to:	2021-06-08

Testing conducted at:
8577 Commerce Court,
Burnaby BC V5A 4N5

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
BBY4SOP-00110	Determination of Avermectins 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
BBY4SOP-00052	Determination of Phenol in Honey
BBY4SOP-00058	Determination of Tetracyclines in Honey
BBY4SOP-00061	Determination of Halofuginone in Tissue and Animal Derived Foods
BBY4SOP-00066	Determination of Pesticides in Animal Derived Foods
BBY4SOP-00076	Determination of Sulfonamide Residues in Animal Derived Foods
BBY4SOP-00118	Determination of Herbicide in Food
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 *Entrobacteriaceae* 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

(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-00029	Determination of Free Residues of Beta-Agonists in Tissue and Animal Derived Foods
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 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 and Processed 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 Tissue and Dairy
BBY4SOP-00050	Determination of Sulfonamides in Tissue
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 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 and 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-00067	Determination of Amphenicols in Fish
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-00078	Determination of Emamectin, Ivermectin and Abamectin in Fish
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 Animal Derived 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 Grain Products 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 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-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

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.
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: 2020-06-03

Appendix 3-G: Bureau Veritas (Calgary) 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. 836

Legal Name of Accredited Laboratory:	**Bureau Veritas Canada (2019) Inc. (Formerly Maxxam Analytics)**
Contact Name:	Jeanette Olivares
Address:	2021 - 41st Avenue, N.E. Calgary, AB T2E 6P2
Telephone:	+1 403 735-2252
Fax:	+1 403 291-9468
Website:	www.bvlabs.com
Email:	Jeanette.Olivares@bvlabs.com

SCC File Number:	151043
Accreditation Standard(s):	ISO/IEC 17025:2017
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:	2020-05-28
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 chemistry and water microbiology: 4000-19 Street N.E Calgary, AB T2E 6P8
Organic chemistry: 2021 – 41 Avenue NE, Calgary, AB T2E 6P2
Food testing: #112, 3442-118 Ave S.E. Calgary, AB T2Z 3X1
Mobile Laboratory, for specific tests where identified below.

ANIMAL AND PLANTS (AGRICULTURE)

Foods and Edible Products: (Human and Animal Consumption)

Assurance GDS ® MPX Top 6 STEC Assay	BioControl Assurance GDS ® MPX Top 6 STEC Assay
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 3MT PetrifilmT *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 from SM 2710 F, MSSMA 2.25, and Petroleum and Natural Gas Industries- Field Testing of Drilling Fluids] [Also includes Water - Inorganic, Modified from SM 2710F-Gravimetric Specific Gravity
AB SOP-00047	Free Liquid (Paint Filter Test) [Modified from EPA 9095 B] Volumetric Free Liquid in Waste Samples
CAL SOP-00028	Flammability Test of Readily Combustible Solids [Modified from Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria, Section 33] Visual Flammability

(Water)

AB SOP-00011	Silica (Reactive) by Konelab - Molybdate/ANSA Reduction Method [Modified from EPA 370.1] Colorimetric Reactive Silica
AB SOP-00016	Chemical Oxygen Demand (Total and Dissolved) [Modified from SM 5220 [D] Colorimetric COD
AB SOP-00017	Biochemical Oxygen Demand [Modified from SM 5210 B] D.O. Meter BOD (5 day) CBOD (5 day)
AB SOP-00018	Sulfate by Konelab - Automated Turbidimetry Method [Modified from SM 4500-SO4 E] Turbidimetric Sulfate
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 from SM 4500 C1G] Colorimetric Free Chlorine Total Chlorine
AB SOP-00041	Ferrous and Ferric Iron in Water-Colorimetric Determination [Modified from SM 3500-Fe A, B] Colorimetric Ferrous Iron
AB SOP-00058	Dissolved Oxygen- Modified Winkler Method [Modified from SM 4500-O C] Titrimetric Dissolved Oxygen
AB SOP-00060	Naphthenic Acids in water by FTIR [Modified from EPA 3510C R3/FTIR] IR Naphthenic Acids

AB SOP-00061	Total Suspended Solids, Total Fixed Solids, Total Volatile Solids [Modified from SM 2540 D, E] Gravimetric Total Suspended Solids Total Suspended Solids Fixed Total Suspended Solids Volatile
AB SOP-00065	Total Dissolved Solids [Modified from 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 from BC MOE LABORATORY MANUAL SECTION C and EPA 245.7] Mercury
AB SOP-00087	Organic Carbon by Technicon - Persulfate UV Oxidation [Modified from 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 from SM 5520 B, Gravimetric] Total Oil and Grease Total Petroleum Hydrocarbons (TPH)
CAL SOP-00040	Bromate, Chlorate, Chlorite by IC – Conductivity detection [Modified from SM 4110 D] Ion Chromatography Bromate Chlorate Chlorite
CAL SOP-00049	Colour by Konelab [Modified from 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 from DIONEX, DOC NO 034035] Ion Chromatography Iodide Thiocyanate Thiosulfate
CAL SOP-00063	Volatile Organic Acids [Modified from DIONEX ICE-AS1 DOC NO 031181] - Waters Ion Chromatography Acetic Acid Butyric Acid Formic Acid Propionic Acid
CAL SOP-00065	Oxalic Acid by Ion Chromatography - Conductivity Detection [Modified from Standard Methods for Examination of Water and Wastewater, Method 4110B] Ion Chromatography Oxalic Acid
CAL SOP-00071	Sulphite by IC [Modified from SM 4110 B] Ion Chromatography - Conductivity Detector Sulfite
CAL SOP-00074	Total Solids [Modified from SM 2540 B, E] Gravimetric Total Solids Total Solids Fixed Total Solids Volatile
CAL SOP-00076	Total Inorganic Carbon and Dissolved Inorganic Carbon – Auto IR analysis [Modified from SM 5310 A, C] Auto Infrared Inorganic Carbon
CAL SOP-00081	Turbidity – Nephelometric Method [Modified from SM 2130 B] Nephelometric Turbidity

CAL SOP-00099	Extraction and analysis of Resin and Fatty Acids in water by GCMS [Modified from 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 Dodecanoic 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-00272	Determination of Tannin and Lignin in Water [Modified from SM 23 5550B] Tannin and Lignin (Total)
CAL SOP-00273	Determination of Chlorophyll and Pheophytin [Modified from SM 23 10200 H] Chlorophyll A Chlorophyll B Chlorophyll C Pheophytin
CAL SOP-00274	Determination of Organic Compounds in Water by Absorption at UV 254 [Modified from SM 23 5910] UV Absorbance @254nm
CAL SOP-00277	Determination of Low Level Silica [Modified from ASTM D859-16] Reactive Silica

(Water and Soil (Toxicology))

AB SOP-00083	15 min. Microtox BioAssay using Vibrio fischeri [EPS 1/RM/24] BIOLUMINESCENCE Microtox IC50 (15 min)

Air

AIR SOP-00009	Sorbent traps for the determination of Mercury Emissions (Field) [Modified from: Method 30B: Determination of total vapor phase mercury emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps. US EPA Code of Regulations] Spectrometer - Atomic Absorption Detector Mercury (Hg)
AIR SOP-00110	Anions-Water [Modified from Methods Manual for Chemical Analysis of Atmospheric Pollutants, method 52121] Ion Chromatography - Conductivity Detector Chloride Fluoride Nitrate Sulfate
AIR SOP-00111	Ammonia – Water [Modified from Methods Manual for Chemical Analysis of Atmospheric Pollutants, method 52626] Ion Chromatography - Conductivity Detector Ammonia
AIR SOP-00112	Fixed Gases - Air [Modified from Method 3, Alberta Stack Sampling Code, 1995, Publication Number: REF.89 and EPA 3C GC/TCD CO CO2 N2 O2
AIR SOP-00113	Formaldehyde – Water [Modified from Methods Manual for Chemical Analysis of Atmospheric Pollutants, method 12525] Colorimetric Formaldehyde
AIR SOP-00114	Hydrocarbons - Air [Modified from AENV18] GC/FID

	Total Hydrocarbons as Methane
AIR SOP-00115	Total Particulates - Air Filter [Modified from method 5, Determination of Particulate Emissions from Stationary Sources, Alberta Stack Sampling Code, 1995, Publication Number: REF.89] Gravimetric Particulates
AIR 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
AIR SOP-00122	Chlorine and Chlorine Dioxide – Air (Field) [Modified from Alberta Environment Stack Code, 1995, Publication Number REF 89] Iodometric Determination Chlorine Chlorine Dioxide

Soil/Solid

AB SOP-00002	Moisture Content in Soil [Modified from 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 from 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 from SM 2510B - Soils and waters Conductivity Meter (Manual) Conductivity
AB SOP-00005	Alkalinity Conductivity Fluoride and pH by PC-Titrate [Modified from 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] Soils and waters pH Meter pH
AB SOP-00007	Ammonia-Nitrogen by Konelab - Phenate colorimetric method [Modified from SM4500-NH3 A&G]- Soils and water [Modified from SM4500-NH3 A&G]- Waters Ammonia Ammonia – Extraction Colorimetric
AB SOP-00008	TKN by Konelab [Modified from EPA 351.1, EPA 351.2] - Soil and Waters Colorimetric Total Kjeldahl Nitrogen
AB SOP-00012	Total Organic Carbon and Organic Matter in Soil [Modified from Methods Manual for Soil and Plant Analysis, Pages 27-30] Reflux – Titrimetric Organic Matter – Calculation

	Total Organic Carbon
AB SOP-00019	Calcium Carbonate Equivalence by pH [Modified from SSMA 20.2] pH Meter
	Calcium Carbonate Equivalence (CCE)
AB SOP-00020	Chloride by Konelab - Automated Ferric Thiocyanate Method [Modified from SM 4500Cl-E] - Soils and waters Colorimetric
	Chloride
AB SOP-00022	Particle Size Distribution by Sieve Analysis [Modified from ASTM D6913] Gravimetric/SIEVE Grain size Particle size by sieve (Special)
AB SOP-00023	Nitrite and Nitrate by Ion Chromatography [Modified from SM 4110 B] – Soil and Waters Ion Chromatography
	Nitrate
	Nitrite
AB SOP-00025	Ortho-phosphate by Konelab - Ascorbic Acid Reduction Method [Modified from SM 4500-P, A and F] - Waters and soils Colorimetric Auto Color
	Ortho-phosphate
AB SOP-00026	Chloride, Sulphate and Bromide by Ion Chromatography [Modified from SM 4110B] - Soils and waters Ion Chromatography
	Chloride
	Sulfate
AB SOP-00030	PSA by Hydrometer - Texture (Sand, Silt, Clay and gravel) Analysis [Modified from SSMA 55.3] Hydrometer
	% clay
	% gravel
	% sand
	% silt
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 from EPA 8260D, GC/MS - HEADSPACE] - Soils and Waters [F1/PHC: Modified from CCME Petroleum Hydrocarbons - Tier 1 Method and EPA5021A] - Soils and Waters [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 GCFID 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 ICPOES [Modified EPA 6010 D-Soils and Waters 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 from 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 from ASTM D422-63] Hydrometer Particle Size Distribution
AB SOP-00050	Dry Bulk Density and Wet Bulk Density [Modified from McKeague and MSSMA Section 2.21] Gravimetric Bulk Density
AB SOP-00052	Bromide by Ion Chromatography - UV Detection [Modified from SM 4110 B] – Soils and waters 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] – Soils and Waters 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 Dichloromethane Ethylbenzene m/p-xylene Methyl methacrylate Methyl t-butyl ether o-xylene Styrene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene trans-1,3-Dichloropropene Trichloroethylene Trichlorofluoromethane Vinyl Chloride
AB SOP-00062	Flashpoint by Small Scale Closed Cup Tester (SetaFlash) [Modified from ASTM D3828] Seta Flash Closed Cup Flashpoint
AB SOP-00063	Hexavalent Chromium by Konelab [Modified from SM 3500-Cr B]- Soil and water Colorimetric Hexavalent Chromium
AB SOP-00067	Elemental Sulfur [Modified from Canadian Journal of Soil Science, 65. Pages 811-813, 1985] Colour-Extraction Elemental Sulphur
AB SOP-00071	Electrolytic Conductivity in Water and Soil by Manual Meter - Mobile Lab [Modified from SM 2510 B] – Waters and soil Conductivity Meter Conductivity (25 °C)
AB SOP-00073	Moisture in Solid Samples-Mobile Lab [Modified from CCME PHC-CWS] Gravimetric

	% Moisture
AB SOP-00074	Determination of pH in Water and Soil by Manual Meter - Mobile Laboratory) [Modified from SM 4500H+ B] – Soils and waters pH Meter pH
AB SOP-00075	Preparation of Saturation Samples - Mobile Lab [Modified from SSMA Method 15.2] Gravimetric % Saturation
AB SOP-00076	BTEX/F1 – Soil and Water (Mobile lab) [BTEX: Modified from EPA 8021B] – GC/PID - Headspace [F1: CCME Hydrocarbons Tier 1, BCMOE Section D, BCMELP] - GC/FID - Headspace Benzene C6-O-Xylene Ethylbenzene F1:C6-C10 m/p-xylene o-xylene O-Xylene-C10 Styrene Toluene Total C6-C10
AB SOP-00077	Extractable Hydrocarbon – Soil and Water (Mobile lab) [Modified from CCME hydrocarbons Analysis tier 1, BCMOE Section D, BCMELP]-Soils and waters GC/FID - Direct Injection EPH (C10-C19) EPH (C19-C32) F2: C10-C16 F3: C16-C34 F4: C34-C50 TEH (C10-C30)
AB SOP-00078	Chloride Analysis by Hach DR2800- Mobile Laboratory [Modified from SM 4500-Cl E] - Soils and waters Colorimetric Chloride
AB SOP-00080	Sulphide, Low level [Modified from SM 4500-S2D, A, F] Soil and water Colorimetric Sulphide

AB SOP-00088	Phenolics Phenolics Automated 4-AAP Colorimetry [Modified from SSMA Chapter 40]-Soil [Modified from EPA 9066]-Water Colorimetric – Distillation Extraction Phenol
AB SOP-00091	NO2 and TON by Gallery Plus [Modified from SM 4500-NO3-H] Nitrite Total Oxidized Nitrogen (TON)
CAL SOP-00032	Spontaneous combustion (Self Heating) [Modified from 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-00052	Diisopropanolamine [Modified from DIONEX PAX500 DOC #034217] - Water and soil IC -Extraction Diisopropanolamine (DIPA)
CAL SOP-00054	Amines [Modified from DIONEX PAX500 DOC #034217] - Water and soil IC – Extraction Diethanolamine (DEA) Methyldiethanolamine (MDEA) Monoethanolamine (MEA)
CAL SOP-00093	Preparation and Analysis of Glycols and Sulfolane in Water, Soil and oil by GC-FID [Modified from EPA 8015D] – Soils, waters and oil GC/FID – Extraction Diethylene Glycol Ethylene Glycol Propylene Glycol Sulfolane Tetraethylene Glycol Triethylene Glycol
CAL SOP-00094	Herbicides [Modified from EPA 8151A and EPA 8270E] – Soils and Waters 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 from SM 23 5520 C m] - Soils and waters 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 from EPA 8260D and EPA 5021A] [VOC TCLP: EPA 1311]- Soils and waters 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
	Isopropylbenzene
	Naphthalene
	n-Butylbenzene
	Nitrobenzene
	n-Propylbenzene
	p-Isopropyltoluene
	sec-Butylbenzene
	tert-Butylbenzene
CAL SOP-00149	Polychlorinated Biphenyls (PCB) [Modified from EPA 8082A] -Soils, waters and oil GC/ECD - Extraction
	Aroclor 1016
	Aroclor 1221
	Aroclor 1232
	Aroclor 1242
	Aroclor 1248
	Aroclor 1254
	Aroclor 1260
	Aroclor 1262
	Aroclor 1268
	Total PCB
CAL SOP-00164	Semi Volatile Phenols [Modified from 8270E] - Soils and waters 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] – Soils and Waters 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 from BCMOE EPH S 12/16]- soils and water 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 from volatile HC in soils by GC/FID and EPA method 5021A, BC MELP VH; Atl. RBCA] - Soils and waters GC/FID Benzene C6-C8 C6-o-Xylene C8-C10 Aromatic Ethylbenzene m&p-xylene Methyl-tert-butylether o-xylene o-Xylene-C10 Styrene Toluene
CAL SOP-00243/CAL SOP-00263	Carbon, Nitrogen and Sulfur [Modified from 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)] - Soils IR Combustion Carbon Nitrogen Organic Carbon Sulphur
CAL SOP-00250	Preparation and analysis of Alkylated PAH in soils and water [Modified from SM 8270 E and ESTD-OR-20]- Soils and waters 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
C1-Fluorene
C1-Naphthalene
C1-Phenanthrene / anthracene
C1- Fluoranthene / pyrene
C2-Benzo(bjk)fluoranthene / Benzo[a]pyrene
C2-Biphenyl
C2-Benzo(a)anthracene / chrysene
C2-Dibenzothiophene
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
C4- Fluoranthene / Pyrene
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 from EPA 8270E] GC/MSD - Extraction Sulfolane
CAL SOP-00258	Liquid limit, plastic limit and plasticity index of soil [Modified from ASTM D4318] ATTERBERG LIMITS TEST Liquid limit Plastic limit Plasticity index
CAL SOP-00264	Preparation and Analysis of Alcohol/Solvents (Water, soil, oil) by GCFID [Modified from EPA 8015D] –Soils and waters GC/FID – Extraction 2-Methylphenol 3-Methylphenol 4-Methylphenol Acetone (2-Propanone) Ethanol Isobutanol Isopropanol Methanol (also available in the mobile lab) n-butanol Nitrobenzene n-propanol Pyridine
CAL SOP-00265	ICPMS Analysis for Low Level Metals [Modified from EPA SW846 Method 6020B]-Soils and waters ICPMS 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 from EPA Method 9016]-Water Colorimetric- Distillation
	Free cyanide

CAL SOP-00270	Determination of cyanide by automated colourimetry [Modified from SM 23 4500-CN-, O]-Soil and Water Colorimetric- Distillation Cyanide SAD Cyanide WAD
CAL SOP-00275	Extraction and Analysis of Hydroxyphenols in Water and Soil by GCMS [Modified from BC MOE Laboratory Manual and EPA SW846 8270]- Water and Soil 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 from 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 from 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 from SM 9215 A, B] Pour Plate Heterotrophic Plate Count (HPC)

Number of Scope Listings: 126

Notes:

ISO/IEC 17025: 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

AB SOP: Internal test method (Alberta)

Standards Council of Canada
Conseil canadien des normes

CAL SOP: Internal test method (Calgary)

CCME: Canadian Council of Ministers of the Environment

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Elias Rafoul
Vice President, Accreditation Services
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Appendix 4-A: Groundwater Quality Plots

PEACE RIVER
HYDRO PARTNERS

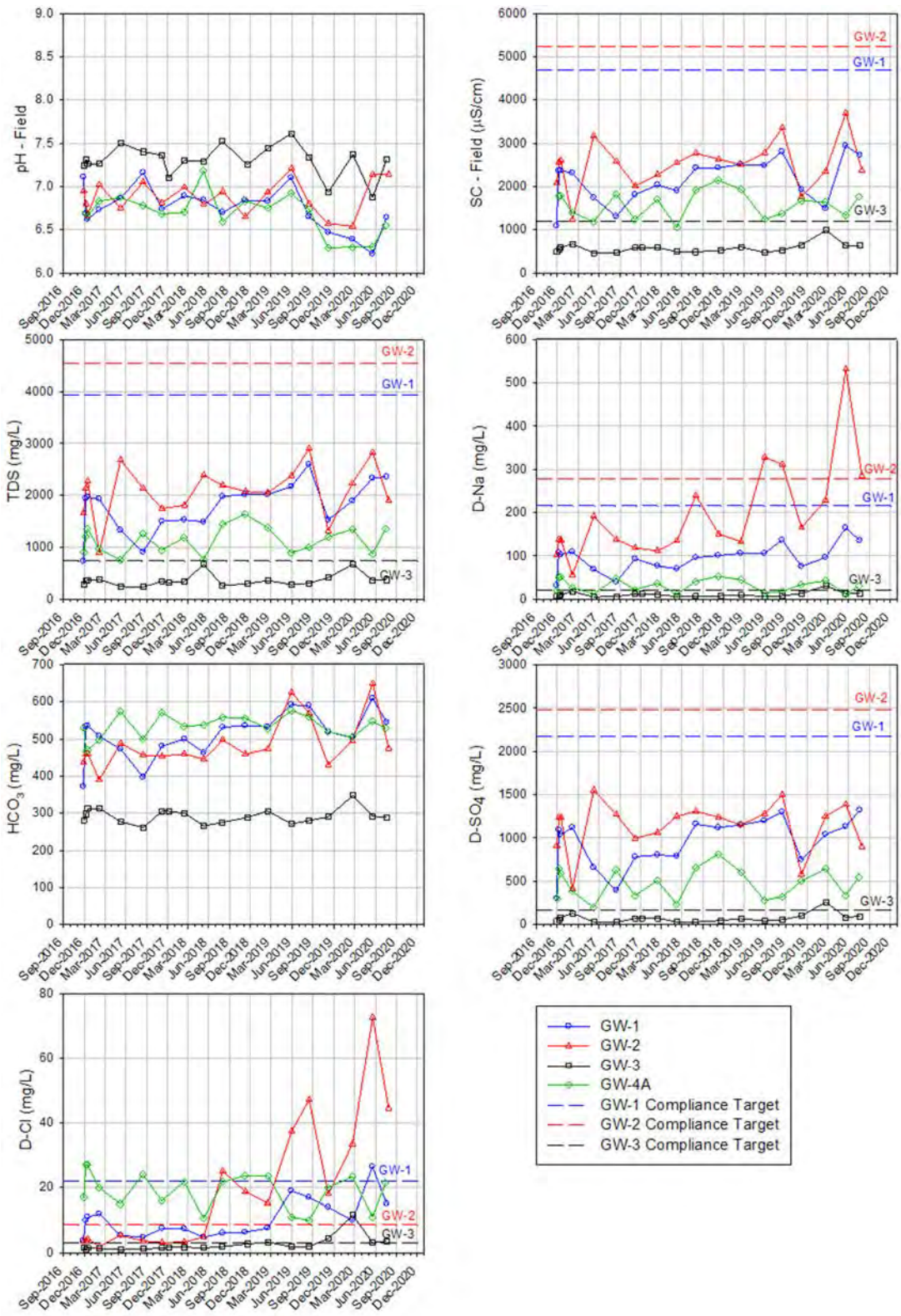

Figure 1: Time Series of Groundwater Quality at RSEM Area R5A for field-pH, field-SC, TDS, Dissolved Na, HCO_3, SO_4 and Cl (2016 - 2020). Trigger 3 Compliance Targets are included for reference.

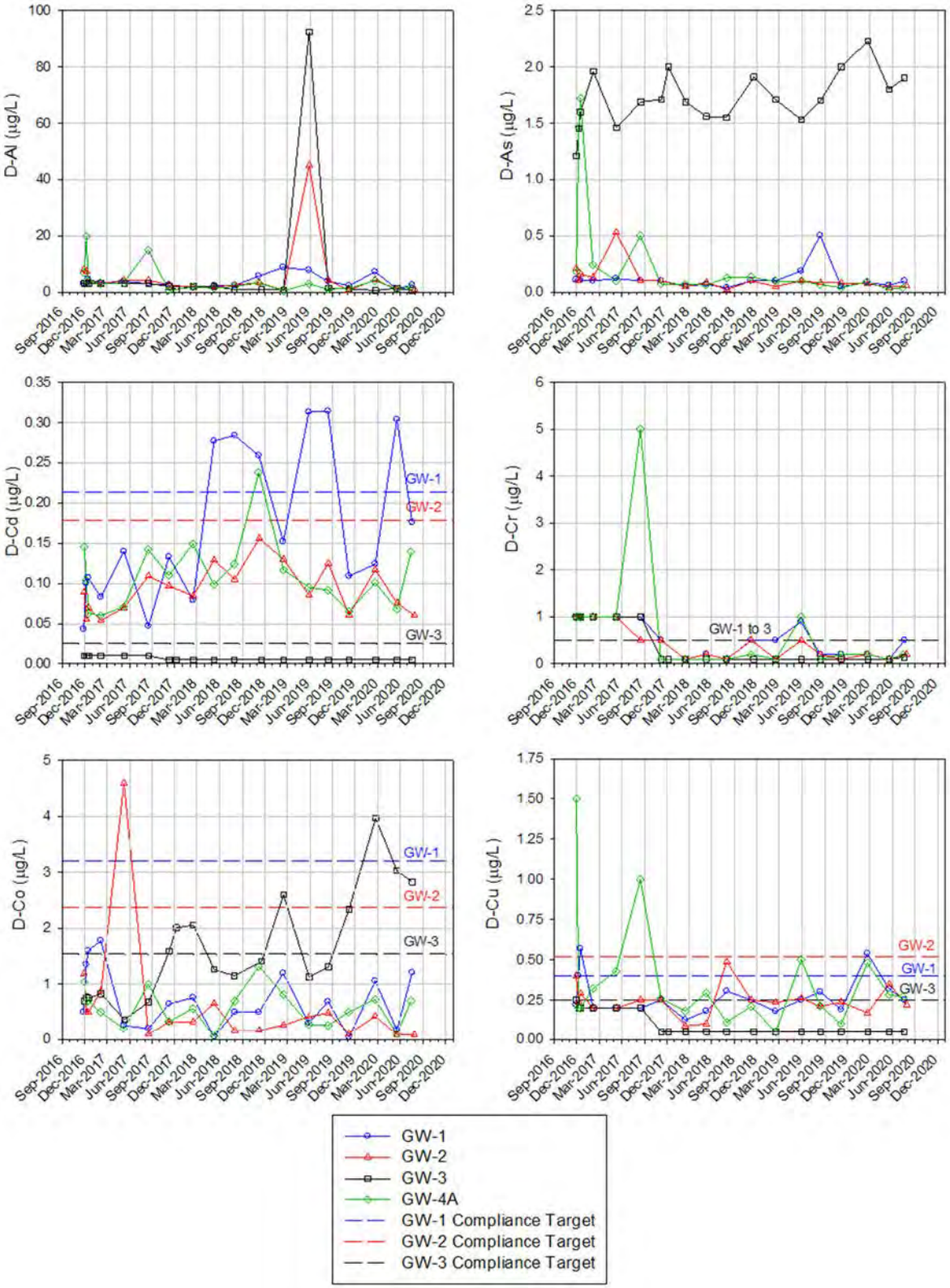

Figure 2: Time Series of Groundwater Quality at RSEM Area R5A for Dissolved Al, As, Cd, Cr, Co and Cu (2016 - 2020). Trigger 3 Compliance Targets are included for reference.

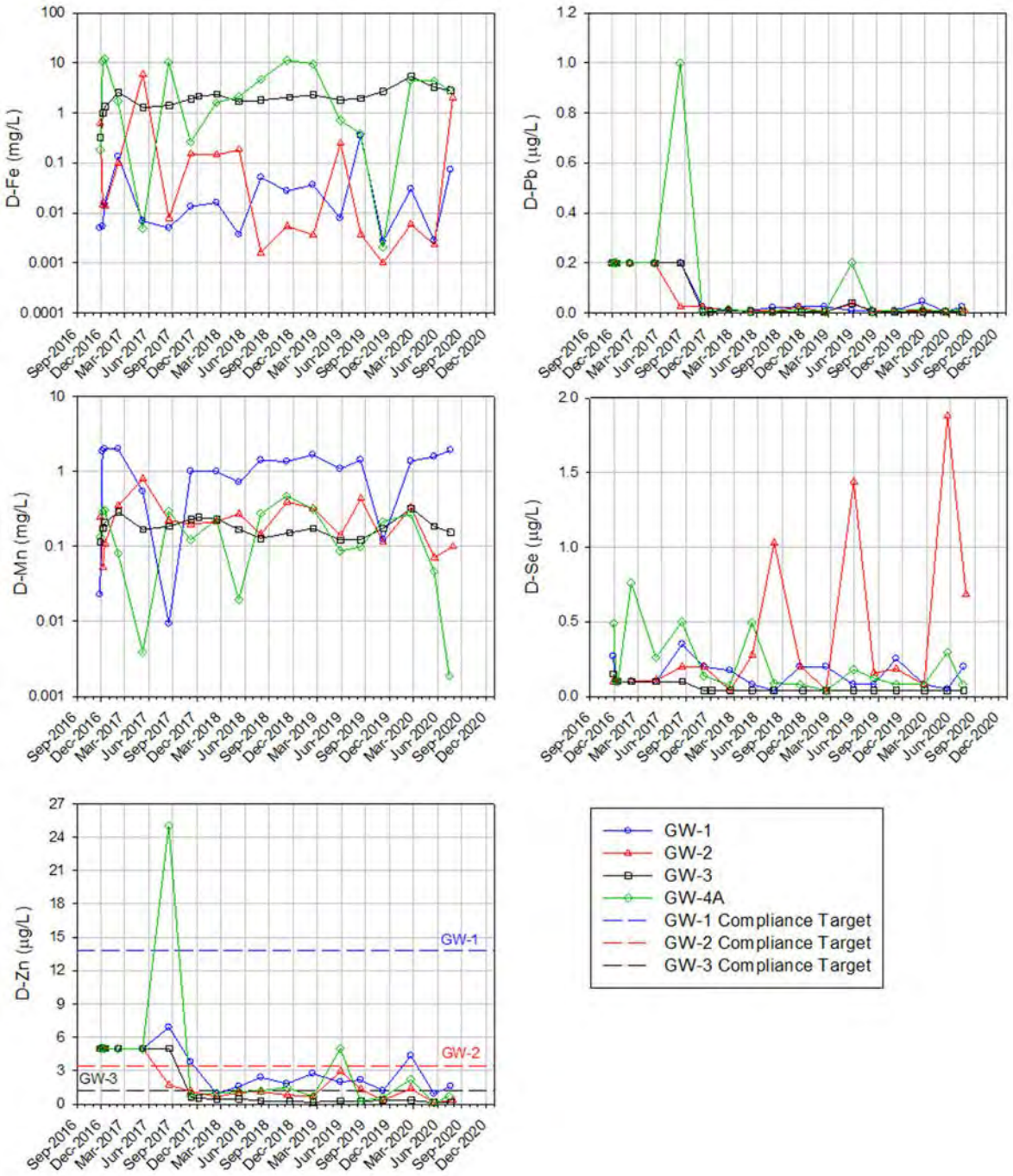

Figure 3: Time Series of Groundwater Quality at RSEM Area R5A for Dissolved Fe, Pb, Mn, Se and Zn (2016 - 2020). Trigger 3 Compliance Targets are included for reference. Note log scale for Fe and Mn on y-axes.

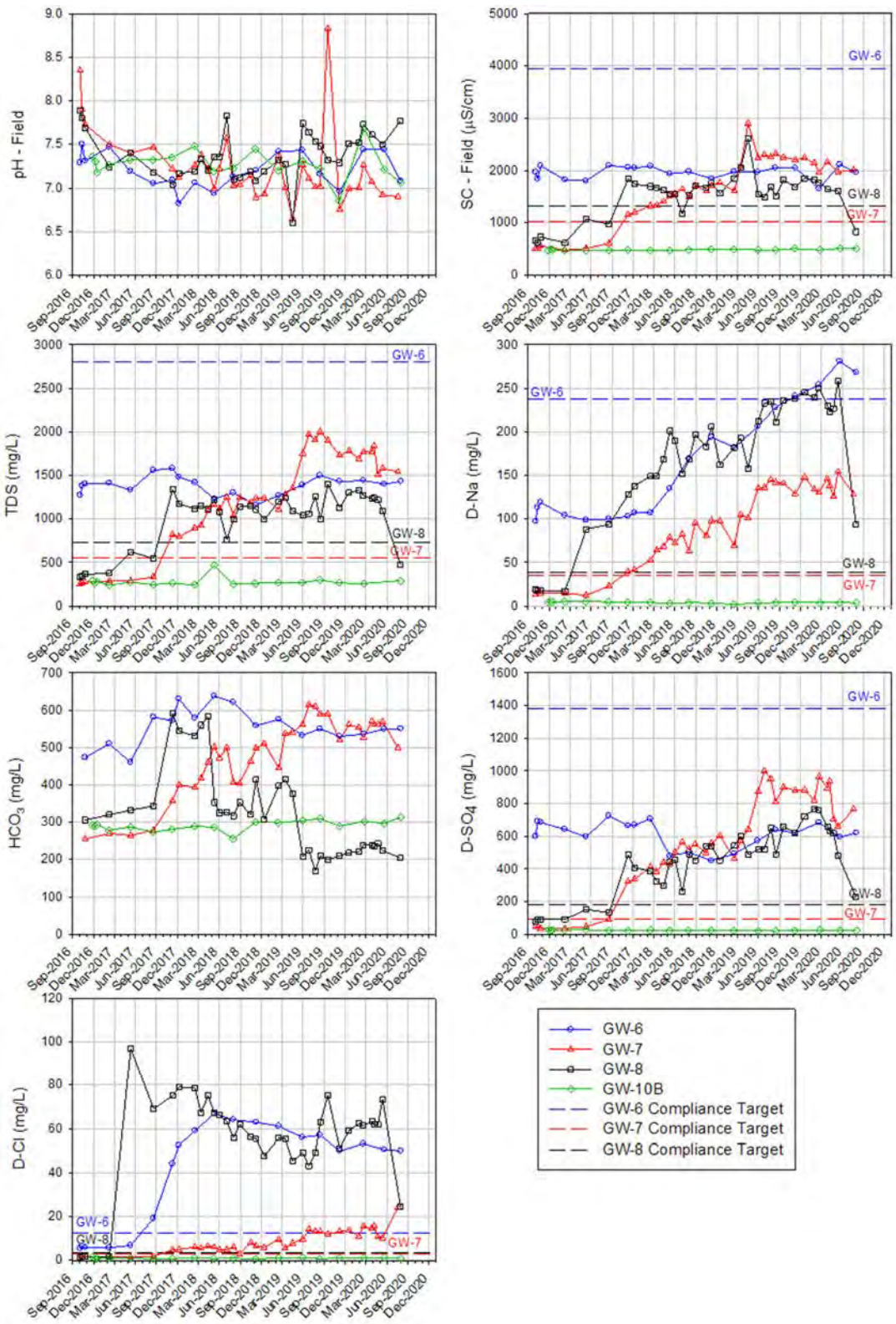

Figure 4: Time Series of Groundwater Quality at RSEM Area R5B for field-pH, field-SC, TDS, Dissolved Na, HCO_3, SO_4 and Cl (2016 - 2020). Trigger 3 Compliance Targets are included for reference.

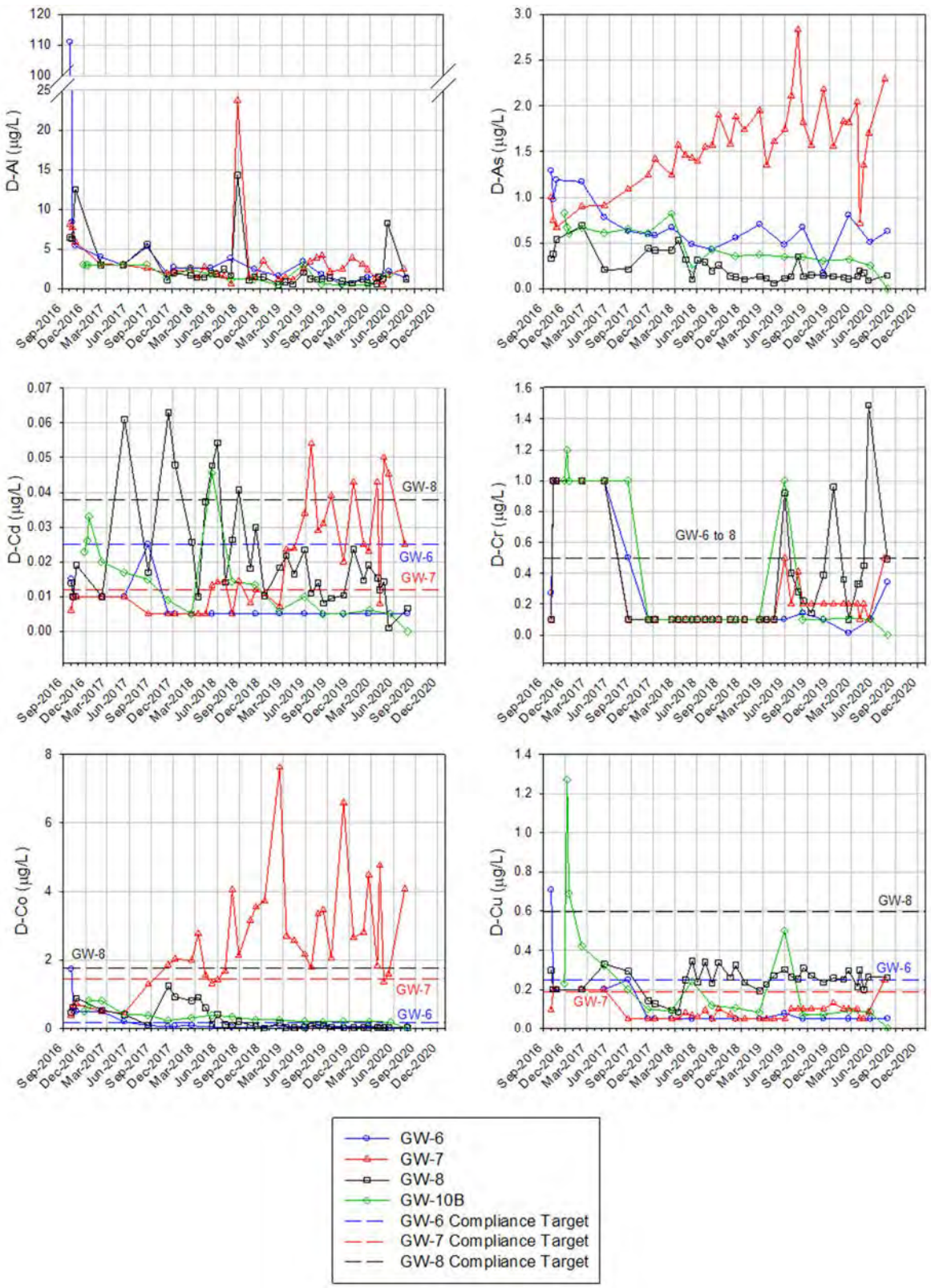

Figure 5: Time Series of Groundwater Quality at RSEM Area R5B for Dissolved Al, As, Cd, Cr, Co and Cu (2016 - 2020). Trigger 3 Compliance Targets are included for reference.

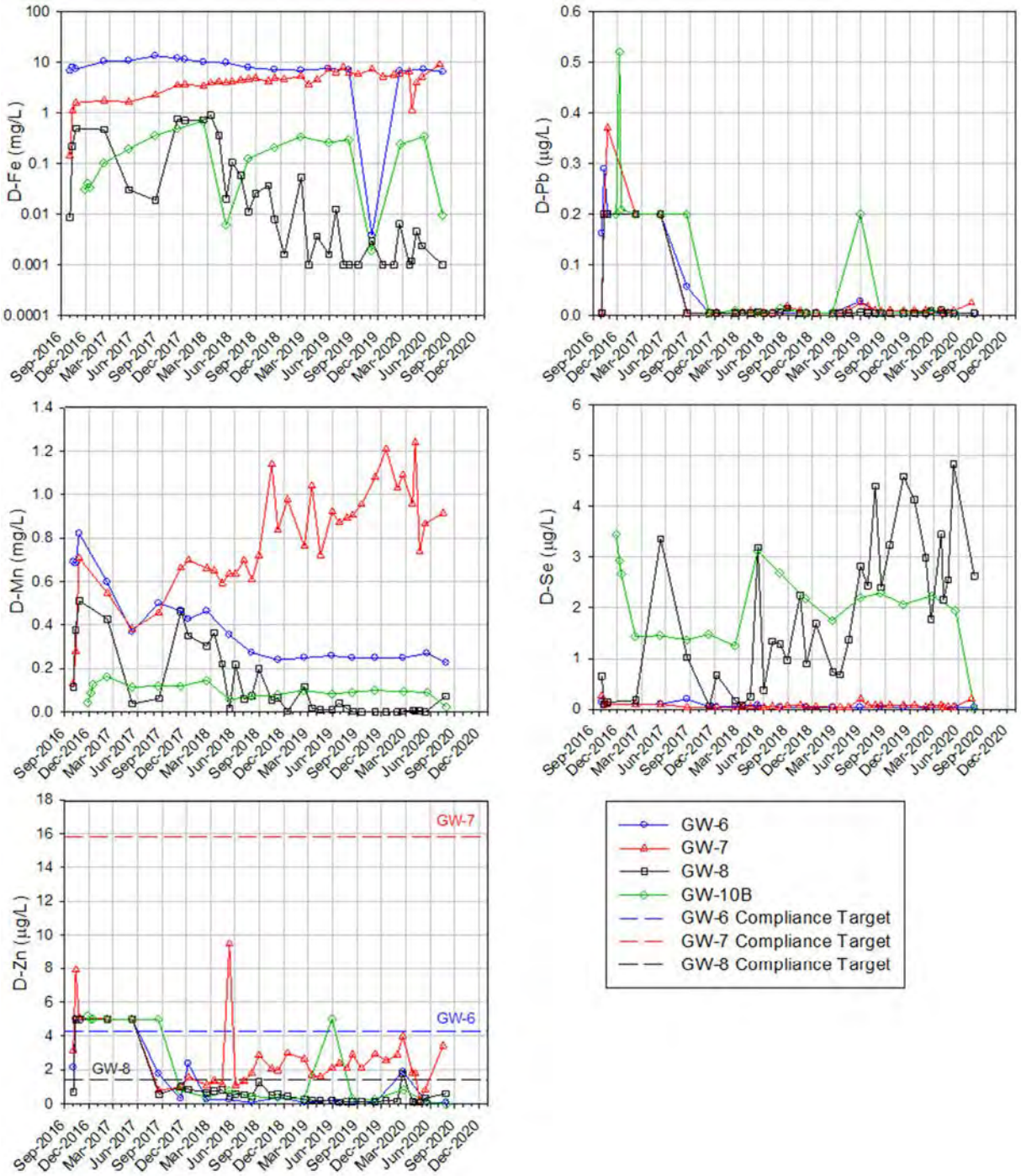

Figure 6: Time Series of Groundwater Quality at RSEM Area R5B for Dissolved Fe, Pb, Mn, Se and Zn (2016 - 2020). Trigger 3 Compliance Targets are included for reference. Note log scale for Fe on y-axis.

Appendix 4-B: Groundwater Quality Results, Tabulated

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Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	Lab Sample ID	Field Parameters	pH (field)	Specific Conductance (field)	Temperature	Dissolved Oxygen	ORP	Comments	Physical Properties	pH (lab)	Conductivity (lab)	Total Dissolved Solids	Total Suspended Solids	Total Hardness (CaCO3)	Disolved Hardness (CaCO3)	Turbidity	Inorganics	Alkalinity (Total as CaCO3)	Alkalinity (PP as CaCO3)	Bicarbonate (HCO3)
					pH	µS/cm	°C	mg/L	mV			pH	uS/cm	mg/L	mg/L	mg/L	mg/L	NTU		mg/L	mg/L	mg/L
				BV Lab RDL	0.1	1						0.1	1.0	10	1.0	0.50	0.50	0.10		0.50	0.50	0.50
GW-1	GW-1	27-Nov-2016 14:00	QD4990		7.11	1089	4.9	6.19	134.1	Clear		7.83	1060	732	1.1	543	518	0.38		305	<0.50	372
GW-1	GW-1	07-Dec-2016 19:30	QF8820		6.68	2361	5.4	0.03	157.7	Clear		7.78	2320	1940	<1.0	1230	1120	0.15		437	<0.50	534
GW-1	GW-1	15-Dec-2016 16:45	QG8922		6.62	2367	5.9	0.87	117.3	Clear		8.01	2350	1970	<1.0	1300	1190	0.26		440	<0.50	536
GW-1	GW-1	04-Feb-2017 15:45	QM9455		6.73	2310	5.4	1.88	71	Clear		7.49	2340	1930	<1.0	1210	1280	0.91		417	<0.50	508
GW-1	GW-1	09-May-2017 11:30	RA6586		6.86	1740	6.36	0.41	71.0	Clear		8.01	1740	1330	<1.0	801	916	<0.10		388	<0.50	473
GW-1	JH41-100	09-May-2017 12:00	RA6589									8.02	1740	1320	<1.0	811	931	0.15		384	<0.50	468
GW-1	GW-1	16-Aug-2017 11:00	RT6937		7.16	1306	8.7	0.06	26.9	Clear		8.17	1290	910	<1.0	662	656	<0.10		326	<1.0	397
GW-1	FB	16-Aug-2017 14:30	RT6943									5.56	<2.0	<10	1	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-1	JH41-500	06-Nov-2017 17:00	SL2870									8.08	1930	1520	<1.0	1210	1080	<0.10		393	<1.0	480
GW-1	GW-1	07-Nov-2017 11:35	SL2868		6.74	1812	6.1	0.22	106.7	Clear		8.07	1940	1500	<1.0	1120	1100	<0.10		394	<1.0	481
GW-1	FB-500	07-Nov-2017 15:30	SL2871									5.50	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-1	GW-1	13-Feb-2018 12:00	SY7317		6.89	2030	5.5	0.46	89.9	Clear		7.82	1980	1530	<1.0	986	974	0.16		410	<1.0	500
GW-1	GW-1	08-May-2018 15:00	TK1674		6.84	1899	2.7	0.1	37.4	Clear		7.89	1940	1490	<1.0	957	1000	0.12		380	<1.0	464
GW-1	FB-Q2	08-May-2018 15:30	TK1673									4.61	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-1	GW-1	31-Jul-2018 13:00	TZ5739		6.7	2427	9.4	0.15	33.2	Clear		7.63	2390	1980	<1.0	1130	1220	0.17		436	<1.0	532
GW-1	GW-1	06-Nov-2018 13:45	US9768		6.84	2432	5.5	0.09	65.6	Clear		7.98	2440	2020	<1.0	1370	1390	0.46		440	<1.0	536
GW-1	GW-1	13-Feb-2019 13:30	VF7843		6.83	2507	2.4	0.81	47.8	Clear		7.62	2410	2020	<1.0	1220	1230	0.13		437	<1.0	533
GW-1	FB-Q1	13-Feb-2019 14:00	VF7844									5.67	<2.0	<10	<1.0	<0.50	<0.50	0.12		<1.0	<1.0	<1.0
GW-1	GW-1	28-May-2019 16:30	VT7646		7.10	2480	7.5	0.11	87.9	Clear		7.85	2620	2170	1.4	1460	1320	0.14		485	<1.0	592
GW-1	GW-1	13-Aug-2019 17:30	WH4590		6.65	2806	8.1	1.35	188.1	Clear		7.85	2800	2600	5.1	1500	1520	0.14		490	<1.0	590
GW-1	GW-1	06-Nov-2019 11:30	WW9339		6.47	1924	5.7	2.1	192.0	Clear		7.5	1900	1530	1.5	989	1040	0.85		430	<1.0	520
GW-1	GW-1	20-Feb-2020 14:25	XK7941		6.39	1488	6.4	1.68	77.3	Clear		7.17	2300	1900	1.3	1240	1190	0.11		413	<1.0	504
GW-1	GW-1	18-May-2020 12:10	XU2431		6.22	2940	6.7	0.95	144.4	Clear		7.38	2790	2330	1.3	1370	1340	<0.10		500	<1.0	610
GW-1	GW-1	19-Jul-2020 16:40	YC7449		6.64	2725	8.5	3.72	75.2			7.39	2780	2360	1.7	1540	1510	0.37		447	<1.0	545
GW-2	GW-2	28-Nov-2016 13:20	QE0414		6.95	2078	6.2	6.76	48	Clear		7.91	2020	1660	13.8	1040	1060	7.02		359	<0.50	438
GW-2	GW-2D	28-Nov-2016 14:00	QE0417		6.95	2078	6.2	6.76	48	Clear		7.90	2020	1650	19.6	1020	1090	7.63		355	<0.50	433
GW-2	GW-2	08-Dec-2016 18:00	QF8821		6.80	2558	6.4	-	118.1	Clear		7.90	2540	2140	<1.0	1290	1280	0.74		376	<0.50	459
GW-2	GW-2	16-Dec-2016 09:30	QG8923		6.67	2597	5.8	0.17	89.6	Clear		8.07	2620	2270	<1.0	1400	1290	<0.10		378	<0.50	461
GW-2	GW-2	05-Feb-2017 11:10	QM9459		7.02	1230	5.8	1.36	63	Clear		7.86	1290	898	<1.0	625	686	0.34		320	<0.50	390
GW-2	GW-2	09-May-2017 16:00	RA6587		6.75	3172	7.39	0.56	-90.5	Clear		7.91	3050	2680	12.7	1550	1700	45.4		400	<0.50	488
GW-2	GW-2	16-Aug-2017 13:45	RT6939		7.05	2585	10.7	0.24	78.8	Clear		8.12	2560	2140	1.3	1350	1350	<0.10		375	<1.0	457
GW-2	GW-2	07-Nov-2017 15:00	SL2869		6.81	2011	7.1	0.17	42.9	Clear		8.15	2180	1750	<1.0	1320	1220	1.01		372	<1.0	454
GW-2	FB	12-Feb-2018 17:30	SY5144									5.55	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-2	JH41-A	13-Feb-2018 14:15	SY7319		6.99	2271	6.3	0.09	45.2	Clear		7.90	2260	2060	<1.0	1110	1100	1.93		377	<1.0	460
GW-2	GW-2	13-Feb-2018 14:15	SY7318		6.99	2271	6.3	0.09	45.2	Clear		7.91	2260	1810	<1.0	1110	1100	1.52		377	<1.0	460
GW-2	GW-2	09-May-2018 13:30	TK4267		6.79	2547	2.7	0.4	27.2	Clear		8.00	2560	2390	<1.0	1190	1280	1.96		366	<1.0	446
GW-2	GW-2	31-Jul-2018 17:00	TZ5740		6.94	2766	8.3	0.47	21.9	Clear		7.71	2680	2190	<1.0	1010	1060	0.34		408	<1.0	498
GW-2	GW-NOV	08-Nov-2018 08:30	UT1590									8.08	2610	2090	<1.0	1420	1400	0.15		366	<1.0	447
GW-2	GW-2	08-Nov-2018 08:30	UT1586		6.65	2630	5.0	0.08	14.1	Clear		8.08	2630	2080	<1.1	1400	1360	0.22		376	<1.0	459
GW-2	GW-2	14-Feb-2019 13:30	VF9069		6.93	2500	2.5	0.38	29.1	Clear		8.15	2470	2050	<1.0	1190	1180	0.11		388	<1.0	473
GW-2	GW-2	29-May-2019 09:30	VU0131		7.21	2780	7.7	0.26	119.0	Clear		8.2	3020	2380	<1.0	1110	1050	1.53		513	<1.0	626
GW-2	BD-Q2	29-May-2019 10:00	VU0132									8.22	3020	2430	<1.0	1100	1070	2.58		471	<1.0	574
GW-2	FB-Q2	29-May-2019 10:15	VU0133									5.12	<2.0	<10	<1.0	<0.50	<0.50	0.14		<1.0	<1.0	<1.0
GW-2	GW-2	14-Aug-2019 10:00	WH7084		6.8	3355	7.8	0.34	230.9	Clear		8.09	3200	2900	<1.0	1360	1340	0.31		470	<1.0	570
GW-2	GW-2	06-Nov-2019 13:00	WW9340		6.57	1758	7.2	1.6	190.7	Clear		7.61	1780	1320	<1.0	656	681	<0.10		350	<1.0	430
GW-2	GW-2	20-Feb-2020 16:30	XK7942		6.54	2344	6.6	1.32	97	Clear		7.46	2740	2240	<1.0	1160	1170	0.1		406	<1.0	495
GW-2	GW-2	19-May-2020 12:20	XU3830		7.14	3701	8.1	0.92	167.4	Clear		7.91	3670	2830	9.9	1240	1230	0.17		533	<1.0	650
GW-2	GW-2	28-Jul-2020 16:00	YE2042		7.14	2379	9.2	1.34	204.1			7.63	2430	1900	1.4	743	698	<0.10		389	<1.0	475

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	Lab Sample ID	Field Parameters	pH (field)	Specific Conductance (field)	Temperature	Dissolved Oxygen	ORP	Comments	Physical Properties	pH (lab)	Conductivity (lab)	Total Dissolved Solids	Total Suspended Solids	Total Hardness (CaCO3)	Disolved Hardness (CaCO3)	Turbidity	Inorganics	Alkalinity (Total as CaCO3)	Alkalinity (PP as CaCO3)	Bicarbonate (HCO3)
					pH	µS/cm	°C	mg/L	mV			pH	uS/cm	mg/L	mg/L	mg/L	mg/L	NTU		mg/L	mg/L	mg/L
				BV Lab RDL	0.1	1						0.1	1.0	10	1.0	0.50	0.50	0.10		0.50	0.50	0.50
GW-3	FB-1	29-Nov-2016 11:00	QE0418									5.99	2.1	<10	<1.0	<0.50	<0.50	0.26		0.85	<0.50	1.04
GW-3	GW-3	29-Nov-2016 11:00	QE0415		7.24	490	7.1	-	-52.7	Clear		8.09	482	286	1.8	253	262	2.52		230	<0.50	281
GW-3	GW-3	09-Dec-2016 10:00	QF8822		7.31	538	7.2	-	-57.1	Clear		8.11	533	364	2.7	274	262	13.4		244	<0.50	298
GW-3	GW-3	16-Dec-2016 12:05	QG8924		7.26	590	7.0	-	-91.5	Clear		8.30	592	368	2.9	326	285	16.6		256	<0.50	313
GW-3	GW-3	05-Feb-2017 15:10	QM9460		7.26	670	6.7	-	-63.3	Clear		7.94	682	382	6.0	316	341	32.5		257	<0.50	313
GW-3	GW-3	10-May-2017 15:00	RA9297		7.50	459	7.81	0.10	-115.4	Clear		8.28	446	246	2.7	236	235	12.6		227	<0.50	277
GW-3	GW-3	17-Aug-2017 17:00	RT8646		7.40	467.3	8.6	-	-50.4	Clear		8.44	452	238	2.5	227	247	16.3		223	4.7	261
GW-3	GW-3	08-Nov-2017 15:30	SL4203		7.36	584	6.9	0.16	-114.6	Clear		8.29	577	346	4.1	296	286	24.9		251	<1.0	306
GW-3	GW-3	07-Dec-2017 11:30	SQ5119		7.1	583	6.4	-	-101	Clear		8.23	569	318	4.5	298	303	30		250	<1.0	305
GW-3	GW-3	14-Feb-2018 11:00	SY9341		7.30	586	5.1	-	-81.5	Clear		8.23	582	342	5.2	272	269	32.6		246	<1.0	300
GW-3	GW-3	09-May-2018 16:00	TK4268		7.29	486.6	1.6	0.1	-46.2	Clear		8.14	473	674	3.2	231	247	18.8		218	<1.0	266
GW-3	GW-3	30-Jul-2018 17:00	TZ3327		7.52	485.3	8.5	0.62	-93.2	Clear		7.93	464	260	3.8	245	239	24.8		226	<1.0	275
GW-3	GW-A	30-Jul-2018 17:30	TZ3328									7.88	470	252	3.9	237	239	22.8		227	<1.0	277
GW-3	GW-3	08-Nov-2018 08:30	UT1588		7.25	521.8	6.5	0.2	-140.5	Clear		8.23	526	302	4.1	263	266	22.7		237	<1.0	289
GW-3	GW-3	14-Feb-2019 16:00	VF9070		7.44	601.1	3.2	0.2	-107.1	Clear		8.22	580	360	4.8	265	274	27.3		251	<1.0	306
GW-3	GW-3	29-May-2019 12:45	VU0130		7.61	470	7.2	0.20	-94.0	Clear		8.30	481	282	1.5	245	242	17.8		222	<1.0	271
GW-3	GW-3	14-Aug-2019 12:30	WH7085		7.34	528.6	7.9	0.35	-70.4	Clear		8.16	510	310	6.3	268	264	24		230	<1.0	280
GW-3	GW-3	06-Nov-2019 14:25	WW9341		6.93	654	6.9	1.0	-121.4	Clear		7.64	639	415	4.1	315	329	29		240	<1.0	290
GW-3	GW-3	22-Feb-2020 15:20	XL1019		7.37	986	6.9	1.36	-82.6	Clear		7.45	1020	676	12	617	474	57		285	<1.0	348
GW-3	GW-3	18-May-2020 22:40	XU2430		6.87	634.1	6.5	0.87	-118.3	Clear		7.79	598	365	5.9	326	329	31		239	<1.0	292
GW-3	GW-3	19-Jul-2020 13:15	YC7447		7.31	635.4	8.7	0.66	-91.9			7.83	647	371	6.3	310	308	15		237	<1.0	289
GW-4A	GW-4A	29-Nov-2016 17:50	QE0416		6.85	1328	5.1	5.38	95.9	Clear		7.96	1310	908	7	693	767	4.98		435	<0.50	530
GW-4A	GW-4A	08-Dec-2016 15:00	QF8823		6.70	1772	5.2	-	-49.9	Clear		7.71	1720	1210	17.1	984	900	123		382	<0.50	466
GW-4A	GW-4A	15-Dec-2016 14:00	QG8925		6.65	1785	5.1	0.82	-38	Clear		8.00	1780	1360	20.6	946	930	59.7		386	<0.50	471
GW-4A	GW-4A	04-Feb-2017 11:50	QM9461		6.83	1403	5.3	2.29	28.1	Clear		7.55	1420	964	3.0	741	838	8.53		407	<0.50	497
GW-4A	GW-4A	08-May-2017 17:30	RA6588		6.87	1187	6.3	0.28	136.1	Clear		8.00	1190	764	1	551	652	1.16		471	<0.50	575
GW-4A	GW-4A	15-Aug-2017 16:00	RT4215		6.78	1822	8.4	0.69	-39.9	Clear		8.07	1780	1260	16.2	890	1030	77.3		410	<1.0	500
GW-4A	GW-4A	06-Nov-2017 16:30	SL0174		6.68	1231	4.6	0.29	43.3	Clear		8.04	1390	948	1.8	836	726	2.72		469	<1.0	572
GW-4A	GW-4A	12-Feb-2018 17:00	SY5143		6.70	1699	4.5	0.99	40.1	Clear		7.99	1670	1190	2.7	882	881	15.8		438	<1.0	534
GW-4A	GW-4A	08-May-2018 12:00	TK1675		7.18	1050	2.5	0.4	39.9	Clear		8.10	1180	768	<1.0	632	658	0.13		441	<1.0	538
GW-4A	JH42-Q2	08-May-2018 12:15	TK1676									8.00	1190	766	<1.0	639	675	0.18		444	<1.0	542
GW-4A	GW-4A	31-Jul-2018 10:15	TZ5738		6.59	1924	7.1	0.55	-20.3	Clear		7.47	1870	1440	4.5	978	1050	29.4		458	<1.0	559
GW-4A	GW-4A	06-Nov-2018 11:30	US9769		6.83	2144	5.0	0.46	-58.9	Clear		7.88	2090	1640	18.1	1170	1190	111		456	<1.0	556
GW-4A	GW-4A	14-Feb-2019 11:00	VF9071		6.75	1930	1.1	0.5	-60.8	Clear		7.89	1850	1380	19.5	913	945	79.2		432	<1.0	528
GW-4A	GW-4A	28-May-2019 14:30	VT7647		6.92	1240	7.8	0.17	8.0	Clear		8.01	1300	896	<1.0	722	685	5.95		473	<1.0	577
GW-4A	GW-4A	13-Aug-2019 15:00	WH4588		6.74	1373	7.6	1.39	142.3	Clear		7.96	1400	1000	4.5	755	780	4.9		460	<1.0	560
GW-4A	BD-Q3	13-Aug-2019 15:30	WH4589									7.85	1400	1000	4.3	743	769	4.1		460	<1.0	560
GW-4A	GW 4A	05-Nov-2019 14:37	WW7111		6.29	1668	4.9	2.3	-5.8	Clear		7.39	1620	1200	8.3	921	927	21		420	<1.0	520
GW-4A	GW-4A	20-Feb-2020 12:45	XK7943		6.30	1641	6.1	2.07	-3.4	Clear		7.04	1760	1350	9.4	936	949	30		414	<1.0	505
GW-4A	GW-4A	18-May-2020 15:50	XU2429		6.30	1324	6.4	1.2	147.0	Clear		7.61	1270	873	<1.0	645	665	<0.10		449	<1.0	548
GW-4A	Duplicate	18-May-2020 16:00	XU2432									7.43	1270	880	<1.0	683	655	<0.10		448	<1.0	547
GW-4A	GW-4A	14-Jul-2020 15:15	YC1075		6.55	1759	1900-01-07	1900-01-04	1900-01-23			7.31	1760	1360	7.1		972	16		434	<1.0	530
GW-4A	GW-4A Dup	2020-07-14	YC1076									7.35	1770	1350	8	979	977	18		433	<1.0	528
FB	FB Q3	2020-07-14	YC1077									5.18	<2.0	<10	1.5	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	Carbonate (CO3)	Hydroxide (OH)	Dissolved Chloride (Cl)	Fluoride (F)	Bromide (Br)	Anions and Nutrients	Dissolved Sulphate (SO4)	Total Sulphide	Total Sulphide (as H2S)	Total Ammonia (N)	Nitrite (N)	Nitrate (N)	Nitrate plus Nitrite (N)	Orthophosphate (P)	Organic / Inorganic Carbon	TOC	DOC	Total Metals	T-Al	T-Sb	T-As	T-Ba	T-Be
			mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L
			0.50	0.50	0.50	0.010	0.010		0.50	0.0019	0.0020	0.0050	0.0020	0.0020	0.0020	0.0030		0.50	0.50		0.00050	0.00002	0.00002	0.00002	0.000010
GW-1	GW-1	27-Nov-2016 14:00	<0.50	<0.50	3.7	0.31	<0.10		302	<0.0050	<0.0050	0.014	<0.0050	0.039	0.039	0.0075		1.3	0.74		0.0155	<0.00050	0.00012	0.0164	<0.00010
GW-1	GW-1	07-Dec-2016 19:30	<0.50	<0.50	10	0.25	<0.10		1090	0.0067	0.007	0.93	<0.0050	<0.020	<0.020	<0.0050		0.79	1.12		0.0033	<0.00050	0.00011	0.0119	<0.00010
GW-1	GW-1	15-Dec-2016 16:45	<0.50	<0.50	11	0.22	<0.10		1040	0.0051	0.005	0.91	<0.0050	<0.020	<0.020	<0.0050		<0.50	0.67		0.0045	<0.00050	0.00013	0.0096	<0.00010
GW-1	GW-1	04-Feb-2017 15:45	<0.50	<0.50	12	0.240	<0.10		1120	0.0063	0.0070	0.96	<0.0020	0.0028	0.0028	<0.0050		2.25	1.46		0.0055	<0.0005	<0.0001	0.0091	<0.0001
GW-1	GW-1	09-May-2017 11:30	<0.50	<0.50	5.4	0.27	0.025		658	<0.0050	<0.0050	0.51	<0.0020	0.0274	0.0274	<0.0050		0.51	<0.50		<0.003	<0.0005	<0.0001	0.01	<0.0001
GW-1	JH41-100	09-May-2017 12:00	<0.50	<0.50	5.7	0.26	<0.10		652	<0.0050	<0.0050	0.5	<0.0020	0.0252	0.0252	<0.0050		<0.50	0.53		<0.003	<0.0005	<0.0001	0.0104	<0.0001
GW-1	GW-1	16-Aug-2017 11:00	<1.0	<1.0	4.8	0.3	<0.050		394	<0.0050	<0.0050	0.044	<0.0020	0.051	0.051	<0.0050		0.53	1.2		0.0035	<0.0005	<0.0001	0.0143	<0.0001
GW-1	FB	16-Aug-2017 14:30	<1.0	<1.0	<0.50	0.028	<0.010		<0.50	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001	<0.0001
GW-1	JH41-500	06-Nov-2017 17:00	<1.0	<1.0	7.5	0.25	0.06		775	0.0061	0.007	0.5	<0.0020	<0.0020	<0.0020	<0.0050		1.19	0.65		0.00224	<0.00002	0.000059	0.0136	<0.00001
GW-1	GW-1	07-Nov-2017 11:35	<1.0	<1.0	7.5	0.25	0.063		782	0.0204	0.022	0.52	<0.0020	<0.0020	<0.0020	<0.0050		0.93	0.78		0.00168	<0.00002	0.000058	0.0137	<0.00001
GW-1	FB-500	07-Nov-2017 15:30	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0050	<0.0050	0.055	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.00107	<0.00002	<0.00002	<0.00002	<0.00001
GW-1	GW-1	13-Feb-2018 12:00	<1.0	<1.0	7.33	0.28	<0.050		804	0.0089	0.009	0.62	<0.0020	0.0152	0.0152	<0.0050		1.43	0.67		0.002	<0.00002	0.000049	0.0139	<0.00001
GW-1	GW-1	08-May-2018 15:00	<1.0	<1.0	4.83	0.26	0.19		789	<0.0019	<0.0020	0.59	<0.0020	<0.0020	<0.0020	<0.0050		1.38	<0.50		<0.015	<0.0001	<0.0001	0.013	<0.00005
GW-1	FB-Q2	08-May-2018 15:30	<1.0	<1.0	<0.50	<0.020	<0.010		<0.50	<0.0019	<0.0020	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		0.83	0.63		0.00089	<0.00002	<0.00002	<0.00002	<0.00001
GW-1	GW-1	31-Jul-2018 13:00	<1.0	<1.0	6.17	0.22	0.28		1160	<0.0050	<0.0050	1.3	<0.0020	0.0038	0.0038	<0.0050		1.1	1.2		<0.0025	<0.0001	<0.0001	0.0123	<0.00005
GW-1	GW-1	06-Nov-2018 13:45	<1.0	<1.0	6.4	0.26	0.28		1120	<0.0050	<0.0053	0.72	<0.0020	<0.0020	<0.0020	<0.0050		1.3	1.79		<0.015	<0.0001	<0.0001	0.0175	<0.00005
GW-1	GW-1	13-Feb-2019 13:30	<1.0	<1.0	7.59	0.26	0.26		1150	<0.0019	<0.0020	0.76	<0.0020	<0.0020	<0.0020	<0.0050		1.1	1.3		0.0119	<0.0001	<0.0001	0.0133	<0.00005
GW-1	FB-Q1	13-Feb-2019 14:00	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0019	<0.0020	<0.015	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.00067	<0.00002	<0.00002	<0.00002	<0.00001
GW-1	GW-1	28-May-2019 16:30	<1.0	<1.0	19	0.26	0.49		1200	<0.0019	<0.0020	0.78	<0.0020	0.002	0.002	<0.0050		1.8	2		<0.006	<0.001	<0.0002	0.0167	<0.0002
GW-1	GW-1	13-Aug-2019 17:30	<1.0	<1.0	17	0.2	0.54		1300	<0.0018	<0.0020	0.9	<0.0020	<0.0020	<0.0020	<0.0030		1.9	2.1		0.0025	<0.00004	0.0024	0.0278	<0.00002
GW-1	GW-1	06-Nov-2019 11:30	<1.0	<1.0	14	0.27	0.41		750	<0.0018	<0.0020	0.16	<0.0010	0.039	0.039	0.003		1.3	1.2		0.0206	0.000095	0.000112	0.0199	<0.00002
GW-1	GW-1	20-Feb-2020 14:25	<1.0	<1.0	10	0.269	0.232		1040	<0.0018	<0.0020	0.861	0.0036	<0.0020	0.0036	0.0035		0.58	1.4		0.0018	<0.00004	0.000076	0.0146	<0.00002
GW-1	GW-1	18-May-2020 12:10	<1.0	<1.0	26.4	0.219	0.689		1130	<0.0018	<0.0020	1.4	<0.0010	0.0051	0.0052	<0.0030		1.72	2		0.00103	0.000039	0.000078	0.0186	<0.00001
GW-1	GW-1	19-Jul-2020 16:40	<1.0	<1.0	15.1	0.233	0.501		1320	<0.0018	<0.0020	1.12	<0.0010	<0.0020	<0.0022	0.0032		1.7	1.6		<0.001	<0.00004	0.000046	0.0161	<0.00002
GW-2	GW-2	28-Nov-2016 13:20	<0.50	<0.50	3.6	0.71	<0.10		912	0.0061	0.006	0.15	<0.0050	<0.020	<0.020	0.0068		0.71	<0.50		0.0372	<0.00050	0.00026	0.0245	<0.00010
GW-2	GW-2D	28-Nov-2016 14:00	<0.50	<0.50	3.8	0.71	<0.10		915	0.006	0.006	0.12	<0.0050	<0.020	<0.020	<0.0050		1.3	<0.50		0.0537	<0.00050	0.00026	0.0237	<0.00010
GW-2	GW-2	08-Dec-2016 18:00	<0.50	<0.50	3.6	0.95	<0.10		1240	<0.0050	<0.0050	0.33	<0.0050	<0.020	<0.020	<0.0050		0.85	0.5		0.0079	<0.00050	<0.00010	0.0101	<0.00010
GW-2	GW-2	16-Dec-2016 09:30	<0.50	<0.50	4.3	0.88	<0.10		1240	0.0078	0.008	0.34	<0.0050	<0.020	<0.020	<0.0050		<0.50	0.86		0.0045	<0.00050	0.00015	0.0097	<0.00010
GW-2	GW-2	05-Feb-2017 11:10	<0.50	<0.50	2.0	0.610	<0.10		417	<0.0050	<0.0050	0.083	<0.0020	0.0128	0.0128	<0.0050		1.65	0.75		0.0128	<0.0005	0.00018	0.0172	0.00019
GW-2	GW-2	09-May-2017 16:00	<0.50	<0.50	5.4	0.95	<0.10		1550	<0.0050	<0.0050	1.1	0.0084	0.0286	0.037	<0.0050		1.43	0.96		<0.003	<0.0005	0.00042	0.0128	<0.0001
GW-2	GW-2	16-Aug-2017 13:45	<1.0	<1.0	3.7	0.97	0.063		1270	<0.0050	<0.0050	0.36	0.0055	<0.0020	0.0063	<0.0050		0.78	1.2		0.0054	<0.0001	<0.0001	0.00692	<0.00005
GW-2	GW-2	07-Nov-2017 15:00	<1.0	<1.0	3.2	0.82	0.053		996	0.0082	0.009	0.26	<0.0020	<0.0020	<0.0020	<0.0050		0.88	1.04		0.00306	0.000024	0.000056	0.0123	<0.00001
GW-2	FB	12-Feb-2018 17:30	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.0017	<0.00002	<0.00002	0.000025	<0.00001
GW-2	JH41-A	13-Feb-2018 14:15	<1.0	<1.0	3.34	0.94	0.053		1060	0.0145	0.015	0.31	<0.0020	<0.0020	<0.0020	<0.0050		0.72	0.6		0.0019	<0.00002	0.000063	0.00898	<0.00001
GW-2	GW-2	13-Feb-2018 14:15	<1.0	<1.0	3.31	0.93	0.055		1060	0.0115	0.012	0.3	<0.0020	<0.0020	<0.0020	<0.0050		0.57	<0.50		0.00263	<0.00002	0.000067	0.00907	<0.00001
GW-2	GW-2	09-May-2018 13:30	<1.0	<1.0	4.94	0.74	0.35		1250	0.064	0.068	0.43	0.0065	0.0968	0.103	<0.0050		2.02	1.13		<0.015	<0.0001	<0.0001	0.0177	<0.00005
GW-2	GW-2	31-Jul-2018 17:00	<1.0	<1.0	25.1	0.62	0.55		1310	<0.0050	<0.0050	0.51	0.005	1.41	1.41	<0.0050		1.1	1.2		<0.0025	<0.0001	<0.0001	0.0214	<0.00005
GW-2	GW-NOV	08-Nov-2018 08:30	<1.0	<1.0	18.9	1.1	0.44		1150	<0.0050	<0.0053	0.38	<0.0020	0.388	0.388	<0.0050		1.3	1.13		<0.015	<0.0001	<0.0001	0.0103	<0.00005
GW-2	GW-2	08-Nov-2018 08:30	<1.0	<1.0	18.7	1.1	0.49		1240	<0.0050	<0.0053	0.32	<0.0020	0.382	0.382	<0.0050		0.91	0.97		<0.015	<0.0001	<0.0001	0.0105	<0.00005
GW-2	GW-2	14-Feb-2019 13:30	<1.0	<1.0	15.2	0.95	0.44		1150	<0.0019	<0.0020	0.26	<0.0020	0.125	0.125	<0.0050		<0.50	0.86		<0.003	<0.00002	0.00006	0.00867	<0.00001
GW-2	GW-2	29-May-2019 09:30	<1.0	<1.0	37.3	0.65	0.74		1280	<0.0019	<0.0020	0.17	0.0037	1.76	1.77	<0.0050		1.2	1.4		0.0092	<0.0001	<0.0001	0.026	<0.00005
GW-2	BD-Q2	29-May-2019 10:00	<1.0	<1.0	38	0.67	0.74		1260	<0.0019	<0.0020	0.15	0.0047	1.76	1.77	<0.0050		1.2	1.3		0.0118	<0.0001	<0.0001	0.0256	<0.00005
GW-2	FB-Q2	29-May-2019 10:15	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0019	<0.0020	<0.015	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.00448	0.000051	<0.00002	<0.00002	<0.00001
GW-2	GW-2	14-Aug-2019 10:00	<1.0	<1.0	47	0.79	0.87		1500	<0.0018	<0.0020	0.41	<0.0020	1.39	1.39	<0.0030		1.6	1.6		0.0048	<0.00004	0.000114	0.0151	<0.00002
GW-2	GW-2	06-Nov-2019 13:00	<1.0	<1.0	18	0.48	0.37		580	<0.0018	<0.0020	0.12	<0.0010	0.42	0.42	<0.0030		0.78	1.2		0.0061	0.000057	0.000076	0.00853	<0.00001
GW-2	GW-2	20-Feb-2020 16:30	<1.0	<1.0	33.4	0.915	0.579		1250	<0.0018	<0.0020	0.305	0.0059	0.45	0.45	0.0034		1.06	1.7		0.0035	<0.00004	0.000078	0.0116	<0.00002
GW-2	GW-2	19-May-2020 12:20	<1.0	<1.0	72.7	0.517	1.36		1390	<0.0018	<0.0020	0.062	<0.0010	2.5	2.5	<0.0030		1.61	2.2		0.00143	0.00006	0.000046	0.0332	<0.00001
GW-2	GW-2	28-Jul-2020 16:00	<1.0	<1.0	44.4	0.505	0.825		901	<0.0018	<0.0020	0.075	0.0017	1.4	1.4	0.003		1.31	1.4		<0.0005	0.000051	0.000167	0.0109	<0.00001

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	Carbonate (CO3)	Hydroxide (OH)	Dissolved Chloride (Cl)	Fluoride (F)	Bromide (Br)	Anions and Nutrients	Dissolved Sulphate (SO4)	Total Sulphide	Total Sulphide (as H2S)	Total Ammonia (N)	Nitrite (N)	Nitrate (N)	Nitrate plus Nitrite (N)	Orthophosphate (P)	Organic / Inorganic Carbon	TOC	DOC	Total Metals	T-Al	T-Sb	T-As	T-Ba	T-Be
			mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L
			0.50	0.50	0.50	0.010	0.010		0.50	0.0019	0.0020	0.0050	0.0020	0.0020	0.0020	0.0030		0.50	0.50		0.00050	0.00002	0.00002	0.00002	0.000010
GW-3	FB-1	29-Nov-2016 11:00	<0.50	<0.50	3.7	<0.010	<0.010		<0.50	0.007	0.007	<0.0050	<0.0050	<0.020	<0.020	<0.0050		<0.50	<0.50		<0.0030	<0.00050	<0.00010	<0.0010	<0.00010
GW-3	GW-3	29-Nov-2016 11:00	<0.50	<0.50	1.5	0.086	0.01		36.4	0.0053	0.006	0.072	<0.0050	<0.020	<0.020	<0.0050		1.69	1.56		0.0094	0.00067	0.00122	0.104	<0.00010
GW-3	GW-3	09-Dec-2016 10:00	<0.50	<0.50	0.91	0.093	<0.10		53.3	0.0054	0.006	0.11	<0.0050	<0.020	<0.020	<0.0050		2.28	1.46		0.0044	<0.00050	0.00161	0.0952	<0.00010
GW-3	GW-3	16-Dec-2016 12:05	<0.50	<0.50	1.5	0.086	<0.10		83.2	<0.0050	<0.0050	0.052	<0.0050	<0.020	<0.020	<0.0050		1.77	1.76		0.0045	<0.00050	0.00154	0.105	<0.00010
GW-3	GW-3	05-Feb-2017 15:10	<0.50	<0.50	1.3	0.097	<0.10		130	0.0072	0.0080	0.068	<0.0020	<0.0020	<0.0020	0.0059		2.79	1.90		0.0082	<0.0005	0.00209	0.124	<0.0001
GW-3	GW-3	10-May-2017 15:00	<0.50	<0.50	1	0.083	<0.010		27.3	<0.0050	<0.0050	0.13	<0.0020	<0.0020	<0.0020	<0.0050		2.19	2.07		<0.003	<0.0005	0.00154	0.097	<0.0001
GW-3	GW-3	17-Aug-2017 17:00	5.7	<1.0	1.2	0.081	0.015		27.3	0.0057	0.006	0.2	<0.0050	<0.020	<0.020	0.0119		2	2.3		0.0147	<0.0005	0.00163	0.11	<0.0001
GW-3	GW-3	08-Nov-2017 15:30	<1.0	<1.0	1.5	0.079	0.017		69.6	0.0059	0.006	0.065	<0.0020	<0.0020	<0.0020	<0.0050		2.04	1.97		0.00542	0.000023	0.00173	0.137	<0.00001
GW-3	GW-3	07-Dec-2017 11:30	<1.0	<1.0	1.81	0.084	0.018		71.8	0.0137	0.015	0.041	<0.0020	0.0084	0.0084	<0.0050		2.9	2.22		0.00155	<0.00002	0.0019	0.133	<0.00001
GW-3	GW-3	14-Feb-2018 11:00	<1.0	<1.0	1.71	0.097	0.024		71.7	0.0142	0.015	0.055	<0.0020	<0.0020	<0.0020	<0.0050		2.57	2.47		0.00268	0.000021	0.00172	0.129	<0.00001
GW-3	GW-3	09-May-2018 16:00	<1.0	<1.0	1.54	0.087	0.015		29.9	<0.0019	<0.0020	0.067	0.0028	0.0141	0.0169	<0.0050		3.19	2.51		<0.003	<0.00002	0.00162	0.111	<0.00001
GW-3	GW-3	30-Jul-2018 17:00	<1.0	<1.0	1.95	0.074	0.018		28.7	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		2.2	2.4		0.0039	0.000029	0.00176	0.133	<0.00001
GW-3	GW-A	30-Jul-2018 17:30	<1.0	<1.0	1.75	0.074	0.018		27.9	<0.0050	<0.0050	0.034	<0.0020	0.002	0.002	<0.0050		2.1	2.5		0.0087	0.000052	0.0017	0.13	<0.00001
GW-3	GW-3	08-Nov-2018 08:30	<1.0	<1.0	2.76	0.094	0.029		46.4	<0.0050	<0.0053	0.047	<0.0020	<0.0020	<0.0020	<0.0050		2.31	2.43		<0.003	<0.00002	0.00178	0.131	<0.00001
GW-3	GW-3	14-Feb-2019 16:00	<1.0	<1.0	3.29	0.094	0.053		67.4	<0.0019	<0.0020	0.02	<0.0020	<0.0020	<0.0020	<0.0050		1.8	2.3		<0.003	<0.00002	0.00193	0.146	<0.00001
GW-3	GW-3	29-May-2019 12:45	<1.0	<1.0	1.86	0.082	0.029		41.3	<0.0019	<0.0020	0.015	<0.0020	0.0036	0.0036	<0.0050		2.1	2.1		0.00695	0.000093	0.00154	0.13	<0.00001
GW-3	GW-3	14-Aug-2019 12:30	<1.0	<1.0	2	0.078	0.03		56	<0.0018	<0.0020	0.043	<0.0020	0.0042	0.0042	<0.0030		2.5	2.3		0.00181	0.000025	0.0017	0.154	<0.00001
GW-3	GW-3	06-Nov-2019 14:25	<1.0	<1.0	4.4	0.08	0.056		100	<0.0018	<0.0020	0.054	<0.0010	<0.0020	<0.0022	<0.0030		1.9	2.3		0.0043	<0.00002	0.00186	0.191	<0.00001
GW-3	GW-3	22-Feb-2020 15:20	<1.0	<1.0	11.6	0.09	0.152		259	<0.0018	<0.0020	0.205	0.002	<0.0020	<0.0022	<0.0030		2.36	2.1		0.00126	<0.00002	0.00289	0.329	<0.00001
GW-3	GW-3	18-May-2020 22:40	<1.0	<1.0	3.19	0.08	0.043		82.5	<0.0018	<0.0020	0.049	<0.0010	<0.0020	<0.0022	<0.0030		2.4	2.4		0.00418	0.000034	0.0016	0.12	<0.00001
GW-3	GW-3	19-Jul-2020 13:15	<1.0	<1.0	3.66	0.077	0.058		95.3	<0.0018	<0.0020	0.046	<0.0010	<0.0020	<0.0022	<0.0030		2.74	2.3		0.00057	<0.00002	0.002	0.11	<0.00001
GW-4A	GW-4A	29-Nov-2016 17:50	<0.50	<0.50	17	0.33	<0.10		297	0.0099	0.011	0.25	<0.0050	0.803	0.803	0.0138		2.73	1.89		0.0533	<0.00050	0.0003	0.0356	<0.00010
GW-4A	GW-4A	08-Dec-2016 15:00	<0.50	<0.50	27	0.72	<0.10		648	0.005	0.005	0.89	<0.0050	<0.020	<0.020	<0.0050		1.93	1.34		0.037	<0.00050	0.00154	0.0096	<0.00010
GW-4A	GW-4A	15-Dec-2016 14:00	<0.50	<0.50	27	0.65	<0.10		595	0.0092	0.01	0.83	<0.0050	<0.020	<0.020	<0.0050		1.32	1.25		0.0045	<0.00050	0.00169	0.0087	<0.00010
GW-4A	GW-4A	04-Feb-2017 11:50	<0.50	<0.50	20	0.360	<0.10		383	0.0073	0.0080	0.18	0.0063	0.300	0.307	<0.0050		2.93	1.07		0.0051	<0.0005	0.00033	0.0208	<0.0001
GW-4A	GW-4A	08-May-2017 17:30	<0.50	<0.50	15	0.27	<0.10		200	<0.0050	<0.0050	0.015	<0.0020	0.715	0.715	<0.0050		1.31	1.61		<0.003	<0.0005	<0.0001	0.0227	<0.0001
GW-4A	GW-4A	15-Aug-2017 16:00	<1.0	<1.0	24	0.68	<0.050		629	<0.0050	<0.0050	0.91	<0.0020	0.0046	0.0046	<0.0050		2.4	2.9		0.0032	<0.0005	0.00028	0.0153	<0.0001
GW-4A	GW-4A	06-Nov-2017 16:30	<1.0	<1.0	16	0.37	0.021		334	0.0118	0.013	0.26	<0.0020	0.62	0.62	<0.0050		2.79	2.16		0.00067	0.000034	0.00008	0.0236	<0.00001
GW-4A	GW-4A	12-Feb-2018 17:00	<1.0	<1.0	21.7	0.56	0.035		507	0.0087	0.009	0.61	0.005	0.0943	0.0993	<0.0050		2.2	2.28		0.00168	0.000024	0.000076	0.0222	<0.00001
GW-4A	GW-4A	08-May-2018 12:00	<1.0	<1.0	10.6	0.29	0.057		234	<0.0019	<0.0020	0.045	<0.0020	1.04	1.04	<0.0050		<0.50	<0.50		<0.003	0.00004	0.000041	0.022	<0.00001
GW-4A	JH42-Q2	08-May-2018 12:15	<1.0	<1.0	10.5	0.28	0.057		229	<0.0019	<0.0020	0.052	<0.0020	1.03	1.03	0.0054		1.63	1.65		<0.003	0.000043	0.000047	0.022	<0.00001
GW-4A	GW-4A	31-Jul-2018 10:15	<1.0	<1.0	21.7	0.53	0.16		654	<0.0050	<0.0050	1.2	<0.0020	0.0028	0.0028	<0.0050		2.7	2.7		0.0016	<0.00002	0.000124	0.0216	<0.00001
GW-4A	GW-4A	06-Nov-2018 11:30	<1.0	<1.0	23.6	0.68	0.21		813	<0.0050	<0.0053	0.83	0.0041	0.0289	0.033	<0.0050		2.6	2.7		<0.006	<0.00004	0.000126	0.0287	<0.00002
GW-4A	GW-4A	14-Feb-2019 11:00	<1.0	<1.0	23.5	0.71	0.15		604	<0.0019	<0.0020	0.79	<0.0020	0.0112	0.0112	<0.0050		2.3	2.1		<0.003	<0.00002	0.000109	0.0143	<0.00001
GW-4A	GW-4A	28-May-2019 14:30	<1.0	<1.0	11	0.36	0.055		280	<0.0019	<0.0020	0.25	0.0034	0.823	0.827	<0.0050		2.1	2.4		<0.003	<0.0005	<0.0001	0.0224	<0.0001
GW-4A	GW-4A	13-Aug-2019 15:00	<1.0	<1.0	10	0.26	0.077		320	<0.0018	<0.0020	0.14	0.0068	0.65	0.656	<0.0030		2.8	2.8		0.00099	0.000032	0.000103	0.0216	<0.00001
GW-4A	BD-Q3	13-Aug-2019 15:30	<1.0	<1.0	11	0.26	0.061		320	<0.0018	<0.0020	0.17	0.0067	0.644	0.651	<0.0030		2.3	1.6		0.00108	0.000034	0.000122	0.0209	<0.00001
GW-4A	GW 4A	05-Nov-2019 14:37	<1.0	<1.0	20	0.56	0.14		500	<0.0018	<0.0020	0.51	0.007	0.25	0.26	<0.0030		1.6	2		<0.006	<0.00004	0.000065	0.0156	<0.00002
GW-4A	GW-4A	20-Feb-2020 12:45	<1.0	<1.0	23.4	0.632	0.114		645	<0.0018	<0.0020	0.786	0.0039	0.0024	0.0063	<0.0030		2.27	2.4		0.0032	<0.00004	0.000089	0.0156	<0.00002
GW-4A	GW-4A	18-May-2020 15:50	<1.0	<1.0	11	0.282	0.049		336	<0.0018	<0.0020	0.045	0.0094	0.85	0.86	0.0073		2.38	2.2		0.00065	0.000043	0.000023	0.0228	<0.00001
GW-4A	Duplicate	18-May-2020 16:00	<1.0	<1.0	11	0.281	0.05		268	<0.0018	<0.0020	0.05	0.0088	0.86	0.87	<0.0030		2.43	2.3		0.00073	0.000044	<0.00002	0.0262	<0.00001
GW-4A	GW-4A	14-Jul-2020 15:15	<1.0	<1.0	21.5	0.445	0.122		547	<0.0018	<0.0020	0.479	0.0043	0.12	0.13	<0.0030		2.48	2.6		0.0013	0.000116	0.000097	0.0196	<0.00002
GW-4A	GW-4A Dup	2020-07-14	<1.0	<1.0	21.6	0.469	0.13		551	<0.0018	<0.0020	0.489	0.0046	0.12	0.13	<0.0030		2.52	2.6		0.0008	<0.00002	0.000022	0.0183	<0.00001
FB	FB Q3	2020-07-14	<1.0	<1.0	<0.50	<0.050	<0.010		<1.0	<0.0018	<0.0020	<0.015	<0.0010	<0.0020	<0.0022	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	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	T-Se	T-Si	T-Ag	T-Na	T-Sr
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.000005	0.010	0.000005	0.050	0.00010	0.000005	0.000050	0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.0020	0.050	0.00004	0.05	0.000005	0.050	0.00005
GW-1	GW-1	27-Nov-2016 14:00	<0.0010	0.105	0.000041	158	<0.0010	<0.00050	<0.00050	0.011	<0.00020	0.0403	36.2	0.0216	<0.000010	<0.0010	<0.0010		3.89	0.00027	4.09	<0.000020	31	0.333
GW-1	GW-1	07-Dec-2016 19:30	<0.0010	0.283	0.000103	349	<0.0010	0.0014	<0.00050	<0.01	<0.00020	0.114	87	1.89	<0.000010	<0.0010	0.0029		5.71	<0.00010	7.02	<0.000020	108	0.763
GW-1	GW-1	15-Dec-2016 16:45	<0.0010	0.305	0.0001	372	<0.0010	0.00151	<0.00050	0.017	<0.00020	0.122	91.1	1.97	<0.000010	<0.0010	0.0033		5.78	<0.00010	7.66	<0.000020	114	0.797
GW-1	GW-1	04-Feb-2017 15:45	<0.001	0.276	0.00008	344	<0.001	0.00169	<0.0005	0.124	<0.0002	0.111	86.2	1.89	<0.00001	<0.001	0.0027		5.60	<0.0001	7	<0.00002	108	0.743
GW-1	GW-1	09-May-2017 11:30	<0.001	0.178	0.000121	225	<0.001	0.00025	<0.0005	<0.01	<0.0002	0.0712	58.3	0.477	<0.00001	<0.001	0.002		4.12	0.00011	4.22	<0.00002	58.2	0.438
GW-1	JH41-100	09-May-2017 12:00	<0.001	0.18	0.000129	227	<0.001	0.00025	<0.0005	<0.01	<0.0002	0.0724	59.3	0.514	<0.00001	<0.001	0.0018		4.22	<0.0001	4.2	<0.00002	59	0.453
GW-1	GW-1	16-Aug-2017 11:00	<0.001	0.116	0.000046	187	<0.001	<0.0002	<0.0005	<0.01	<0.0002	0.0503	47.7	0.0093	<0.00001	<0.001	<0.001		4.76	0.00032	4.76	<0.00002	38.1	0.381
GW-1	FB	16-Aug-2017 14:30	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.00001	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001
GW-1	JH41-500	06-Nov-2017 17:00	<0.000005	0.268	0.000114	349	<0.0001	0.000547	0.000117	0.0118	<0.000005	0.0774	81.2	0.926	<0.000002	0.000548	0.00188	0.0066	5.83	0.000052	6.97	<0.000005	90.8	0.599
GW-1	GW-1	07-Nov-2017 11:35	<0.000005	0.31	0.000113	323	<0.0001	0.000524	0.000108	0.0143	<0.000005	0.0754	76.9	0.924	<0.000002	0.000542	0.00177	0.0063	5.93	0.000196	7.11	<0.000005	86.4	0.589
GW-1	FB-500	07-Nov-2017 15:30	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000073	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0037	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005
GW-1	GW-1	13-Feb-2018 12:00	<0.000005	0.219	0.0000696	281	<0.0001	0.000788	0.000128	0.018	0.000017	0.0782	69.1	1.05	<0.000002	0.000425	0.00179	0.0052	5.08	0.000157	5.43	<0.000005	77	0.612
GW-1	GW-1	08-May-2018 15:00	<0.00005	0.218	0.000225	264	<0.0005	0.000061	<0.0005	0.052	<0.0001	0.0764	72.5	0.651	<0.000002	0.00094	0.00264	<0.025	4.5	<0.0002	4.97	<0.00005	62.8	0.516
GW-1	FB-Q2	08-May-2018 15:30	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0059	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005
GW-1	GW-1	31-Jul-2018 13:00	<0.000025	0.222	0.000249	314	<0.0005	0.000403	<0.00025	0.0106	<0.000025	0.084	83.3	1.16	<0.000002	0.00072	0.00301	<0.01	5.15	<0.0002	4.83	<0.000025	83.2	0.632
GW-1	GW-1	06-Nov-2018 13:45	<0.00005	0.247	0.000286	392	<0.0005	0.000499	<0.0005	<0.025	<0.0001	0.0933	96.2	1.33	<0.000002	0.0009	0.0035	<0.025	6.2	<0.0002	6.26	<0.00005	95.5	0.885
GW-1	GW-1	13-Feb-2019 13:30	<0.000025	0.273	0.000139	341	<0.0005	0.00129	<0.00025	0.032	<0.000025	0.103	90.8	1.73	0.0000022	0.00048	0.00324	<0.01	5.78	<0.0002	5.88	<0.000025	105	0.744
GW-1	FB-Q1	13-Feb-2019 14:00	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	0.0000058	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005
GW-1	GW-1	28-May-2019 16:30	<0.002	0.259	0.00033	396	<0.002	<0.0004	<0.001	<0.02	<0.0004	0.11	115	1.13	<0.000002	<0.002	0.0042		7.18	<0.0002	6.46	<0.00004	118	0.77
GW-1	GW-1	13-Aug-2019 17:30	<0.00001	0.295	0.000291	422	<0.0002	0.000531	0.00018	1.97	<0.00001	0.114	108	1.45	<0.000002	0.00094	0.00413	0.016	6.89	<0.00008	6.98	<0.00001	132	0.953
GW-1	GW-1	06-Nov-2019 11:30	<0.00001	0.144	0.00011	281	<0.0002	0.000039	0.00035	0.0023	0.000018	0.0569	69.7	0.116	<0.000002	0.0006	0.00175	0.0082	5.79	0.000208	4.69	<0.00001	75.9	0.616
GW-1	GW-1	20-Feb-2020 14:25	<0.00001	0.252	0.000128	347	<0.0002	0.00114	<0.0001	0.0281	<0.00001	0.0981	90	1.41	<0.0000019	0.00054	0.00273	0.0048	6.06	<0.00008	6.23	<0.00001	100	0.76
GW-1	GW-1	18-May-2020 12:10	<0.000005	0.283	0.000286	372	<0.0001	0.000184	0.00029	0.0027	<0.000005	0.118	107	1.58	<0.0000019	0.00127	0.00386	<0.002	7.25	0.00006	7	<0.000005	150	0.83
GW-1	GW-1	19-Jul-2020 16:40	<0.00001	0.318	0.000201	436	<0.0002	0.00123	0.0001	0.0722	<0.00001	0.122	111	1.86	<0.0000019	0.00071	0.00362	0.0118	6.99	<0.00008	7.19	<0.00001	142	0.996
GW-2	GW-2	28-Nov-2016 13:20	<0.0010	0.158	0.000107	272	0.001	0.00119	0.00066	0.604	<0.00020	0.121	86.4	0.243	<0.000010	0.001	0.0078		3.28	<0.00010	5.59	<0.000020	97.1	0.626
GW-2	GW-2D	28-Nov-2016 14:00	<0.0010	0.163	0.000103	263	0.0014	0.00124	0.00079	0.676	<0.00020	0.123	87.3	0.249	<0.000010	0.0012	0.0085		3.37	<0.00010	5.87	<0.000020	97.4	0.628
GW-2	GW-2	08-Dec-2016 18:00	<0.0010	0.221	0.000063	324	<0.0010	<0.00050	<0.00050	0.035	<0.00020	0.178	117	0.0546	<0.000010	<0.0010	0.0035		3.84	<0.00010	5.82	<0.000020	145	0.795
GW-2	GW-2	16-Dec-2016 09:30	<0.0010	0.234	0.00007	352	<0.0010	<0.00050	<0.00050	0.015	<0.00020	0.177	126	0.109	<0.000010	<0.0010	0.0036		4.21	<0.00010	6.41	<0.000020	155	0.866
GW-2	GW-2	05-Feb-2017 11:10	<0.001	0.107	0.0002	162	<0.001	0.00082	<0.0005	0.088	<0.0002	0.0783	53.2	0.338	<0.00001	<0.001	0.0033		2.10	<0.0001	4.64	<0.00002	52.6	0.411
GW-2	GW-2	09-May-2017 16:00	<0.001	0.285	0.00006	391	<0.001	0.00471	<0.0005	5.58	<0.0002	0.223	139	0.778	<0.00001	<0.001	0.0223		3.5	<0.0001	5.41	<0.00002	176	0.965
GW-2	GW-2	16-Aug-2017 13:45	<0.000025	0.216	0.000096	347	<0.0005	0.000115	<0.00025	0.0123	<0.000025	0.176	118	0.213	<0.000010	<0.00025	0.00607		4.12	<0.0002	6.78	<0.000025	136	0.807
GW-2	GW-2	07-Nov-2017 15:00	<0.000005	0.236	0.0000876	346	<0.0001	0.000251	0.000323	0.145	0.000006	0.124	110	0.184	<0.000002	0.000285	0.00456	0.0051	3.84	0.000071	6.78	<0.000005	118	0.689
GW-2	FB	12-Feb-2018 17:30	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000057	<0.001	0.0000109	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0025	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005
GW-2	JH41-A	13-Feb-2018 14:15	<0.000005	0.191	0.0000783	290	<0.0001	0.000358	0.000094	0.153	0.0000214	0.139	94.2	0.225	<0.000002	0.000277	0.00581	0.0032	3.14	<0.00004	5.26	<0.000005	111	0.735
GW-2	GW-2	13-Feb-2018 14:15	<0.000005	0.189	0.0000812	291	<0.0001	0.000357	0.00019	0.154	0.0000181	0.14	93.7	0.219	<0.000002	0.000265	0.00566	0.0034	3.07	<0.00004	5.13	<0.000005	112	0.688
GW-2	GW-2	09-May-2018 13:30	<0.00005	0.209	0.000104	309	<0.0005	0.000626	<0.0005	0.167	<0.0001	0.149	102	0.254	<0.000002	0.00031	0.00661	<0.025	3.3	0.00021	5.01	<0.00005	121	0.778
GW-2	GW-2	31-Jul-2018 17:00	<0.000025	0.155	0.000087	265	<0.0005	0.000111	<0.00025	<0.005	<0.000025	0.111	85	0.13	<0.000002	0.00029	0.00408	<0.01	3.35	0.00084	4.21	<0.000025	204	0.631
GW-2	GW-NOV	08-Nov-2018 08:30	<0.00005	0.235	0.000165	363	<0.0005	0.000177	<0.0005	<0.025	<0.0001	0.176	124	0.406	<0.000002	0.0003	0.00857	<0.025	3.8	<0.0002	5.89	<0.00005	156	0.839
GW-2	GW-2	08-Nov-2018 08:30	<0.00005	0.235	0.000173	356	<0.0005	0.000184	0.00057	<0.025	0.00134	0.176	124	0.407	<0.000002	0.00031	0.00862	<0.025	3.9	<0.0002	5.78	<0.00005	155	0.841
GW-2	GW-2	14-Feb-2019 13:30	<0.00001	0.21	0.000125	311	<0.0001	0.000264	0.00016	0.008	<0.00002	0.151	101	0.328	0.0000054	0.000289	0.00665	0.0077	3.55	0.000048	5.39	<0.00001	132	0.819
GW-2	GW-2	29-May-2019 09:30	<0.000025	0.205	0.000096	293	<0.0005	0.000451	<0.00025	0.253	0.000025	0.134	91.7	0.152	<0.000002	0.00038	0.00489	<0.01	4.15	0.00143	5.11	<0.000025	336	0.781
GW-2	BD-Q2	29-May-2019 10:00	<0.000025	0.203	0.000078	293	<0.0005	0.000433	0.00026	0.246	<0.000025	0.134	90	0.145	<0.000002	0.00035	0.00444	<0.01	4	0.00141	5.09	<0.000025	324	0.772
GW-2	FB-Q2	29-May-2019 10:15	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0037	<0.050	<0.00004	<0.05	<0.000005	<0.050	0.00012
GW-2	GW-2	14-Aug-2019 10:00	<0.00001	0.249	0.00013	351	<0.0002	0.00049	0.00017	0.0052	0.000028	0.196	117	0.442	<0.000002	0.00032	0.00893	0.0047	4.71	0.000158	5.73	<0.00001	315	0.901
GW-2	GW-2	06-Nov-2019 13:00	<0.00001	0.107	0.0000601	178	<0.0001	0.000109	0.00031	0.0239	<0.00002	0.0704	51.5	0.106	<0.000002	0.000384	0.00319	0.0052	2.97	0.000169	4.81	<0.00001	160	0.465
GW-2	GW-2	20-Feb-2020 16:30	<0.00001	0.207	0.000125	295	<0.0002	0.000453	0.00014	0.0072	<0.00001	0.161	103	0.335	<0.0000019	0.00032	0.00743	<0.004	4.09	<0.00008	5.51	<0.00001	229	0.782
GW-2	GW-2	19-May-2020 12:20	<0.000005	0.255	0.0000838	356	<0.0001	0.000109	0.00027	0.0027	<0.000005	0.161	86	0.0699	<0.0000019	0.000606	0.00263	<0.002	6.26	0.00173	6.04	<0.000005	537	0.975
GW-2	GW-2	28-Jul-2020 16:00	<0.000005	0.124	0.0000591	209	<0.0001	0.000081	0.00022	0.0019	0.0000066	0.0784	53.6	0.0987	<0.0000019	0.000425	0.00275	0.0059	3.72	0.000798	4.6	<0.000005	302	0.58

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	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	T-Se	T-Si	T-Ag	T-Na	T-Sr
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.000005	0.010	0.000005	0.050	0.00010	0.000005	0.000050	0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.0020	0.050	0.00004	0.05	0.000005	0.050	0.00005
GW-3	FB-1	29-Nov-2016 11:00	<0.0010	<0.05	<0.000010	0.093	<0.0010	<0.00050	<0.00050	<0.01	<0.00020	<0.0050	<0.050	<0.0010	<0.000010	<0.0010	<0.0010		<0.050	<0.00010	<0.1	<0.000020	<0.050	<0.0010
GW-3	GW-3	29-Nov-2016 11:00	<0.0010	<0.05	0.000032	76.4	<0.0010	0.00074	0.00066	0.303	<0.00020	0.0077	15	0.117	<0.000010	0.0013	0.0019		1.39	0.00014	3.51	<0.000020	7.53	0.192
GW-3	GW-3	09-Dec-2016 10:00	<0.0010	<0.05	0.000012	80.6	<0.0010	0.00084	<0.00050	0.98	<0.00020	0.0088	17.7	0.19	<0.000010	0.0011	0.0016		1.41	<0.00010	3.67	<0.000020	9.43	0.22
GW-3	GW-3	16-Dec-2016 12:05	<0.0010	<0.05	0.00001	98.3	<0.0010	0.00077	<0.00050	1.37	<0.00020	0.0094	19.5	0.22	<0.000010	0.001	0.0015		1.45	<0.00010	4.23	<0.000020	11.9	0.236
GW-3	GW-3	05-Feb-2017 15:10	<0.001	<0.05	<0.00001	91.2	<0.001	0.00075	<0.0005	2.36	<0.0002	0.0103	21.6	0.281	<0.00001	<0.001	0.0014		1.49	<0.0001	3.65	<0.00002	18.1	0.234
GW-3	GW-3	10-May-2017 15:00	<0.001	<0.05	<0.00001	72.2	<0.001	0.00038	<0.0005	1.46	<0.0002	0.0059	13.6	0.168	<0.00001	<0.001	<0.001		1.05	<0.0001	3.65	<0.00002	5.23	0.157
GW-3	GW-3	17-Aug-2017 17:00	<0.001	<0.05	<0.00001	67.8	<0.001	0.00061	<0.0005	1.38	<0.0002	0.0057	14.1	0.164	<0.00001	<0.001	<0.001		0.939	<0.0001	3.27	<0.00002	6.07	0.153
GW-3	GW-3	08-Nov-2017 15:30	<0.000005	0.024	<0.000005	87.3	<0.0001	0.00136	<0.00005	2.08	0.0000125	0.00836	18.9	0.226	<0.000002	0.000923	0.000872	0.0149	1.36	0.000043	3.57	<0.000005	11.8	0.194
GW-3	GW-3	07-Dec-2017 11:30	<0.000005	0.027	<0.000005	88	<0.0001	0.00179	<0.00005	2.21	<0.000005	0.00873	19	0.238	<0.000002	0.00104	0.000875	0.0156	1.34	<0.00004	3.32	<0.000005	12.1	0.223
GW-3	GW-3	14-Feb-2018 11:00	<0.000005	0.026	<0.000005	80.6	<0.0001	0.00229	<0.00005	2.24	0.0000118	0.00833	17.2	0.234	<0.000002	0.000979	0.000918	0.0105	1.18	<0.00004	3.39	<0.000005	11.5	0.186
GW-3	GW-3	09-May-2018 16:00	<0.00001	0.014	<0.000005	69.2	<0.0001	0.00125	<0.0001	1.67	<0.00002	0.00591	14	0.161	<0.000002	0.000899	0.00067	0.0147	1	<0.00004	3.11	<0.00001	5.65	0.171
GW-3	GW-3	30-Jul-2018 17:00	<0.00001	0.015	<0.000005	74.4	<0.0001	0.00115	<0.0001	1.88	<0.00002	0.00598	14.4	0.13	<0.000002	0.000859	0.00061	0.0172	1.05	<0.00004	3.38	<0.00001	6.84	0.178
GW-3	GW-A	30-Jul-2018 17:30	<0.00001	0.015	<0.000005	71.7	<0.0001	0.00111	<0.0001	1.82	<0.00002	0.00579	14	0.127	<0.000002	0.000838	0.00058	0.0197	1.02	<0.00004	3.17	<0.00001	6.57	0.174
GW-3	GW-3	08-Nov-2018 08:30	<0.00001	0.017	<0.000005	79.4	<0.0001	0.00149	<0.0001	2.02	<0.00002	0.00658	15.6	0.149	<0.000002	0.000869	0.00069	0.0141	1.11	<0.00004	3.33	<0.00001	7.63	0.181
GW-3	GW-3	14-Feb-2019 16:00	<0.00001	0.019	<0.000005	78.5	<0.0001	0.00267	<0.0001	2.19	<0.00002	0.00805	16.8	0.18	0.000005	0.000858	0.00082	0.0167	1.2	<0.00004	3.28	<0.00001	9.8	0.208
GW-3	GW-3	29-May-2019 12:45	<0.000005	0.014	<0.000005	74.4	<0.0001	0.00109	<0.00005	1.86	<0.000005	0.00576	14.3	0.122	<0.000002	0.000789	0.000566	0.0132	0.933	<0.00004	2.96	<0.000005	6.61	0.175
GW-3	GW-3	14-Aug-2019 12:30	<0.000005	0.016	<0.000005	80.6	<0.0001	0.00139	<0.00005	2	<0.000005	0.00694	16.2	0.126	<0.000002	0.000869	0.000667	0.0162	1.16	<0.00004	3.33	<0.000005	7.93	0.193
GW-3	GW-3	06-Nov-2019 14:25	<0.00001	0.019	<0.000005	94.7	<0.0001	0.00239	<0.0001	2.69	<0.00002	0.00719	19	0.167	<0.000002	0.000842	0.0008	0.0151	1.3	<0.00004	3.21	<0.00001	13.3	0.234
GW-3	GW-3	22-Feb-2020 15:20	<0.000005	0.055	<0.000005	182	<0.0001	0.00591	<0.00005	6.87	<0.000005	0.0159	39.5	0.418	<0.0000019	0.00122	0.00161	0.0174	2.33	<0.00004	4.63	<0.000005	41.4	0.427
GW-3	GW-3	18-May-2020 22:40	<0.000005	0.021	<0.000005	101	0.0003	0.00298	0.000118	3.27	0.0000923	0.00713	18.2	0.181	<0.0000019	0.00107	0.00157	0.0111	1.32	<0.00004	3.59	<0.000005	11.9	0.225
GW-3	GW-3	19-Jul-2020 13:15	<0.000005	0.022	<0.000005	93.1	0.00011	0.00292	<0.00005	2.79	<0.000005	0.00752	18.8	0.158	<0.0000019	0.000845	0.00078	0.014	1.25	<0.00004	3.41	<0.000005	14	0.225
GW-4A	GW-4A	29-Nov-2016 17:50	<0.0010	0.101	0.000156	200	<0.0010	0.00105	0.00403	0.174	<0.00020	0.0496	46.6	0.129	<0.000010	<0.0010	0.0033		7.7	0.00059	5.14	<0.000020	18.7	0.472
GW-4A	GW-4A	08-Dec-2016 15:00	<0.0010	0.218	0.000114	294	<0.0010	0.00071	<0.00050	12.3	<0.00020	0.096	60.8	0.293	<0.000010	<0.0010	0.0033		4.64	<0.00010	7.82	<0.000020	51.5	0.47
GW-4A	GW-4A	15-Dec-2016 14:00	<0.0010	0.187	0.00006	281	<0.0010	0.00066	<0.00050	11.6	<0.00020	0.0841	59.5	0.29	<0.000010	<0.0010	0.0034		4.83	<0.00010	7.73	<0.000020	50.1	0.49
GW-4A	GW-4A	04-Feb-2017 11:50	<0.001	0.102	0.000075	213	<0.001	<0.0005	0.00055	1.46	<0.0002	0.0492	51.0	0.0768	<0.00001	<0.001	0.0023		7.55	0.00076	5.2	<0.00002	25.9	0.452
GW-4A	GW-4A	08-May-2017 17:30	<0.001	0.084	0.000057	158	<0.001	<0.0002	<0.0005	0.366	<0.0002	0.0376	37.8	0.0048	<0.00001	<0.001	<0.001		6.18	0.00021	4.38	<0.00002	9.94	0.339
GW-4A	GW-4A	15-Aug-2017 16:00	<0.001	0.195	0.000118	260	<0.001	0.00075	<0.0005	8.8	<0.0002	0.0908	58.4	0.281	<0.00001	<0.001	0.0037		5.39	<0.0001	6.74	<0.00002	47.5	0.544
GW-4A	GW-4A	06-Nov-2017 16:30	<0.000005	0.142	0.000133	248	<0.0001	0.0004	0.000254	0.496	<0.000005	0.0615	52.6	0.142	<0.000002	0.000241	0.00295	0.004	7.67	0.000163	5.89	<0.000005	24.5	0.457
GW-4A	GW-4A	12-Feb-2018 17:00	0.0000051	0.159	0.000158	269	<0.0001	0.000517	0.000147	1.42	0.0000107	0.0731	51.2	0.215	<0.000002	0.000191	0.00323	0.0047	5.96	0.000056	5.97	<0.000005	35.1	0.486
GW-4A	GW-4A	08-May-2018 12:00	<0.00001	0.099	0.0000989	182	<0.0001	0.000063	0.00034	<0.005	<0.00002	0.0434	43.2	0.0191	<0.000002	0.00035	0.00128	0.0128	7.22	0.000477	5.21	<0.00001	11	0.416
GW-4A	JH42-Q2	08-May-2018 12:15	<0.00001	0.099	0.0000892	185	<0.0001	0.000062	0.00033	<0.005	<0.00002	0.0419	43	0.0186	<0.000002	0.00031	0.00126	0.0077	7.32	0.000471	5.25	<0.00001	11.3	0.418
GW-4A	GW-4A	31-Jul-2018 10:15	<0.000005	0.182	0.000141	293	<0.0001	0.000653	0.000088	4.22	0.0000093	0.0806	59.8	0.263	<0.000002	0.000212	0.00377	0.0044	6.44	0.000073	5.93	<0.000005	40.7	0.554
GW-4A	GW-4A	06-Nov-2018 11:30	<0.00002	0.24	0.000239	356	<0.0002	0.00134	<0.0002	11.5	<0.00004	0.0934	68.2	0.471	<0.000002	0.00019	0.00703	<0.01	6.99	<0.00008	7.21	<0.00002	47.8	0.659
GW-4A	GW-4A	14-Feb-2019 11:00	<0.00001	0.21	0.00012	273	<0.0001	0.0008	<0.0001	9.09	<0.00002	0.0917	56.4	0.323	<0.000002	0.000065	0.00416	0.0071	5.4	<0.00004	6.27	<0.00001	44.5	0.531
GW-4A	GW-4A	28-May-2019 14:30	<0.001	0.125	0.000097	212	<0.001	0.00026	<0.0005	0.701	<0.0002	0.052	46.7	0.0813	<0.000002	<0.001	0.0023		7.43	0.00017	5.89	<0.00002	15.2	0.4
GW-4A	GW-4A	13-Aug-2019 15:00	<0.000005	0.116	0.0000908	225	<0.0001	0.000242	0.0002	0.394	<0.000005	0.0509	47	0.0956	<0.000002	0.000223	0.0022	0.003	7.29	0.000115	5.46	<0.000005	17.2	0.465
GW-4A	BD-Q3	13-Aug-2019 15:30	<0.000005	0.116	0.0000828	221	<0.0001	0.000244	0.00018	0.366	<0.000005	0.0505	46.7	0.0923	<0.000002	0.000213	0.00217	0.0021	7.07	0.000116	5.41	<0.000005	17	0.455
GW-4A	GW 4A	05-Nov-2019 14:37	<0.00002	0.185	0.000088	276	<0.0002	0.000518	<0.0002	6.7	<0.00004	0.0812	56.2	0.202	<0.000002	0.00012	0.00388	<0.01	6.1	0.000081	6.75	<0.00002	34.1	0.485
GW-4A	GW-4A	20-Feb-2020 12:45	<0.00001	0.196	0.000102	277	<0.0002	0.000703	<0.0001	4.5	<0.00001	0.0852	59.5	0.266	<0.0000019	<0.0001	0.00397	0.0065	5.84	<0.00008	6.12	<0.00001	42.7	0.494
GW-4A	GW-4A	18-May-2020 15:50	<0.000005	0.125	0.0000586	191	<0.0001	0.0000965	0.000233	0.0521	<0.000005	0.0539	41	0.0404	<0.0000019	0.000293	0.00157	0.0094	7.29	0.000253	5.85	<0.000005	12	0.469
GW-4A	Duplicate	18-May-2020 16:00	<0.000005	0.12	0.0000806	197	<0.0001	0.000108	0.000289	0.0239	<0.000005	0.0468	46.3	0.0395	<0.0000019	0.000317	0.00153	0.0091	8.13	0.000241	5.43	<0.000005	12.8	0.464
GW-4A	GW-4A	14-Jul-2020 15:15	<0.00001	0.195	0.000128	310	<0.0002	0.000707	0.00013	3.16	<0.00001	0.0813	62.4	0.333	<0.0000019	0.00018	0.00396	0.011	6.65	0.00009	7.55	<0.00001	31.7	0.53
GW-4A	GW-4A Dup	2020-07-14	<0.000005	0.187	0.000138	293	<0.0001	0.000695	0.000143	3.23	0.0000073	0.0769	60	0.315	<0.0000019	0.000135	0.00366	0.0111	6.32	0.000078	7.02	<0.000005	30.6	0.488
FB	FB Q3	2020-07-14	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	Dissolved Metals	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001		0.0005	0.00002	0.00002	0.00002	0.00001	0.000005	0.01	0.000005	0.050	0.0001	0.000005	0.00005
GW-1	GW-1	27-Nov-2016 14:00	97.6	<0.000050	<0.0050	<0.0050	0.00215	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	0.00011	0.0154	<0.00010	<0.0010	0.104	0.000043	148	<0.0010	<0.00050	0.00022
GW-1	GW-1	07-Dec-2016 19:30	361	<0.000050	<0.0050	<0.0050	0.00136	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	<0.00010	0.0114	<0.00010	<0.0010	0.279	0.0001	314	<0.0010	0.00135	0.0004
GW-1	GW-1	15-Dec-2016 16:45	373	<0.000050	<0.0050	<0.0050	0.00146	<0.0050	0.0098	<0.00050		0.0046	<0.00050	0.0001	0.0091	<0.00010	<0.0010	0.284	0.000107	340	<0.0010	0.0016	0.00057
GW-1	GW-1	04-Feb-2017 15:45	351	0.000016	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0005		0.0033	<0.0005	<0.0001	0.01	<0.0001	<0.001	0.251	0.000083	363	<0.001	0.00178	<0.0002
GW-1	GW-1	09-May-2017 11:30	206	0.000036	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001		0.0038	<0.0005	0.00012	0.0117	<0.0001	<0.001	0.194	0.00014	255	<0.001	0.00026	<0.0002
GW-1	JH41-100	09-May-2017 12:00	223	0.000039	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001		0.0037	<0.0005	<0.0001	0.0118	<0.0001	<0.001	0.188	0.000151	266	<0.001	0.00023	<0.0002
GW-1	GW-1	16-Aug-2017 11:00	154	0.000015	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001		<0.003	<0.0005	<0.0001	0.0145	<0.0001	<0.001	0.109	0.000047	186	<0.001	<0.0002	0.0002
GW-1	FB	16-Aug-2017 14:30	<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	<0.0002	<0.0002
GW-1	JH41-500	06-Nov-2017 17:00	243	0.0000264	<0.0002	<0.0005	0.00176	<0.0002	0.00106	<0.0001		<0.0025	<0.0001	<0.0001	0.0131	<0.00005	<0.000025	0.246	0.00013	306	<0.0005	0.000675	<0.00025
GW-1	GW-1	07-Nov-2017 11:35	254	0.0000277	<0.0002	<0.0005	0.0017	<0.0002	0.00133	<0.0001		<0.0025	<0.0001	<0.0001	0.0133	<0.00005	<0.000025	0.241	0.000133	313	<0.0005	0.000649	<0.00025
GW-1	FB-500	07-Nov-2017 15:30	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00044	<0.0001		0.0008	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000057
GW-1	GW-1	13-Feb-2018 12:00	263	0.0000202	<0.0002	<0.0005	0.00192	<0.0002	0.00088	<0.0001		0.00176	0.00002	0.000053	0.0142	<0.00001	0.0000056	0.212	0.0000791	279	<0.0001	0.000761	0.000126
GW-1	GW-1	08-May-2018 15:00	233	0.000045	<0.001	<0.01	0.00144	<0.001	<0.005	<0.0005		0.0022	<0.00004	0.00007	0.0125	<0.00002	<0.00001	0.214	0.000277	290	<0.0002	0.000057	0.00018
GW-1	FB-Q2	08-May-2018 15:30	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00029	<0.0001		0.001	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-1	GW-1	31-Jul-2018 13:00	297	0.000043	<0.001	<0.0025	0.00152	<0.001	0.00174	<0.0005		0.00235	<0.00002	0.000038	0.0154	<0.00001	<0.000005	0.279	0.000284	408	<0.0001	0.000502	0.000305
GW-1	GW-1	06-Nov-2018 13:45	383	0.00005	<0.001	<0.01	0.00198	<0.001	<0.005	<0.0005		0.0057	<0.0001	<0.0001	0.0167	<0.00005	<0.000025	0.273	0.000259	391	<0.0005	0.000495	<0.00025
GW-1	GW-1	13-Feb-2019 13:30	357	<0.00001	<0.001	<0.0025	0.00168	<0.001	0.00233	<0.0005		0.0088	<0.0001	<0.0001	0.0134	<0.00005	<0.000025	0.272	0.000152	346	<0.0005	0.0012	0.00018
GW-1	FB-Q1	13-Feb-2019 14:00	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-1	GW-1	28-May-2019 16:30	442	0.000073	<0.01	<0.01	0.00227	<0.01	<0.01	<0.0002		0.0078	<0.00004	0.000187	0.0353	<0.00002	<0.00001	0.239	0.000313	368	0.0009	0.000301	0.00025
GW-1	GW-1	13-Aug-2019 17:30	437	0.0000652	<0.0004	<0.001	0.0025	<0.0004	0.00217	<0.0002		0.0038	<0.00004	0.000503	0.0205	<0.00002	0.000014	0.289	0.000314	425	0.0002	0.000691	0.0003
GW-1	GW-1	06-Nov-2019 11:30	240	0.0000339	<0.0004	<0.001	0.00422	<0.0004	0.00179	<0.0002		0.0023	<0.00004	0.000049	0.0204	<0.00002	<0.00001	0.153	0.000109	297	<0.0002	0.000041	0.00019
GW-1	GW-1	20-Feb-2020 14:25	336	0.0000293	<0.0004	<0.001	0.00217	<0.0004	0.00465	<0.0002		0.0072	<0.00004	0.000087	0.0151	<0.00002	<0.00001	0.252	0.000124	337	<0.0002	0.00106	0.00054
GW-1	GW-1	18-May-2020 12:10	418	0.0000917	<0.0002	<0.0005	0.00298	<0.0002	0.00109	0.00011		0.0011	0.000024	0.000059	0.0185	<0.00001	<0.000005	0.269	0.000304	364	<0.0001	0.000176	0.000319
GW-1	GW-1	19-Jul-2020 16:40	453	0.000044	<0.0004	<0.001	0.00219	<0.0004	0.00147	<0.0002		<0.0025	<0.0001	<0.0001	0.0155	<0.00005	<0.000025	0.291	0.000176	426	<0.0005	0.00121	<0.00025
GW-2	GW-2	28-Nov-2016 13:20	301	<0.000050	<0.0050	<0.0050	0.00199	<0.0050	<0.0050	<0.00050		0.008	<0.00050	0.00021	0.026	<0.00010	<0.0010	0.163	0.000089	270	<0.0010	0.00119	0.0004
GW-2	GW-2D	28-Nov-2016 14:00	316	<0.000050	<0.0050	<0.0050	0.002	<0.0050	<0.0050	<0.00050		0.0081	<0.00050	0.00023	0.023	<0.00010	<0.0010	0.16	0.000099	288	<0.0010	0.00113	0.00022
GW-2	GW-2	08-Dec-2016 18:00	452	<0.000050	<0.0050	<0.0050	0.00185	<0.0050	<0.0050	<0.00050		0.0074	<0.00050	<0.00010	0.0093	<0.00010	<0.0010	0.233	0.000055	325	<0.0010	<0.00050	0.00024
GW-2	GW-2	16-Dec-2016 09:30	464	<0.000050	<0.0050	<0.0050	0.00199	<0.0050	<0.0050	<0.00050		0.0043	<0.00050	0.00016	0.0095	<0.00010	<0.0010	0.206	0.00007	328	<0.0010	<0.00050	0.00029
GW-2	GW-2	05-Feb-2017 11:10	143	0.00002	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0005		<0.003	<0.0005	0.00013	0.017	<0.0001	<0.001	0.101	0.000054	179	<0.001	0.00088	<0.0002
GW-2	GW-2	09-May-2017 16:00	523	0.000024	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001		0.0043	<0.0005	0.00053	0.0134	<0.0001	<0.001	0.277	0.00007	435	<0.001	0.0046	<0.0002
GW-2	GW-2	16-Aug-2017 13:45	463	0.000021	<0.001	<0.0025	0.00197	<0.001	0.00179	<0.0005		0.0043	<0.0001	<0.0001	0.00694	<0.00005	<0.000025	0.234	0.000109	346	<0.0005	0.000097	<0.00025
GW-2	GW-2	07-Nov-2017 15:00	308	0.0000268	<0.0002	<0.0005	0.00181	<0.0002	0.00076	<0.0001		<0.0025	<0.0001	<0.0001	0.012	<0.00005	<0.000025	0.197	0.000097	315	<0.0005	0.000323	<0.00025
GW-2	FB	12-Feb-2018 17:30	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00024	<0.0001		0.00138	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-2	JH41-A	13-Feb-2018 14:15	338	0.0000255	<0.0002	<0.0005	0.00162	<0.0002	0.00072	<0.0001		0.00175	<0.00002	0.000053	0.00899	<0.00001	<0.000005	0.191	0.0000813	283	<0.0001	0.000347	0.00009
GW-2	GW-2	13-Feb-2018 14:15	334	0.0000242	<0.0002	<0.0005	0.00165	<0.0002	0.00075	<0.0001		0.00171	<0.00002	0.000049	0.00902	<0.00001	<0.000005	0.184	0.0000845	287	<0.0001	0.000326	0.000088
GW-2	GW-2	09-May-2018 13:30	370	0.000031	<0.001	<0.01	0.0019	<0.001	<0.005	<0.0005		0.0018	<0.00004	0.000086	0.0168	<0.00002	<0.00001	0.217	0.000129	349	<0.0002	0.000656	<0.0001
GW-2	GW-2	31-Jul-2018 17:00	343	0.000023	<0.001	<0.0025	0.00241	<0.001	0.00083	<0.0005		0.00254	0.000031	0.000023	0.0275	<0.00001	<0.000005	0.198	0.000105	334	<0.0001	0.000166	0.000487
GW-2	GW-NOV	08-Nov-2018 08:30	430	0.000023	<0.001	<0.01	0.00197	<0.001	<0.005	<0.0005		0.0041	<0.0001	<0.0001	0.0103	<0.00005	<0.000025	0.232	0.000156	352	<0.0005	0.00016	<0.00025
GW-2	GW-2	08-Nov-2018 08:30	439	0.00003	<0.001	<0.01	0.00199	<0.001	<0.005	<0.0005		0.0033	<0.0001	<0.0001	0.0108	<0.00005	<0.000025	0.218	0.000156	343	<0.0005	0.000167	<0.00025
GW-2	GW-2	14-Feb-2019 13:30	375	0.0000181	<0.0002	<0.002	0.00191	<0.0002	<0.001	<0.0001		0.00068	<0.00002	0.000051	0.00855	<0.00001	<0.000005	0.201	0.00013	308	<0.0001	0.000266	0.000235
GW-2	GW-2	29-May-2019 09:30	423	0.000032	<0.001	<0.0025	0.00297	<0.001	0.00065	<0.0005		0.0451	0.00054	<0.0001	0.0248	<0.00005	<0.000025	0.194	0.000085	277	<0.0005	0.000423	0.00026
GW-2	BD-Q2	29-May-2019 10:00	428	0.000024	<0.001	<0.0025	0.00289	<0.001	0.00054	<0.0005		0.017	0.00025	<0.0001	0.0255	<0.00005	<0.000025	0.196	0.000089	279	<0.0005	0.000429	0.00037
GW-2	FB-Q2	29-May-2019 10:15	<3.0	<0.000002	<0.0002	<0.0005	0.0000025	<0.0002	<0.0001	<0.0001		0.00719	0.000084	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-2	GW-2	14-Aug-2019 10:00	510	0.0000329	<0.0004	<0.001	0.00291	<0.0004	0.00185	<0.0002		0.0042	<0.00004	0.000081	0.0151	<0.00002	<0.00001	0.249	0.000125	344	<0.0002	0.000482	0.00021
GW-2	GW-2	06-Nov-2019 13:00	197	0.0000192	<0.0002	<0.002	0.00172	<0.0002	<0.001	<0.0001		0.00066	0.000034	0.000081	0.00899	<0.00001	<0.000005	0.115	0.0000607	186	0.0001	0.00011	0.000237
GW-2	GW-2	20-Feb-2020 16:30	400	0.0000221	<0.0004	<0.001	0.00214	<0.0004	0.00146	<0.0002		0.0044	<0.00004	0.000074	0.0117	<0.00002	<0.00001	0.208	0.000117	299	<0.0002	0.000425	0.00017
GW-2	GW-2	19-May-2020 12:20	581	0.0000261	<0.0002	<0.0005	0.00425	<0.0002	<0.0001	0.00011		0.00089	0.000052	0.000044	0.0343	<0.00001	<0.000005	0.252	0.0000755	352	<0.0001	0.0000918	0.00035
GW-2	GW-2	28-Jul-2020 16:00	296	0.0000191	<0.0002	<0.0005	0.00224	<0.0002	0.0003	<0.0001		<0.001	<0.00004	0.000054	0.0111	<0.00002	<0.00001	0.116	0.00006	194	<0.0002	0.000083	0.00022

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	Dissolved Metals	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001		0.0005	0.00002	0.00002	0.00002	0.00001	0.000005	0.01	0.000005	0.050	0.0001	0.000005	0.00005
GW-3	FB-1	29-Nov-2016 11:00	<3.0	<0.000050	<0.0050	<0.0050	<0.00010	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	<0.00010	<0.0010	<0.00010	<0.0010	<0.05	<0.000010	<0.050	<0.0010	<0.00050	0.00024
GW-3	GW-3	29-Nov-2016 11:00	13.6	<0.000050	<0.0050	<0.0050	0.00383	<0.0050	<0.0050	<0.00050		<0.0030	0.00068	0.00121	0.104	<0.00010	<0.0010	<0.05	<0.000010	80.1	<0.0010	0.0007	0.00025
GW-3	GW-3	09-Dec-2016 10:00	19.9	<0.000050	<0.0050	<0.0050	0.00173	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	0.00145	0.0896	<0.00010	<0.0010	<0.05	<0.000010	77.6	<0.0010	0.00077	<0.00020
GW-3	GW-3	16-Dec-2016 12:05	27.2	<0.000050	<0.0050	<0.0050	0.0015	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	0.0016	0.0931	<0.00010	<0.0010	<0.05	<0.000010	84.9	<0.0010	0.00075	<0.00020
GW-3	GW-3	05-Feb-2017 15:10	38.5	0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0005		<0.003	<0.0005	0.00196	0.125	<0.0001	<0.001	<0.05	<0.00001	99.2	<0.001	0.00083	<0.0002
GW-3	GW-3	10-May-2017 15:00	9.7	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00146	0.094	<0.0001	<0.001	<0.05	<0.00001	70.8	<0.001	0.00037	<0.0002
GW-3	GW-3	17-Aug-2017 17:00	9.4	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00169	0.111	<0.0001	<0.001	<0.05	<0.00001	73.5	<0.001	0.00068	<0.0002
GW-3	GW-3	08-Nov-2017 15:30	23.7	0.000006	<0.0002	<0.0005	0.00105	<0.0002	0.00066	<0.0001		0.00206	<0.00002	0.00171	0.132	<0.00001	<0.000005	0.022	<0.000005	84.6	<0.0001	0.00159	<0.00005
GW-3	GW-3	07-Dec-2017 11:30	22.3	0.0000061	<0.0002	<0.0005	0.00101	<0.0002	0.00058	<0.0001		0.00102	<0.00002	0.002	0.137	<0.00001	<0.000005	0.024	<0.000005	91.4	<0.0001	0.00201	<0.00005
GW-3	GW-3	14-Feb-2018 11:00	22.6	0.0000068	<0.0002	<0.0005	0.000958	<0.0002	0.00051	<0.0001		0.00206	<0.00002	0.00169	0.126	<0.00001	<0.000005	0.022	<0.000005	78.3	<0.0001	0.00206	<0.00005
GW-3	GW-3	09-May-2018 16:00	9.6	0.0000045	<0.0002	<0.002	0.000904	<0.0002	<0.001	<0.0001		0.00205	0.000023	0.00156	0.109	<0.00001	<0.000005	0.013	<0.000005	73.9	<0.0001	0.00127	<0.00005
GW-3	GW-3	30-Jul-2018 17:00	10.5	0.000003	<0.0002	<0.002	0.000912	<0.0002	<0.001	<0.0001		0.00086	<0.00002	0.00155	0.126	<0.00001	<0.000005	0.013	<0.000005	71.8	<0.0001	0.00115	<0.00005
GW-3	GW-A	30-Jul-2018 17:30	10.1	0.0000032	<0.0002	<0.002	0.000908	<0.0002	<0.001	<0.0001		0.00087	<0.00002	0.00154	0.127	<0.00001	<0.000005	0.013	<0.000005	71.7	<0.0001	0.00114	<0.00005
GW-3	GW-3	08-Nov-2018 08:30	14.8	0.0000047	<0.0002	<0.002	0.000929	<0.0002	<0.001	<0.0001		0.00094	0.000021	0.00191	0.137	<0.00001	<0.000005	0.016	<0.000005	79.3	<0.0001	0.00141	<0.00005
GW-3	GW-3	14-Feb-2019 16:00	21.4	0.0000021	<0.0002	<0.002	0.00104	<0.0002	<0.001	<0.0001		0.00073	<0.00002	0.00171	0.149	<0.00001	<0.000005	0.016	<0.000005	82.7	<0.0001	0.0026	<0.00005
GW-3	GW-3	29-May-2019 12:45	13	0.0000028	<0.0002	<0.0005	0.000917	<0.0002	0.00026	<0.0001		0.0924	0.0011	0.00153	0.126	<0.00001	<0.000005	0.026	<0.000005	73	<0.0001	0.00113	<0.00005
GW-3	GW-3	14-Aug-2019 12:30	17.8	0.0000034	<0.0002	0.00055	0.00103	<0.0002	0.00024	<0.0001		0.0014	<0.00002	0.0017	0.149	<0.00001	<0.000005	0.016	<0.000005	78.6	<0.0001	0.00131	<0.00005
GW-3	GW-3	06-Nov-2019 14:25	30.6	0.0000034	<0.0002	<0.002	0.00123	<0.0002	<0.001	<0.0001		0.00117	<0.00002	0.002	0.192	<0.00001	<0.000005	0.022	<0.000005	98.9	<0.0001	0.00234	<0.00005
GW-3	GW-3	22-Feb-2020 15:20	102	0.0000062	<0.0002	<0.0005	0.00182	<0.0002	0.00063	<0.0001		0.00057	<0.00002	0.00223	0.266	<0.00001	<0.000005	0.046	<0.000005	140	<0.0001	0.00397	<0.00005
GW-3	GW-3	18-May-2020 22:40	24.8	0.000004	<0.0002	0.00057	0.00139	<0.0002	0.0141	<0.0001		0.00138	<0.00002	0.0018	0.117	<0.00001	<0.000005	0.021	<0.000005	101	<0.0001	0.00303	<0.00005
GW-3	GW-3	19-Jul-2020 13:15	28.7	0.0000024	<0.0002	<0.0005	0.00108	<0.0002	0.00019	<0.0001		0.00056	<0.00002	0.0019	0.111	<0.00001	<0.000005	0.018	<0.000005	93.4	0.00014	0.00283	<0.00005
GW-4A	GW-4A	29-Nov-2016 17:50	109	<0.000050	<0.0050	<0.0050	0.00327	<0.0050	<0.0050	<0.00050		0.0068	<0.00050	0.00018	0.0339	<0.00010	<0.0010	0.107	0.000145	221	<0.0010	0.00104	0.0015
GW-4A	GW-4A	08-Dec-2016 15:00	224	<0.000050	<0.0050	<0.0050	0.00068	<0.0050	<0.0050	<0.00050		0.0198	<0.00050	0.00147	0.0095	<0.00010	<0.0010	0.222	0.000104	263	<0.0010	0.00068	<0.00020
GW-4A	GW-4A	15-Dec-2016 14:00	238	<0.000050	<0.0050	<0.0050	0.00079	<0.0050	<0.0050	<0.00050		0.004	<0.00050	0.00172	0.0088	<0.00010	<0.0010	0.198	0.000063	276	<0.0010	0.0007	<0.00020
GW-4A	GW-4A	04-Feb-2017 11:50	132	0.000026	<0.005	<0.005	0.00282	<0.005	<0.005	<0.0005		<0.003	<0.0005	0.00024	0.0209	<0.0001	<0.001	0.096	0.00006	245	<0.001	<0.0005	0.00032
GW-4A	GW-4A	08-May-2017 17:30	69	0.000015	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001		0.0034	<0.0005	<0.0001	0.0267	<0.0001	<0.001	0.089	0.000071	188	<0.001	<0.0002	0.00043
GW-4A	GW-4A	15-Aug-2017 16:00	219	0.000013	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001		<0.015	<0.0025	<0.0005	0.0149	<0.0005	<0.005	<0.25	0.000142	310	<0.005	<0.001	<0.001
GW-4A	GW-4A	06-Nov-2017 16:30	122	0.0000275	<0.0002	<0.0005	0.00237	<0.0002	0.00094	<0.0001		0.00068	0.000028	0.000072	0.0224	<0.00001	<0.000005	0.13	0.00011	213	<0.0001	0.000329	0.00026
GW-4A	GW-4A	12-Feb-2018 17:00	169	0.000026	<0.0002	<0.0005	0.00208	<0.0002	0.00095	<0.0001		0.00172	<0.00002	0.000069	0.0222	<0.00001	0.0000057	0.187	0.000149	266	<0.0001	0.000567	0.000182
GW-4A	GW-4A	08-May-2018 12:00	65.9	0.0000203	<0.0002	<0.002	0.00234	<0.0002	0.0011	<0.0001		0.00137	0.000041	0.000062	0.0232	<0.00001	<0.000005	0.105	0.000099	190	<0.0001	0.0000624	0.000293
GW-4A	JH42-Q2	08-May-2018 12:15	67.3	0.0000227	<0.0002	<0.002	0.00229	<0.0002	0.0013	<0.0001		0.00149	0.000041	0.000061	0.0236	<0.00001	<0.000005	0.108	0.0000935	195	<0.0001	0.0000696	0.000358
GW-4A	GW-4A	31-Jul-2018 10:15	213	0.0000257	<0.0002	<0.0005	0.00183	<0.0002	0.00141	<0.0001		0.00201	0.000025	0.000127	0.0216	<0.00001	<0.000005	0.185	0.000142	322	<0.0001	0.000704	0.000112
GW-4A	GW-4A	06-Nov-2018 11:30	278	0.0000262	<0.0004	<0.004	0.00207	<0.0004	<0.002	<0.0002		0.0033	<0.00004	0.000135	0.0278	<0.00002	<0.00001	0.261	0.000238	356	<0.0002	0.00132	0.00021
GW-4A	GW-4A	14-Feb-2019 11:00	210	0.0000131	<0.0002	<0.002	0.0013	<0.0002	<0.001	<0.0001		<0.0005	<0.00002	0.000093	0.014	<0.00001	<0.000005	0.202	0.000117	287	<0.0001	0.000815	<0.00005
GW-4A	GW-4A	28-May-2019 14:30	90.8	0.000022	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001		<0.003	<0.0005	<0.0001	0.022	<0.0001	<0.001	0.13	0.000095	200	<0.001	0.00028	<0.0005
GW-4A	GW-4A	13-Aug-2019 15:00	107	0.0000221	<0.0002	<0.0005	0.00269	<0.0002	0.0006	<0.0001		0.00102	0.000037	0.000067	0.0219	<0.00001	<0.000005	0.123	0.0000914	230	<0.0001	0.000257	0.000213
GW-4A	BD-Q3	13-Aug-2019 15:30	102	0.0000212	<0.0002	<0.0005	0.00268	<0.0002	0.00037	<0.0001		0.00105	0.000029	0.000083	0.0216	<0.00001	<0.000005	0.119	0.0000843	226	<0.0001	0.000249	0.000212
GW-4A	GW 4A	05-Nov-2019 14:37	168	0.0000147	<0.0004	<0.004	0.00167	<0.0004	<0.002	<0.0002		0.0013	<0.00004	<0.00004	0.0145	<0.00002	<0.00001	0.184	0.000065	276	<0.0002	0.000503	<0.0001
GW-4A	GW-4A	20-Feb-2020 12:45	194	0.0000232	<0.0004	<0.001	0.00161	<0.0004	0.00128	<0.0002		0.0041	<0.00004	0.000092	0.0164	<0.00002	<0.00001	0.203	0.000101	282	<0.0002	0.000729	0.00048
GW-4A	GW-4A	18-May-2020 15:50	82.8	0.0000229	<0.0002	<0.0005	0.00323	<0.0002	<0.0001	<0.0001		0.00092	0.000049	0.000023	0.0254	<0.00001	<0.000005	0.107	0.0000681	193	<0.0001	0.000104	0.000283
GW-4A	Duplicate	18-May-2020 16:00	90.4	0.0000275	<0.0002	<0.0005	0.00345	<0.0002	<0.0001	0.00011		0.00139	0.000044	0.00003	0.0255	<0.00001	<0.000005	0.117	0.0000755	188	<0.0001	0.000128	0.000283
GW-4A	GW-4A	14-Jul-2020 15:15	199	0.0000234	<0.0004	<0.001	0.00231	<0.0004	0.00093	<0.0002		0.0018	<0.00004	<0.00004	0.0197	<0.00002	<0.00001	0.191	0.000139	291	<0.0002	0.0007	0.00027
GW-4A	GW-4A Dup	2020-07-14	192	0.0000214	<0.0002	<0.0005	0.00214	<0.0002	0.00101	<0.0001		0.0011	<0.00004	<0.00004	0.02	<0.00002	<0.00001	0.194	0.000134	292	<0.0002	0.000722	0.00014
FB	FB Q3	2020-07-14	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	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	Metals Filtration and Preservation
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.002	0.050	0.00004	0.05	0.000005	0.050	0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001	-
GW-1	GW-1	27-Nov-2016 14:00	<0.0050	<0.00020	0.0438	36.2	0.0228	<0.000010	<0.0010	<0.0010		4.06	0.00027	4.14	<0.000020	31.8	0.32	102	<0.000050	<0.0050	<0.0050	0.00205	<0.0050	<0.0050	<0.00050	FIELD
GW-1	GW-1	07-Dec-2016 19:30	0.0054	<0.00020	0.11	81	1.84	<0.000010	<0.0010	0.0026		5.6	<0.00010	6.27	<0.000020	108	0.79	341	<0.000050	<0.0050	<0.0050	0.00144	<0.0050	<0.0050	<0.00050	FIELD
GW-1	GW-1	15-Dec-2016 16:45	0.0155	<0.00020	0.121	83.8	1.99	<0.000010	<0.0010	0.0029		5.3	<0.00010	6.87	<0.000020	103	0.742	360	<0.000050	<0.0050	<0.0050	0.00128	<0.0050	<0.0050	<0.00050	FIELD
GW-1	GW-1	04-Feb-2017 15:45	0.134	<0.0002	0.116	91.7	1.98	<0.00001	<0.001	0.0025		6.27	<0.0001	7.47	<0.00002	110	0.732	395	0.000018	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0005	FIELD
GW-1	GW-1	09-May-2017 11:30	0.0069	<0.0002	0.077	67.8	0.538	<0.00001	<0.001	0.0019		5.02	<0.0001	5.6	<0.00002	68.8	0.52	237	0.000039	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	FIELD
GW-1	JH41-100	09-May-2017 12:00	0.0076	<0.0002	0.0757	64.4	0.519	<0.00001	<0.001	0.0019		4.82	0.0001	5.69	<0.00002	64.3	0.531	227	0.000042	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	FIELD
GW-1	GW-1	16-Aug-2017 11:00	<0.005	<0.0002	0.0516	46.4	0.0093	<0.00001	<0.001	<0.001		4.74	0.00035	4.32	<0.00002	39.8	0.426	145	0.000016	<0.005	<0.005	0.00234	<0.005	0.0069	<0.0001	FIELD
GW-1	FB	16-Aug-2017 14:30	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.00001	<0.001	<0.001		<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	FIELD
GW-1	JH41-500	06-Nov-2017 17:00	0.0122	<0.000025	0.0946	77.4	0.992	<0.000002	0.00057	0.00218	<0.01	5.69	<0.0002	6.05	<0.000025	92.8	0.603	282	0.000024	<0.001	<0.0025	0.00174	<0.001	0.016	<0.0005	FIELD
GW-1	GW-1	07-Nov-2017 11:35	0.0134	<0.000025	0.0987	78	0.999	<0.000002	0.00056	0.0022	<0.01	5.67	<0.0002	6.27	<0.000025	93.5	0.6	279	0.000025	<0.001	<0.0025	0.00174	<0.001	0.00377	<0.0005	FIELD
GW-1	FB-500	07-Nov-2017 15:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0031	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00025	<0.0001	FIELD
GW-1	GW-1	13-Feb-2018 12:00	0.0161	0.0000123	0.0797	67.2	0.992	0.0000022	0.000459	0.00152	0.0042	4.99	0.000174	5.36	<0.000005	76.9	0.608	245	0.0000192	<0.0002	<0.0005	0.00192	<0.0002	0.00092	<0.0001	FIELD
GW-1	GW-1	08-May-2018 15:00	0.0037	<0.00001	0.0854	76.5	0.714	<0.000002	0.00114	0.00278	0.0071	5.18	<0.00008	5.33	<0.00001	70.3	0.656	264	0.000059	<0.0004	<0.001	0.00156	<0.0004	0.00158	<0.0002	FIELD
GW-1	FB-Q2	08-May-2018 15:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00585	<0.0001	FIELD
GW-1	GW-1	31-Jul-2018 13:00	0.0511	0.0000223	0.106	101	1.41	<0.000002	0.000997	0.00368	0.005	6.06	<0.00004	5.96	<0.000005	96.3	0.843	376	0.0000556	<0.0002	<0.0005	0.00193	<0.0002	0.00239	<0.0001	FIELD
GW-1	GW-1	06-Nov-2018 13:45	0.0275	<0.000025	0.106	101	1.35	<0.000002	0.00091	0.00363	<0.01	6.01	<0.0002	6.3	<0.000025	101	0.814	393	0.000051	<0.001	<0.0025	0.00199	<0.001	0.00183	<0.0005	FIELD
GW-1	GW-1	13-Feb-2019 13:30	0.0362	<0.000025	0.103	89.4	1.66	0.0000032	0.00047	0.00322	<0.01	5.78	<0.0002	6.02	<0.000025	106	0.751	358	<0.00001	<0.001	<0.0025	0.00171	<0.001	0.00275	<0.0005	FIELD
GW-1	FB-Q1	13-Feb-2019 14:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	0.0000048	<0.00005	<0.00002	0.0034	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	0.000002	<0.0002	<0.0001	<0.0001	FIELD
GW-1	GW-1	28-May-2019 16:30	0.0079	<0.00001	0.0996	98.7	1.08	<0.000002	0.00165	0.00399		6.42	<0.00008	5.24	<0.00001	106	0.851	374	0.0000525	<0.0004	<0.001	0.00226	<0.0004	0.00197	<0.0002	FIELD
GW-1	GW-1	13-Aug-2019 17:30	0.348	<0.00001	0.119	111	1.41	<0.000002	0.0009	0.00429	0.0219	6.88	<0.00008	6.79	<0.00001	137	0.97	460	0.0000813	<0.0004	<0.001	0.00268	<0.0004	0.00217	<0.0002	
GW-1	GW-1	06-Nov-2019 11:30	0.0027	<0.00001	0.0668	72.5	0.122	<0.000002	0.00063	0.00144	0.0065	5.88	0.000253	4.99	<0.00001	76.3	0.631	254	0.0000302	<0.0004	<0.001	0.00431	<0.0004	0.00119	<0.0002	FIELD
GW-1	GW-1	20-Feb-2020 14:25	0.0302	0.000045	0.0982	85.6	1.36	<0.0000019	0.0005	0.00264	0.0076	5.93	<0.00008	6.04	<0.00001	96.6	0.749	319	0.0000169	0.00066	<0.001	0.00216	<0.0004	0.00435	<0.0002	FIELD
GW-1	GW-1	18-May-2020 12:10	0.0028	<0.000005	0.12	105	1.57	<0.0000019	0.00142	0.00382	0.0022	6.99	0.00005	6.93	<0.000005	165	0.894	427	0.0000098	<0.0002	<0.0005	0.00285	<0.0002	0.00092	0.00018	
GW-1	GW-1	19-Jul-2020 16:40	0.0734	<0.000025	0.119	109	1.9	<0.0000019	0.00051	0.0035	0.016	6.81	<0.0002	6.89	<0.000025	136	0.943	453	0.000034	<0.001	<0.0025	0.00206	<0.001	0.00159	<0.0005	
GW-2	GW-2	28-Nov-2016 13:20	0.624	<0.00020	0.12	93	0.244	<0.000010	0.001	0.0073		3.69	<0.00010	5.5	<0.000020	103	0.629	335	<0.000050	<0.0050	<0.0050	0.00199	<0.0050	<0.0050	<0.00050	FIELD
GW-2	GW-2D	28-Nov-2016 14:00	0.603	<0.00020	0.116	90.2	0.237	<0.000010	<0.0010	0.007		3.41	<0.00010	5.86	<0.000020	101	0.622	329	<0.000050	<0.0050	<0.0050	0.0019	<0.0050	<0.0050	<0.00050	FIELD
GW-2	GW-2	08-Dec-2016 18:00	0.0146	<0.00020	0.173	115	0.0528	<0.000010	<0.0010	0.0036		3.71	<0.00010	5.66	<0.000020	139	0.801	404	<0.000050	<0.0050	<0.0050	0.00191	<0.0050	<0.0050	<0.00050	FIELD
GW-2	GW-2	16-Dec-2016 09:30	0.0139	<0.00020	0.176	115	0.109	<0.000010	<0.0010	0.0038		3.68	<0.00010	5.89	<0.000020	137	0.794	429	<0.000050	<0.0050	<0.0050	0.00185	<0.0050	<0.0050	<0.00050	FIELD
GW-2	GW-2	05-Feb-2017 11:10	0.0991	<0.0002	0.0786	57.9	0.349	<0.00001	<0.001	0.0034		2.32	<0.0001	5.38	<0.00002	56.1	0.394	169	0.00002	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0005	FIELD
GW-2	GW-2	09-May-2017 16:00	5.86	<0.0002	0.229	148	0.794	<0.00001	<0.001	0.0202		4.18	0.00011	6.72	<0.00002	192	1.1	583	0.000026	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	FIELD
GW-2	GW-2	16-Aug-2017 13:45	0.0078	<0.000025	0.191	117	0.222	<0.000010	<0.00025	0.00633		3.9	<0.0002	6.39	<0.000025	138	0.818	424	0.000023	<0.001	<0.0025	0.00201	<0.001	0.00173	<0.0005	FIELD
GW-2	GW-2	07-Nov-2017 15:00	0.152	<0.000025	0.156	107	0.197	<0.000002	0.00029	0.00558	<0.01	3.59	<0.0002	5.93	<0.000025	119	0.698	355	0.000026	<0.001	<0.0025	0.00174	<0.001	0.00114	<0.0005	FIELD
GW-2	FB	12-Feb-2018 17:30	<0.001	0.0000069	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00012	<0.0001	FIELD
GW-2	JH41-A	13-Feb-2018 14:15	0.159	0.0000108	0.14	94.7	0.221	<0.000002	0.000304	0.00556	0.0056	3.13	<0.00004	5.7	<0.000005	113	0.728	346	0.0000231	<0.0002	<0.0005	0.00161	<0.0002	0.00063	<0.0001	FIELD
GW-2	GW-2	13-Feb-2018 14:15	0.145	0.0000102	0.139	93.8	0.215	<0.000002	0.000286	0.0055	0.0038	3.14	<0.00004	5.47	<0.000005	112	0.716	322	0.0000254	<0.0002	<0.0005	0.0016	<0.0002	0.00068	<0.0001	FIELD
GW-2	GW-2	09-May-2018 13:30	0.183	<0.00001	0.161	114	0.27	<0.000002	0.00029	0.00687	0.0049	3.56	0.000278	5.58	<0.00001	135	0.909	414	0.0000299	<0.0004	<0.001	0.00208	<0.0004	0.00104	<0.0002	FIELD
GW-2	GW-2	31-Jul-2018 17:00	0.0016	0.0000063	0.135	100	0.145	<0.000002	0.000425	0.00455	0.0031	3.97	0.00103	5.25	<0.000005	240	0.832	427	0.0000275	<0.0002	<0.0005	0.00319	<0.0002	0.00111	<0.0001	FIELD
GW-2	GW-NOV	08-Nov-2018 08:30	0.0064	<0.000025	0.171	126	0.399	<0.000002	0.00031	0.00848	<0.01	3.93	<0.0002	5.97	<0.000025	154	0.846	436	0.000027	<0.001	<0.0025	0.00195	<0.001	0.00079	<0.0005	FIELD
GW-2	GW-2	08-Nov-2018 08:30	0.0054	<0.000025	0.162	122	0.393	<0.000002	0.00029	0.00828	<0.01	3.83	<0.0002	5.8	<0.000025	151	0.821	434	0.000028	<0.001	<0.0025	0.00194	<0.001	0.00082	<0.0005	FIELD
GW-2	GW-2	14-Feb-2019 13:30	0.0036	<0.000005	0.146	99.4	0.32	0.0000021	0.000276	0.00656	0.0039	3.55	0.000045	5.61	<0.000005	133	0.813	392	0.000013	<0.0002	<0.0005	0.00195	<0.0002	0.00068	<0.0001	FIELD
GW-2	GW-2	29-May-2019 09:30	0.246	0.000036	0.138	87.4	0.141	<0.000002	0.0003	0.00441	<0.01	4.08	0.00144	4.85	<0.000025	328	0.753	401	0.000021	<0.001	<0.0025	0.00287	<0.001	0.00295	<0.0005	FIELD
GW-2	BD-Q2	29-May-2019 10:00	0.254	0.000026	0.14	91.2	0.144	<0.000002	0.0003	0.00443	<0.01	4.16	0.00143	4.91	<0.000025	334	0.765	413	0.000018	<0.001	<0.0025	0.00292	<0.001	0.00067	<0.0005	FIELD
GW-2	FB-Q2	29-May-2019 10:15	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	0.000209	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	FIELD
GW-2	GW-2	14-Aug-2019 10:00	0.0037	<0.00001	0.194	116	0.436	<0.000002	0.00045	0.00874	0.0061	4.69	0.000157	5.75	<0.00001	312	0.927	506	0.0000323	<0.0004	<0.001	0.00283	<0.0004	0.00133	<0.0002	
GW-2	GW-2	06-Nov-2019 13:00	<0.001	<0.000005	0.0804	52.5	0.114	<0.000002	0.000368	0.0033	0.0042	3.11	0.000185	4.94	<0.000005	166	0.484	209	0.0000206	<0.0002	<0.0005	0.0018	<0.0002	0.00035	<0.0001	FIELD
GW-2	GW-2	20-Feb-2020 16:30	0.0059	<0.00001	0.165	102	0.331	<0.0000019	0.00032	0.00753	0.0057	4.06	<0.00008	5.6	<0.00001	229	0.792	394	0.0000126	<0.0004	<0.001	0.00215	<0.0004	0.0014	<0.0002	FIELD
GW-2	GW-2	19-May-2020 12:20	0.0023	<0.000005	0.158	86.1	0.0709	<0.0000019	0.000566	0.00274	<0.002	6.28	0.00188	5.9	<0.000005	532	0.969	568	0.0000189	<0.0002	<0.0005	0.0051	<0.0002	<0.0001	0.00018	
GW-2	GW-2	28-Jul-2020 16:00	<0.002	<0.00001	0.0871	51.8	0.0995	<0.0000019	0.00034	0.00303	0.0129	3.71	0.000684	4.93	<0.00001	286	0.561	298	0.0000326	<0.0004	<0.001	0.00222	<0.0004	0.00035	<0.0002	

Table 1: 2016-2020 Groundwater Quality Data for RSEM Area R5a

Station	Field Sample ID	Sample Date/Time	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	Metals Filtration and Preservation
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.002	0.050	0.00004	0.05	0.000005	0.050	0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001	-
GW-3	FB-1	29-Nov-2016 11:00	<0.0050	<0.00020	<0.0050	<0.050	<0.0010	<0.000010	<0.0010	<0.0010		<0.050	<0.00010	<0.1	<0.000020	<0.050	<0.0010	<3.0	<0.000050	<0.0050	<0.0050	<0.00010	<0.0050	<0.0050	<0.00050	FIELD
GW-3	GW-3	29-Nov-2016 11:00	0.322	<0.00020	0.0076	15	0.115	<0.000010	0.0013	0.0017		1.4	0.00015	3.65	<0.000020	7.41	0.195	13.7	<0.000050	<0.0050	<0.0050	0.0038	<0.0050	<0.0050	<0.00050	FIELD
GW-3	GW-3	09-Dec-2016 10:00	1	<0.00020	0.0081	16.6	0.176	<0.000010	0.0011	0.0015		1.3	0.0001	3.49	<0.000020	8.8	0.207	18.3	<0.000050	<0.0050	<0.0050	0.00159	<0.0050	<0.0050	<0.00050	FIELD
GW-3	GW-3	16-Dec-2016 12:05	1.34	<0.00020	0.0089	17.8	0.207	<0.000010	0.0011	0.0015		1.29	<0.00010	3.69	<0.000020	10.7	0.229	23.8	<0.000050	<0.0050	<0.0050	0.00137	<0.0050	<0.0050	<0.00050	FIELD
GW-3	GW-3	05-Feb-2017 15:10	2.59	<0.0002	0.0102	22.5	0.286	<0.00001	<0.001	0.0014		1.63	<0.0001	3.9	<0.00002	17.8	0.228	40.1	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0005	FIELD
GW-3	GW-3	10-May-2017 15:00	1.27	<0.0002	0.0059	14.1	0.167	<0.00001	<0.001	<0.001		1.08	<0.0001	3.53	<0.00002	5.46	0.155	9.6	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	FIELD
GW-3	GW-3	17-Aug-2017 17:00	1.41	<0.0002	0.0063	15.3	0.185	<0.00001	<0.001	<0.001		1.12	<0.0001	3.67	<0.00002	6.35	0.165	11.4	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	FIELD
GW-3	GW-3	08-Nov-2017 15:30	1.92	<0.000005	0.00794	18.2	0.229	<0.000002	0.000964	0.000891	0.0128	1.27	<0.00004	3.53	<0.000005	11.8	0.193	22.5	0.000007	<0.0002	<0.0005	0.00111	<0.0002	0.00061	<0.0001	FIELD
GW-3	GW-3	07-Dec-2017 11:30	2.14	<0.000005	0.00854	18.3	0.242	<0.000002	0.000996	0.000889	0.0115	1.27	<0.00004	3.26	<0.000005	11.7	0.216	22.9	0.0000068	<0.0002	<0.0005	0.00103	<0.0002	0.00051	<0.0001	FIELD
GW-3	GW-3	14-Feb-2018 11:00	2.35	0.0000109	0.00802	17.8	0.231	<0.000002	0.000958	0.000896	0.0109	1.23	<0.00004	3.4	<0.000005	11.1	0.182	21.8	0.0000054	<0.0002	<0.0005	0.000984	<0.0002	0.00046	<0.0001	FIELD
GW-3	GW-3	09-May-2018 16:00	1.68	<0.000005	0.00637	15.2	0.168	<0.000002	0.000912	0.000712	0.0141	1.04	<0.00004	3.09	<0.000005	6.18	0.169	9.3	0.0000047	<0.0002	<0.0005	0.00096	<0.0002	0.00046	<0.0001	FIELD
GW-3	GW-3	30-Jul-2018 17:00	1.78	<0.000005	0.0059	14.5	0.128	<0.000002	0.000838	0.00064	0.0143	1.05	<0.00004	3.08	<0.000005	6.99	0.168	10.2	0.0000031	<0.0002	<0.0005	0.000886	<0.0002	0.0003	<0.0001	FIELD
GW-3	GW-A	30-Jul-2018 17:30	1.8	<0.000005	0.006	14.7	0.128	<0.000002	0.000802	0.000661	0.0121	1.06	<0.00004	3.03	<0.000005	6.91	0.166	10.3	0.0000036	<0.0002	<0.0005	0.000884	<0.0002	0.00037	<0.0001	FIELD
GW-3	GW-3	08-Nov-2018 08:30	2.06	<0.000005	0.00672	16.6	0.152	<0.000002	0.00083	0.0007	0.0109	1.17	<0.00004	3.43	<0.000005	7.99	0.194	14.8	0.0000042	<0.0002	<0.0005	0.000954	<0.0002	0.00025	<0.0001	FIELD
GW-3	GW-3	14-Feb-2019 16:00	2.29	<0.000005	0.0071	16.5	0.174	0.0000025	0.000869	0.000753	0.0121	1.23	<0.00004	3.15	<0.000005	9.89	0.203	19.9	<0.000002	<0.0002	<0.0005	0.00103	<0.0002	0.00017	<0.0001	FIELD
GW-3	GW-3	29-May-2019 12:45	1.81	0.0000402	0.00596	14.5	0.121	<0.000002	0.00079	0.000569	0.0135	0.953	<0.00004	2.94	<0.000005	6.7	0.171	12.4	<0.000002	<0.0002	<0.0005	0.000898	<0.0002	0.0003	<0.0001	FIELD
GW-3	GW-3	14-Aug-2019 12:30	1.96	<0.000005	0.00696	16.3	0.123	<0.000002	0.000813	0.000656	0.016	1.12	<0.00004	3.25	<0.000005	7.89	0.185	17.5	0.0000029	<0.0002	0.0006	0.00101	<0.0002	0.00024	<0.0001	
GW-3	GW-3	06-Nov-2019 14:25	2.67	<0.000005	0.00802	19.8	0.174	<0.000002	0.000847	0.000776	0.0157	1.4	<0.00004	3.27	<0.000005	13.6	0.233	32.3	0.0000032	<0.0002	<0.0005	0.00123	<0.0002	0.00035	<0.0001	FIELD
GW-3	GW-3	22-Feb-2020 15:20	5.37	<0.000005	0.0132	30.3	0.321	<0.0000019	0.000973	0.0013	0.0135	1.82	<0.00004	3.62	<0.000005	31.5	0.33	77.5	0.0000032	<0.0002	<0.0005	0.00157	<0.0002	0.00035	<0.0001	FIELD
GW-3	GW-3	18-May-2020 22:40	3.23	<0.000005	0.00709	18.8	0.185	<0.0000019	0.000961	0.000809	0.007	1.35	<0.00004	3.57	<0.000005	12.3	0.234	26.5	0.0000043	<0.0002	<0.0005	0.00136	<0.0002	0.00012	<0.0001	
GW-3	GW-3	19-Jul-2020 13:15	2.82	<0.000005	0.00738	18.1	0.154	<0.0000019	0.000887	0.000777	0.0155	1.23	<0.00004	3.53	<0.000005	13.5	0.227	28.1	<0.000002	<0.0002	<0.0005	0.0011	<0.0002	0.00019	<0.0001	
GW-4A	GW-4A	29-Nov-2016 17:50	0.182	<0.00020	0.0488	52.3	0.134	<0.000010	<0.0010	0.0036		8.88	0.00049	5.76	<0.000020	20.3	0.435	115	<0.000050	<0.0050	<0.0050	0.00307	<0.0050	<0.0050	<0.00050	FIELD
GW-4A	GW-4A	08-Dec-2016 15:00	10.9	<0.00020	0.0939	59.3	0.292	<0.000010	<0.0010	0.0035		4.53	<0.00010	6.72	<0.000020	50.2	0.458	209	<0.000050	<0.0050	<0.0050	0.00069	<0.0050	<0.0050	<0.00050	FIELD
GW-4A	GW-4A	15-Dec-2016 14:00	12.2	<0.00020	0.0947	58.5	0.299	<0.000010	<0.0010	0.0034		4.82	<0.00010	7.43	<0.000020	51.4	0.484	218	<0.000050	<0.0050	<0.0050	0.00067	<0.0050	<0.0050	<0.00050	FIELD
GW-4A	GW-4A	04-Feb-2017 11:50	1.74	<0.0002	0.0494	55.2	0.0812	<0.00001	<0.001	0.0022		8.12	0.00076	6.08	<0.00002	27.1	0.423	140	0.000019	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0005	FIELD
GW-4A	GW-4A	08-May-2017 17:30	<0.005	<0.0002	0.0399	44.5	0.0039	<0.00001	<0.001	0.001		7.7	0.00026	5.56	<0.00002	12.4	0.398	70.1	0.000017	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	FIELD
GW-4A	GW-4A	15-Aug-2017 16:00	10.2	<0.001	0.094	62.8	0.298	<0.00001	<0.005	<0.005		5.73	<0.0005	7.76	<0.0001	48.4	0.497	233	<0.00005	<0.025	<0.025	0.00118	<0.025	<0.025	<0.0005	FIELD
GW-4A	GW-4A	06-Nov-2017 16:30	0.259	<0.000005	0.0604	47.3	0.122	<0.000002	0.000215	0.00257	0.0037	6.61	0.000139	5.22	<0.000005	21.8	0.426	113	0.000025	<0.0002	<0.0005	0.00239	<0.0002	0.00076	<0.0001	FIELD
GW-4A	GW-4A	12-Feb-2018 17:00	1.6	0.0000164	0.0853	52.7	0.227	<0.000002	0.00017	0.00338	0.0026	5.9	0.000074	6.53	<0.000005	36.8	0.471	169	0.0000259	<0.0002	<0.0005	0.0021	<0.0002	0.00098	<0.0001	FIELD
GW-4A	GW-4A	08-May-2018 12:00	0.0021	<0.000005	0.0455	44.8	0.0194	<0.000002	0.000365	0.00143	<0.002	7.71	0.000496	5.53	<0.000005	11.7	0.428	72.4	0.000023	<0.0002	<0.0005	0.00251	<0.0002	0.00111	<0.0001	FIELD
GW-4A	JH42-Q2	08-May-2018 12:15	0.0016	<0.000005	0.0471	45.6	0.0199	<0.000002	0.000346	0.00146	0.0041	7.9	0.000503	5.59	<0.000005	12.1	0.442	75.1	0.0000218	<0.0002	<0.0005	0.00254	<0.0002	0.00116	<0.0001	FIELD
GW-4A	GW-4A	31-Jul-2018 10:15	4.66	0.0000057	0.0806	60.2	0.275	<0.000002	0.000202	0.00396	0.0031	6.36	0.000089	6.78	<0.000005	41.8	0.562	217	0.0000282	<0.0002	<0.0005	0.00187	<0.0002	0.00121	<0.0001	FIELD
GW-4A	GW-4A	06-Nov-2018 11:30	11.2	0.000015	0.105	72.4	0.469	<0.000002	0.0003	0.0068	0.0066	6.76	<0.00008	7.51	<0.00001	53	0.642	288	0.0000295	<0.0004	<0.001	0.00205	<0.0004	0.00149	<0.0002	FIELD
GW-4A	GW-4A	14-Feb-2019 11:00	9.57	<0.000005	0.0842	55.4	0.313	0.0000031	0.000073	0.00411	0.0034	5.38	<0.00004	6.39	<0.000005	45.1	0.526	217	0.0000166	<0.0002	<0.0005	0.00131	<0.0002	0.00069	<0.0001	FIELD
GW-4A	GW-4A	28-May-2019 14:30	0.705	<0.0002	0.0501	45.3	0.0869	<0.000002	<0.001	0.0025		7.29	0.00018	5.54	<0.00002	14.7	0.412	92.7	0.000022	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	FIELD
GW-4A	GW-4A	13-Aug-2019 15:00	0.385	<0.000005	0.054	50.1	0.099	<0.000002	0.000216	0.00227	0.0049	7.46	0.000122	5.78	<0.000005	18.1	0.471	116	0.0000224	<0.0002	<0.0005	0.00274	<0.0002	0.00028	<0.0001	FIELD
GW-4A	BD-Q3	13-Aug-2019 15:30	0.373	<0.000005	0.0527	49.6	0.0961	<0.000002	0.000199	0.00224	0.0023	7.4	0.000119	5.66	<0.000005	17.8	0.466	111	0.0000219	<0.0002	<0.0005	0.00275	<0.0002	0.00029	<0.0001	FIELD
GW-4A	GW 4A	05-Nov-2019 14:37	0.0021	<0.00001	0.0799	57.9	0.214	<0.000002	0.00011	0.00318	<0.004	6.31	<0.00008	6.5	<0.00001	33.8	0.487	174	0.0000154	<0.0004	<0.001	0.00168	<0.0004	0.00059	<0.0002	FIELD
GW-4A	GW-4A	20-Feb-2020 12:45	4.49	0.000015	0.088	59.7	0.267	<0.0000019	0.0001	0.00399	0.0046	5.93	<0.00008	6.26	<0.00001	42.8	0.502	194	0.0000117	<0.0004	<0.001	0.00161	<0.0004	0.00222	<0.0002	FIELD
GW-4A	GW-4A	18-May-2020 15:50	0.0044	0.0000061	0.0478	44.4	0.0459	<0.0000019	0.000301	0.00187	<0.002	7.82	0.000295	6.02	<0.000005	12.1	0.479	91.1	0.0000216	<0.0002	<0.0005	0.003	<0.0002	<0.0001	<0.0001	
GW-4A	Duplicate	18-May-2020 16:00	0.0039	<0.000005	0.0461	45.2	0.044	<0.0000019	0.000305	0.00174	<0.002	7.84	0.000234	6.12	<0.000005	12.4	0.46	93.4	<0.000002	<0.0002	<0.0005	0.0034	<0.0002	<0.0001	<0.0001	
GW-4A	GW-4A	14-Jul-2020 15:15	2.86	0.000011	0.0788	59.5	0.313	<0.0000019	0.00017	0.00393	0.0086	6.39	<0.00008	6.89	<0.00001	30.1	0.544	191	0.0000213	<0.0004	<0.001	0.00228	<0.0004	0.00071	<0.0002	
GW-4A	GW-4A Dup	2020-07-14	3.07	<0.00001	0.0774	59.8	0.314	<0.0000019	0.00013	0.00395	0.0088	6.36	<0.00008	6.92	<0.00001	30.1	0.54	191	0.0000177	<0.0004	<0.001	0.00227	<0.0004	0.00043	<0.0002	
FB	FB Q3	2020-07-14	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	0.0027	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	Lab Sample ID	Field Parameters	pH (field)	Specific Conductance (field)	Temperature	Dissolved Oxygen	ORP	Comments	Physical Properties	pH (lab)	Conductivity (lab)	Total Dissolved Solids	Total Suspended Solids	Total Hardness (CaCO3)	Disolved Hardness (CaCO3)	Turbidity	Inorganics	Alkalinity (Total as CaCO3)	Alkalinity (PP as CaCO3)	Bicarbonate (HCO3)
					pH	µS/cm	°C	mg/L	mV			pH	uS/cm	mg/L	mg/L	mg/L	mg/L	NTU		mg/L	mg/L	mg/L
			Maxxam RDL									0.10	1.0	10	1.0	0.50	0.50	0.10		0.50	0.50	0.50
GW-10B	GW-10B	26-Nov-2016 14:00	QD4989		7.36	479	6.8	6.03	57.5	Clear		7.99	480	290	37.2	260	233	7.08		239	<0.50	291
GW-10B	GW-10B	08-Dec-2016 11:30	QF8824		7.3	490	8.0	3.15	41.0	Clear		8.18	464	266	3.5	251	243	3.00		238	<0.50	290
GW-10B	GW-10B	15-Dec-2016 10:00	QG8926		7.18	480	7.3	3.12	37.0	Clear		8.23	474	282	5.9	243	239	2.69		240	<0.50	293
GW-10B	GW-10D	15-Dec-2016 11:00	QG8945		7.18	480	7.3	3.12	37.0	Clear		8.26	475	284	4.7	243	239	3.01		242	<0.50	296
GW-10B	GW-10B	06-Feb-2017 12:00	QN3458		7.27	465	7.7	1.49	6.1	Clear		7.97	468	240	13.3	244	230	35.6		228	<0.50	279
GW-10B	GW-10B	10-May-2017 11:00	RA9299		7.32	473	7.2	2.3	-12.2	Clear		8.21	470	274	8.1	230	241	5.15		235	<0.50	287
GW-10B	FB-R2	10-May-2017 15:30	RA9300									5.41	<1.0	<10	<1.0	<0.50	<0.50	<0.10		0.51	<0.50	0.62
GW-10B	GW-10B	17-Aug-2017 14:00	RT8645		7.32	470	10.3	2.01	-33.5	Clear		8.31	453	246	1.3	234	237	2.82		228	1.5	274
GW-10B	GW-10B	08-Nov-2017 12:00	SL4202		7.35	482	6.20	3.10	-55.0	Clear		8.29	477	262	1.6	247	247	5.06		230	<1.0	281
GW-10B	GW-10B	14-Feb-2018 15:00	SY9342		7.48	476	4.8	0.75	-128.0	Clear		8.28	466	242	2.8	239	237	7.64		237	<1.0	289
GW-10B	GW-10B	10-May-2018 09:30	TK5580		7.19	469.1	3.1	5.9	28.4	Clear		8.3	459	486	2.3	238	251	1.30		235	<1.0	287
GW-10B	GW-10B	01-Aug-2018 10:30	TZ8470		7.23	485.9	10.3	1.7	-2.8	Clear		8.21	444	252	<1.0	247	243	0.82		210	<1.0	256
GW-10B	GW-10B	06-Nov-2018 16:30	US9770		7.45	484.6	5.5	2.01	-26.2	Clear		8.27	485	262	3.8	252	261	1.74		246	<1.0	300
GW-10B	GW-10B	13-Feb-2019 10:30	VF7842		7.2	497.9	2.70	1.01	-29.2	Clear		7.98	482	268	1.4	235	239	3.56		245	<1.0	299
GW-10B	GW-10B	28-May-2019 10:15	VT7648		7.31	480	7.8	2.68	-5.2	Clear		8.34	488	270	<1.0	269	250	1.81		253	2	304
GW-10B	GW-10B	13-Aug-2019 09:30	WH4585		7.22	490	7.4	1.52	89.4	Clear		8.12	490	300	1.1	253	256	1.8		250	<1.0	310
GW-10B	FB-Q3	13-Aug-2019 10:00	WH4586									5.01	<2.0	<10	1	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-10B	GW-10B	05-Nov-2019 14:14	WW7110		6.85	504.7	4.3	1.3	-2.2	Clear		7.72	492	265	1.3	256	262	2.7		240	<1.0	290
GW-10B	GW FB	05-Nov-2019 14:20	WW7112									5.28	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-10B	GW-10B	23-Feb-2020 16:40	XL1018		7.68	481.3	5.1	8.13	-5.5	Clear		7.65	495	259	1	306	255	2.2		248	<1.0	302
GW-10B	GW-10B	20-May-2020 13:30	XU5512		7.21	507.7	7.9	2.49	-36	Clear		7.98	505			255	258	2.3		243	<1.0	297
GW-10B	Field Blank	20-May-2020 13:50	XU5513									5.57	<2.0			<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-10B	GW-10B	30-Jul-2020 13:30	YE5555		7.06	501.9	8.3	2.35	74.5			7.93	538	292	1.4	275	288	0.13		257	<1.0	313
GW-6	GW-6	03-Oct-2016 10:30	PR6457		7.29	1970	5.1			cloudy, brown/grey				1270	255	806	748	-				
GW-6	GW-6	12-Oct-2016 15:00	PT5622		7.5	1840	5.4			sl.cloudy, brownish				1380	413	949	818	-				
GW-6	GW-6	25-Oct-2016 14:30	PW5654		7.31	2090	4.7			cloudy, grey		7.77	1820	1400	488	942	910	-		388	<0.50	473
GW-6	GW-6	07-Feb-2017 11:45	QN4692		7.47	1825	4.6	-	-148.7	Clear		7.96	1820	1410	26.9	853	865	100		418	<0.50	510
GW-6	GW-6	11-May-2017 11:00	RB2044		7.19	1802	5.96	0.1	-156.5	Clear		8.3	1670	1330	27.7	862	918	129		378	<0.50	461
GW-6	GW-6	18-Aug-2017 11:00	RT8631		7.05	2095	12.2	0.05	-128.0	Clear		8.11	2020	1560	31	1040	1140	165		477	<1.0	581
GW-6	GW-6	09-Nov-2017 11:30	SL7230		7.09	2056	7.50	0.18	-131.0	Clear		8.16	2010	1580	30.2	973	1070	152		469	<1.0	572
GW-6	GW-6	07-Dec-2017 15:00	SQ5120		6.82	2048	7.2	0.04	-90	Clear		8.03	2010	1480	28.1	1040	1040	133		516	<1.0	630
GW-6	JH41-600	07-Dec-2017 15:00	SQ5117									8.07	1970	1490	28.1	1030	1040	123		521	<1.0	636
GW-6	FB	07-Dec-2017 15:30	SQ5121									5.19	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-6	GW-6	15-Feb-2018 11:00	SZ0969		7.06	2084	5.7	-	-119.3	Clear		8.25	2030	1420	31.2	932	942	131		475	<1.0	579
GW-6	GW-6	10-May-2018 16:15	TK5581		6.94	1936	2.5	0.5	-72.2	Clear		8.03	1910	1230	27.0	735	851	88.5		523	<1.0	638
GW-6	GW-6	01-Aug-2018 16:00	TZ8471		7.13	1975	12.5		-133.7	Clear		7.96	1840	1300	21.2	743	743	99.1		509	<1.0	621
GW-6	GW-81B	01-Aug-2018 16:45	TZ8472									5.57	<2.0	<10	<1.0	<0.50	<0.50	0.36		1	<1.0	1.3
GW-6	GW-6	08-Nov-2018 08:30	UT1589		7.2	1843	6.3	-	-149	Clear		8.16	1830	1160	14.3	647	619	66.1		458	<1.0	559
GW-6	GW-6	15-Feb-2019 10:30	VF9896		7.42	1976	3.10	0.13	-175.1	Clear		7.85	1900	1270	20.3	604	593	69.8		471	<1.0	575
GW-6	BD-Q1	15-Feb-2019 11:00	VF9899									7.87	1890	1290	20.3	605	577	70.4		476	<1.0	581
GW-6	GW-6	29-May-2019 15:30	VU0135		7.43	1970	14.5	0.04	-148.0	Clear		8.22	1990	1390	20	705	657	73.3		437	<1.0	533
GW-6	GW-6	14-Aug-2019 14:45	WH7086		7.16	2052	16.4	0.22	-162.6	Clear		8.28	2000	1500	24	665	661	69		450	<1.0	550
GW-6	GW-6	07-Nov-2019 11:25	WX1814		6.96	2053	7.7	1.7	-169.8	Clear		7.67	2030	1430	38	628	628	60		440	<1.0	530
GW-6	GW-6	19-Feb-2020 14:30	XK6294		7.44	1654	7.5	1.17	-95.9	Clear		7.5	2060	1440	18.9	594	604	61		442	<1.0	539
GW-6	GW-6	19-May-2020 14:00	XU3831		7.44	2115	9.4	0.75	-124.9	Clear		7.95	2100	1400	20.7	638	694	62		450	<1.0	549
GW-6	GW-6	30-Jul-2020 15:40	YE5554		7.08	1960	10.4	0.72	-121.4			7.91	2110	1430	20.2	607	630	55		451	<1.0	550
GW-7	GW-7	02-Oct-2016 14:00	PR6456		8.35	510	6.0			Clear				254	3.6	194	189	-				
GW-7	GW-7	12-Oct-2016 11:00	PT5621		7.9	510	5.2			Clear				270	3.4	211	208	-				
GW-7	GW-7	24-Oct-2016 17:30	PW5652		7.73	560	5.4			Clear		8.12	480	274	4.8	221	225	-		209	<0.50	255
GW-7	GW-7	07-Feb-2017 17:00	QN4693		7.5	479	5.2	-	-116.9	Clear		8.12	483	288	3.7	231	220	22.7		221	<0.50	270
GW-7	GW-7	11-May-2017 14:30	RB2045		7.4	509	7.13	0.11	-137.5	Clear		8.46	496	294	3.4	240	252	20.5		228	5.35	265
GW-7	GW-7	18-Aug-2017 14:00	RT8632		7.47	610	7.6		-95.7	Clear		8.41	592	334	4.4	274	282	33.2		238	4.9	278
GW-7	JH41-300	18-Aug-2017 15:00	RT8633		7.47	610.1	7.6	-	-95.7	Clear		8.42	596	358	4.5	269	274	30.9		238	4.6	279
GW-7	GW-7	09-Nov-2017 14:30	SL7231		7.22	1154	6.60	0.28	-106.0	Clear		8.34	1110	820	8.8	546	575	49.9		302	4.2	358
GW-7	GW-7	08-Dec-2017 10:00	SQ5091		7.12	1197	5.7	-	-55	Clear		8.25	1200	794	8.6	578	596	43.4		328	<1.0	400

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	Lab Sample ID	Field Parameters	pH (field)	Specific Conductance (field)	Temperature	Dissolved Oxygen	ORP	Comments	Physical Properties	pH (lab)	Conductivity (lab)	Total Dissolved Solids	Total Suspended Solids	Total Hardness (CaCO3)	Disolved Hardness (CaCO3)	Turbidity	Inorganics	Alkalinity (Total as CaCO3)	Alkalinity (PP as CaCO3)	Bicarbonate (HCO3)
					pH	µS/cm	°C	mg/L	mV			pH	uS/cm	mg/L	mg/L	mg/L	mg/L	NTU		mg/L	mg/L	mg/L
			Maxxam RDL									0.10	1.0	10	1.0	0.50	0.50	0.10		0.50	0.50	0.50
GW-7	GW-7	15-Feb-2018 13:15	SZ0970		7.26	1327	4.6	-	-96.0	Clear		8.37	1300	898	7.9	624	621	47.8		334	6.2	393
GW-7	GW-7	16-Mar-2018 12:30	TC9083		7.38	1340	6.1	-	-48.2	Clear		8.39	1330	928	8.9	662	700	54.2		352	4.7	418
GW-7	GW-7	13-Apr-2018 11:00	TG7740		7.22	1407	6.0	0.41	-67.0	Clear		8.11	1390	1100	9.0	688	689	56.2		377	<0.50	460
GW-7	JH42-01	13-Apr-2018 12:00	TG7742									8.11	1390	1020	8.6	675	678	52.5		380	<0.50	464
GW-7	FB	13-Apr-2018 12:00	TG7743									5.22	1.1	<10	<1.0	<0.50	<0.50	<0.10		0.6	<0.50	0.73
GW-7	GW-7	10-May-2018 18:15	TK5582		6.99	1509	1.9	0.5	-37.3	Clear		8.08	1490	1160	8.9	694	738	53.9		411	<1.0	502
GW-7	GW-7	02-Jun-2018 10:00	TO2175		7.22	1550	7.1	0.48	-60.3	Clear		8.29	1550	1120	9.5	753	743	64.0		386	<1.0	472
GW-7	GW-7	04-Jul-2018 08:55	TU5485		7.57	1643	6.9	0.15	-93	Clear		8.15	1690	1250	10.2	774	780	67		410	<1.0	500
GW-7	GW-7 DUP	04-Jul-2018 09:10	TU5486									8.14	1700	1260	10.1	772	773	66.2		415	<1.0	506
GW-7	FB	04-Jul-2018 10:15	TU5443									5.37	<2.0	<10	<1.1	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-7	GW-7	02-Aug-2018 10:15	UA0803		7.03	1501	7.5	0.06	-84.7	Clear		8.2	1410	1040	10.1	684	645	66.7		333	<1.0	407
GW-7	GW-7	29-Aug-2018 10:00	UE8163		7.04	1711	8.3	0.47	-56.2	Clear		8.23	1610	1250	10.8	792	792	0.47		331	<1.0	404
GW-7	GW-7	16-Oct-2018 09:45	UO7640		7.14	1605	6.7	0.32	-115	Clear		7.94	1610	1190	10.2	744	740	54.9		380	<1.0	463
GW-7	GW-OCT	16-Oct-2018 09:50	UO7642									7.97	1610	1170	10.2	738	734	51		383	<1.0	467
GW-7	GW-7	08-Nov-2018 10:00	UT3631		6.89	1714	4.5	0.15	-98.1	Clear		8.3	1660	1240	9.9	802	798	52.1		409	<1.0	498
GW-7	FB-Q4	08-Nov-2018 10:30	UT3634									4.94	<2.0	<11	<1.0	<0.50	<0.50	0.12		<1.0	<1.0	<1.0
GW-7	GW-7	14-Dec-2018 10:00	UY7689		6.93	1765	5.4	-	-67.1	Clear		8.09	1750	1240	10.8	781	773	49.6		419	<1.0	511
GW-7	GW-7	15-Feb-2019 12:30	VF9897		7.37	1607	1.70	0.31	-99.1	Clear		7.81	1540	1110	12.7	668	684	57.6		366	<1.0	446
GW-7	GW-7	15-Mar-2019 10:00	VJ4097		7	2082	-0.4	0.34	-75.0	Clear		8.27	1780	1280	9.8	801	815	39.4		441	<1.0	538
GW-7	GW-7	16-Apr-2019 11:30	VN8500		6.65	2901	6.26	0.2	-62.6	Clear		7.97	1840	1350	11.6	788	785	53		443	<1.0	541
GW-7	GW-74	16-Apr-2019 12:00	VN8501									8.03	1830	1360	12	784	787	56.1		449	<1.0	548
GW-7	GW-A	16-Apr-2019 12:30	VN8502									4.68	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-7	GW-7	30-May-2019 09:00	VU0249		7.26	2240	7.0	0.60	-84.4	Clear		8.19	2220	1750	13	1170	1090	72.6		461	<1.0	562
GW-7	GW-7	26-Jun-2019 16:20	VZ5399		7.11	2300	7.4	0.19	-62.6			7.96	2350	1970	15.6	1140	1130	76		504	<1.0	615
GW-7	GW-7	24-Jul-2019 08:00	WE1458		7.01	2259	7.3	0.63	12.3	Clear		7.81	2300	1910	19	1070	1090	96		500	<1.0	610
GW-7	BD-7	24-Jul-2019 08:30	WE1459									7.78	2400	1880	19	1070	1090	95		510	<1.0	620
GW-7	GW-7	14-Aug-2019 16:30	WH7087		7.02	2324	7.7	0.44	-77.7	Clear		8.20	2300	2000	20	1100	1080	78		490	<1.0	590
GW-7	GW-7	17-Sep-2019 14:00	WN2229		8.86	2253	7.47	0.2	-152.3	Clear		7.90	2300	1900	14	1050	1040	75		480	<1.0	590
GW-7	GW-7	07-Nov-2019 13:20	WX1815		6.75	2210	6.2	2.0	-100.0	Clear		7.42	2170	1730	20	1020	1030	57		430	<1.0	520
GW-7	GW-FD	07-Nov-2019 13:31	WX1817									7.3	2170	1760	19	1020	1050	55		450	<1.0	550
GW-7	GW-7	18-Dec-2019 13:40	XD7350		6.99	2240	5.2	2.7	-61.8	Clear		7.50	2220	1780	10.7	1030	1040	36		460	<1.0	561
GW-7	GW-7	29-Jan-2020 17:40	XH6886		7.00	2146	6.3	0.98	-33.8	Clear		7.43	2150	1690	15.9	980	922	47		454	<1.0	554
GW-7	GW-7	19-Feb-2020 16:25	XK6295		7.26	1969	5.5	1.92	-54.2	Clear		7.31	2210	1770	15.4	1070	975	61		432	<1.0	527
GW-7	GW-7	26-Mar-2020 13:15	XP2426		7.07	2161	7.1	1.31	-49	Clear		7.63	2270	1770	15.5			66		467	<1.0	570
GW-7	GW-7	05-Apr-2020 15:55	XQ0880		6.91	2250	6.5	1.04	-60	Clear		7.42	2240	1840	12.1	1040	1040	65		460	<1.0	561
GW-7	GW-7	22-Apr-2020 12:00	XR6424		6.96	1967	7.6	0.98	-53.4	Clear		7.94	1990	1510	10.3	929	789	51		461	<1.0	563
GW-7	GW-7	12-May-2020 16:00	XT6979		6.92	1973	8.7	0.87	-61.5	Clear		7.75	2060	1580	15.1	1040	1080	51		467	<1.0	569
GW-7	GW-7	24-Jun-2020 11:25	XZ5257		6.99	2302	8.6	1.35	-48	Clear		7.66	2170	1820	14.2	1050	1110	71		478	<1.0	584
GW-7	GW-7	18-Jul-2020 16:30	YC7448		6.9	2009	8.2	2.17	-55.3			7.57	2040	1540	20.4	945	1020	76		410	<1.0	500
GW-8	GW-8	03-Oct-2016 14:30	PR6458		7.89	660	6.2			clear - opal brown				330	24.8	249	254	-				
GW-8	GW-8	11-Oct-2016 17:00	PT5620		7.8	624	6.0			Clear				344	13.2	304	271	-				
GW-8	GW-8	25-Oct-2016 11:30	PW5653		7.69	730	5.7			Clear		8.12	628	364	7.4	314	289	-		251	<0.50	306
GW-8	GW-A	08-Feb-2017 12:00	QN4695		7.24	616.9	5.7	0.13	-41	Clear		8.11	632	386	1.5	305	292	3.62		263	<0.50	321
GW-8	GW-8	08-Feb-2017 12:50	QN4694		7.24	617	5.7	0.13	-41.0	Clear		8.11	629	378	1.4	305	292	3.69		262	<0.50	320
GW-8	GW-FB	08-Feb-2017 15:00	QN4725									5.34	1.1	12	<1.0	<0.50	<0.50	<0.10		<0.50	<0.50	<0.50
GW-8	GW-8	12-May-2017 11:00	RB1931		7.4	1071	5.11	6.91	32.3	Clear		8.35	1040	622	-	308	368	0.44		279	3.33	332
GW-8	GW-8	19-Aug-2017 10:30	RU0152		7.18	976	12.9	1.34	90.0	Clear		8.21	977	546	<1.0	306	289	6.89		282	<1.0	344
GW-8	GW-8	10-Nov-2017 11:30	SL7532		7.04	1845	10.50	0.23	-55.0	Clear		8.24	1850	1340	2	783	776	9.72		484	<1.0	591
GW-8	GW-8	08-Dec-2017 12:30	SQ5092		7.17	1742	9.2	-	-20	Clear		8.24	1740	1170	2.1	719	728	7.79		446	<1.0	544
GW-8	GW-8	15-Feb-2018 16:15	SZ0971		7.19	1696	6.2	0.05	-75.0	Clear		8.32	1660	1120	1.4	643	647	8.28		443	3.8	531
GW-8	GW-8	16-Mar-2018 14:45	TC9084		7.33	1676	7.1	0.08	-42.9	Clear		8.28	1660	1150	2.4	587	594	9.2		459	<1.0	560
GW-8	GW-8	13-Apr-2018 14:00	TG7741		7.2	1619	7.0	0.48	-3.9	Clear		8.13	1630	1120	1.7	581	568	2.24		479	<0.50	584
GW-8	GW-8	11-May-2018 10:15	TK5579		7.36	1550	3.2	9.3	47.7	Clear		8.16	1580	984	<1.0	400	419	0.44		290	<1.0	353
GW-8	GW-8	02-Jun-2018 12:00	TO2176		7.36	1544	11.7	3.67	34.5	Clear		8.24	1630	1080	<1.0	447	441	0.65		266	<1.0	325
GW-8	GW-8	04-Jul-2018 13:30	TU5445		7.83	1170	13.0	3.43	1.4	Clear		8.24	1220	762	<1.1	286	291	0.53		268	<1.0	327
GW-8	GW-8	02-Aug-2018 13:15	UA0804		7.09	1524	14.2	0.61	-0.2	Clear		8.17	1450	992	<1.0	404	431	0.3		260	<1.0	317

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	Lab Sample ID	Field Parameters	pH (field)	Specific Conductance (field)	Temperature	Dissolved Oxygen	ORP	Comments	Physical Properties	pH (lab)	Conductivity (lab)	Total Dissolved Solids	Total Suspended Solids	Total Hardness (CaCO3)	Disolved Hardness (CaCO3)	Turbidity	Inorganics	Alkalinity (Total as CaCO3)	Alkalinity (PP as CaCO3)	Bicarbonate (HCO3)
					pH	µS/cm	°C	mg/L	mV			pH	uS/cm	mg/L	mg/L	mg/L	mg/L	NTU		mg/L	mg/L	mg/L
			Maxxam RDL									0.10	1.0	10	1.0	0.50	0.50	0.10		0.50	0.50	0.50
GW-8	GW-8	29-Aug-2018 12:30	UE8164		7.12	1713	16.1	0.47	-29.3	Clear		8.28	1650	1140	<1.0	505	517	74.5		289	<1.0	353
GW-8	GW-8	16-Oct-2018 12:00	UO7641		7.19	1675	12.7	1.91	2.0	Clear		8.05	1700	1150	1	500	500	1.21		263	<1.0	320
GW-8	FB	16-Oct-2018 12:30	UO7644									6.98	<2.0	<10	<1.0	<0.50	<0.50	0.11		3	<1.0	3.7
GW-8	GW-8	08-Nov-2018 13:30	UT3633		7.08	1760	7.6	0.20	1.4	Clear		8.3	1760	1110	<1.0	543	533	0.35		339	<1.0	414
GW-8	GW-8	14-Dec-2018 12:30	UY7690		7.19	1565	7.4	0.93	-9.8	Clear		8.18	1500	996	<1.0	445	445	0.25		252	<1.0	307
GW-8	GW-8	15-Feb-2019 14:30	VF9898		7.32	1850	1.60	0.74	-2.2	Clear		7.90	1770	1200	<1.0	512	524	0.42		327	<1.0	398
GW-8	GW-8	15-Mar-2019 12:00	VJ4098		7.27	2054	0.5	0.85	15.4	Clear		8.31	1810	1240	<1.0	543	557	0.14		343	1.4	415
GW-8	GW-8	16-Apr-2019 16:00	VN8503		6.6	2617	6.63	3.52	79.3	Clear		8.25	1640	1090	<1.0	426	426	0.13		309	<1.0	377
GW-8	GW-8	30-May-2019 12:10	VU0250		7.74	1540	10.0	5.23	108.1	Clear		8.25	1590	1040	<1.0	327	321	0.36		170	<1.0	208
GW-8	GW-8	26-Jun-2019 12:25	VZ5400		7.64	1487	11.1	3.44	77.7			8.07	1570	1060	<1.0	301	311	0.2		184	<1.0	225
GW-8	GW-8	24-Jul-2019 10:00	WE1460		7.53	1688	14.5	1.96	71.1	Clear		8.01	1800	1260	<1.0	407	418	0.17		140	<1.0	170
GW-8	FB	24-Jul-2019 10:15	WE1456									5.00	<2.0	<10	1	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-8	GW-8	15-Aug-2019 09:15	WH8457		7.48	1514	15.8	1.35	108.5	Clear		8.22	1500	1000	<1.0	317	312	0.39		180	<1.0	210
GW-8	GW-8	17-Sep-2019 14:00	WN2230		7.32	1820	15.13	1.83	-75.4	Clear		8.00	1900	1400	<1.0	439	446	0.12		160	<1.0	200
GW-8	GW-8	07-Nov-2019 15:10	WX1816		7.29	1685	11.3	3.7	35.7	Clear		7.77	1680	1130	1.6	337	343	0.14		170	<1.0	210
GW-8	GW-8	18-Dec-2019 16:30	XD7351		7.51	1851	4.8	7.0	161.5	Clear		7.45	1860	1300	<1.0	441	445	0.40		178	<1.0	218
GW-8	GW-8	29-Jan-2020 15:20	XH6887		7.52	1826	4.9	3.0	126	Clear		7.53	1920	1330	<1.0	438	444	0.13		181	<1.0	221
GW-8	GW-8-DUP	29-Jan-2020 15:30	XH6888		7.52	1826	4.9	3.0	126	Clear		7.55	1910	1340	<1.0	447	429	0.15		184	<1.0	225
GW-8	Field Blank	29-Jan-2020 15:40	XH6889									5.67	<2.0	<10	<1.0	<0.50	<0.50	0.26		<1.0	<1.0	<1.0
GW-8	GW-8	19-Feb-2020 00:20	XK6296		7.73	1773	5.5	1.24	114.2	Clear		7.5	1870	1270	<1.0	448	447	0.35		196	<1.0	239
GW-8	FIELD DUPLICATE	19-Feb-2020 12:35	XK6297		7.73	1773	5.5	1.24	114.2	Clear		7.31	1870	1260	2.1	449	452	<0.10		192	<1.0	234
GW-8	FIELD BLANK	19-Feb-2020 12:50	XK6298									6.52	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-8	GW-8	27-Mar-2020 17:20	XP2427		7.61	1638	6.3	4.15	129.5	Clear		7.94	1790	1230	<1.0			<0.10		195	<1.0	238
GW-8	GW-8	05-Apr-2020 13:45	XQ0881		7.43	1739	6.4	3.13	129	Clear		7.83	1790	1240	<1.0	396	381	0.11		192	<1.0	235
GW-8	Duplicate	05-Apr-2020 14:05	XQ0882									7.88	1770	1220	<1.0	381	390	0.57		199	<1.0	243
GW-8	Field Blank	05-Apr-2020 14:25	XQ0879									5.39	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
GW-8	GW-8	12-May-2020 14:40	XT6980		7.5	1610	7.4	7.11	181.2	Clear		7.96	1690	1090	1.3	409	375	0.19		184	<1.0	224
GW-8	GW-8	24-Jun-2020 15:30	XZ5258		7.48	1274	10.2	7.94	66.2	Clear		7.98	1280	808	<1.0	255	252	0.18		194	<1.0	236
GW-8	GW-8	29-Jul-2020 15:40	YE3977		7.77	828	13.7	5.9	145			7.94	841	473	<1.0	211	209	<0.10		167	<1.0	204
	TRIP BLANK	30-Nov-2016 10:20	QE0419									5.86	1.9	<10	<1.0	<0.50	<0.50	<0.10		<0.50	<0.50	<0.50
	TRIP BLANK	09-Feb-2017 00:00	QN4726									5.80	1.4	<10	<1.0	<0.50	<0.50	<0.10		<0.50	<0.50	<0.50
	TRIP BLANK	11-May-2017 08:30	RA9301									6.33	5.1	<10	<1.0	<0.50	<0.50	<0.10		1.56	<0.50	1.9
	TRIP BLANK	16-Aug-2017 00:00	RT6946									5.73	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	07-Nov-2017 08:30	SL0175									5.06	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	09-Dec-2017 09:45	SQ5122									5.21	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	13-Feb-2018 07:40	SY5145									5.49	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	16-Mar-2018 00:00	TC9085									5.35	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	14-Apr-2018 11:01	TG7744									5.05	1.2	<10	<1.0	<0.50	<0.50	<0.10		<0.50	<0.50	<0.50
	TRIP BLANK	09-May-2018 07:00	TK1672									4.64	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	04-Jul-2018 10:15	TU5444									5.36	<2.0	<10		<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	03-Aug-2018 09:00	UA0802									5.17	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	17-Oct-2018 08:00	UO7643									4.97	<2.0	218	<1.0	<0.50	<0.50	0.13		<1.0	<1.0	<1.0
	TRIP BLANK	08-Nov-2018 08:30	UT1587									4.98	<2.0	<10	<1.3	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	14-Feb-2019 09:50	VF7845									5.03	<2.0	<11	<1.0	<0.50	<0.50	0.12		<1.0	<1.0	<1.0
	TRIP BLANK	16-Apr-2019 16:00	VN8504									4.84	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	28-May-2019 00:00	VT7650									5.19	<2.0	<10	<1.0	<0.50	<0.50	0.15		<1.0	<1.0	<1.0
	TRIP BLANK	24-Jul-2019 13:00	WE1457									4.97	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	14-Aug-2019 07:50	WH4587									4.96	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	TRIP BLANK	05-Nov-2019 00:00	WW7113									5.46	<2.0	<10	<1.0	<0.50	<0.50	<0.10		1	<1.0	1.3
	TRIP BLANK	20-Feb-2020 00:00	XK7944									4.87	<2.0	<10	<1.0	<0.50	<0.50	<0.10		<1.0	<1.0	<1.0
	Trip Blank	20-May-2020 13:30	XU5514									4.99	<2.0			<0.50	<0.50	<0.10		<1.0	<1.0	<1.0

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	Carbonate (CO3)	Hydroxide (OH)	Dissolved Chloride (Cl)	Fluoride (F)	Bromide (Br)	Anions and Nutrients	Dissolved Sulphate (SO4)	Total Sulphide	Total Sulphide (as H2S)	Total Ammonia (N)	Nitrite (N)	Nitrate (N)	Nitrate plus Nitrite (N)	Orthophosphate (P)	Organic / Inorganic Carbon	TOC	DOC	Total Metals	T-Al	T-Sb	T-As	T-Ba
			mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L
			0.50	0.50	0.50	0.010	0.010		0.50	0.0019	0.0020	0.0050	0.0020	0.0020	0.0020	0.0030		0.50	0.50		0.00050	0.00002	0.00002	0.00002
GW-10B	GW-10B	26-Nov-2016 14:00	<0.50	<0.50	1.5	0.16	0.012		26.3	0.0054	0.006	0.019	0.0093	0.211	0.221	0.0502		2.39	2.1		0.28	0.00072	0.00133	0.153
GW-10B	GW-10B	08-Dec-2016 11:30	<0.50	<0.50	0.53	0.16	0.012		24.2	<0.0050	<0.0050	0.07	<0.0050	0.192	0.192	0.0084		1.59	1.51		0.0157	<0.00050	0.00077	0.117
GW-10B	GW-10B	15-Dec-2016 10:00	<0.50	<0.50	0.78	0.16	<0.10		25.2	0.0066	0.007	0.021	<0.0050	0.168	0.168	0.017		1.17	0.88		0.116	<0.00050	0.00079	0.119
GW-10B	GW-10D	15-Dec-2016 11:00	<0.50	<0.50	0.91	0.16	0.011		28	0.0059	0.006	0.024	<0.0050	0.17	0.17	0.0124		0.71	1.3		0.155	<0.00050	0.001	0.135
GW-10B	GW-10B	06-Feb-2017 12:00	<0.50	<0.50	1.0	0.160	0.012		26.0	0.0096	0.010	0.026	0.0053	0.115	0.120	<0.0050		2.16	2.02		<0.003	<0.0005	0.00072	0.1
GW-10B	GW-10B	10-May-2017 11:00	<0.50	<0.50	0.99	0.17	0.011		27.3	<0.0050	<0.0050	0.048	0.0035	0.131	0.135	0.0149		1.26	1.74		0.0156	<0.0005	0.00062	0.1
GW-10B	FB-R2	10-May-2017 15:30	<0.50	<0.50	<0.50	0.011	<0.010		<0.50	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001
GW-10B	GW-10B	17-Aug-2017 14:00	1.8	<1.0	0.63	0.17	<0.010		21.7	<0.0050	<0.0050	0.037	<0.0050	0.083	0.083	0.0163		1.4	1.6		0.0258	<0.0005	0.00065	0.0903
GW-10B	GW-10B	08-Nov-2017 12:00	<1.0	<1.0	0.74	0.16	<0.010		21.3	0.0108	0.011	<0.020	0.0033	0.087	0.0903	0.0161		1.34	1.49		0.0104	0.000103	0.000614	0.0972
GW-10B	GW-10B	14-Feb-2018 15:00	<1.0	<1.0	0.91	0.19	0.01		26	0.0117	0.012	0.024	<0.0020	0.0885	0.0885	<0.0050		3.46	2.04		0.0162	0.00009	0.000751	0.11
GW-10B	GW-10B	10-May-2018 09:30	<1.0	<1.0	0.77	0.17	<0.010		20.6	<0.0019	<0.0020	<0.020	0.0033	0.201	0.205	<0.0050		<0.50	0.86		0.0069	0.000115	0.000237	0.122
GW-10B	GW-10B	01-Aug-2018 10:30	<1.0	<1.0	0.91	0.14	<0.010		23.4	<0.0050	<0.0050	<0.020	<0.0020	0.118	0.118	<0.0050		1.7	1.7		0.00183	0.000039	0.000525	0.0858
GW-10B	GW-10B	06-Nov-2018 16:30	<1.0	<1.0	<0.50	0.21	<0.010		21.3	<0.0050	<0.0053	0.045	<0.0020	0.143	0.143	<0.0050		0.69	1.62		0.0041	0.000038	0.0004	0.0992
GW-10B	GW-10B	13-Feb-2019 10:30	<1.0	<1.0	1.19	0.2	<0.010		22.9	<0.0019	<0.0020	<0.015	<0.0020	0.113	0.113	<0.0050		1.8	1.9		0.0042	0.000038	0.000493	0.081
GW-10B	GW-10B	28-May-2019 10:15	2.4	<1.0	1.2	0.21	<0.010		22	<0.0019	<0.0020	<0.015	0.0024	0.154	0.156	0.0063		1.4	1.6		0.0036	<0.0005	0.00036	0.0845
GW-10B	GW-10B	13-Aug-2019 09:30	<1.0	<1.0	0.72	0.18	<0.010		20	<0.0018	<0.0020	0.028	<0.0020	0.141	0.141	0.0069		1.3	1.5		0.00189	0.000027	0.000347	0.0794
GW-10B	FB-Q3	13-Aug-2019 10:00	<1.0	<1.0	<0.50	<0.050	<0.010		<0.50	<0.0018	<0.0020	0.023	<0.0020	<0.0020	<0.0020	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	0.000023
GW-10B	GW-10B	05-Nov-2019 14:14	<1.0	<1.0	0.92	0.17	<0.010		26	<0.0018	<0.0020	0.029	<0.0010	0.091	0.091	0.18		0.99	1.7		<0.0005	0.00002	0.000443	0.0774
GW-10B	GW FB	05-Nov-2019 14:20	<1.0	<1.0	<0.50	<0.050	<0.010		<1.0	<0.0018	<0.0020	0.018	<0.0010	<0.0020	<0.0022	<0.0030		<0.50	<0.50		0.00056	<0.00002	<0.00002	0.000024
GW-10B	GW-10B	23-Feb-2020 16:40	<1.0	<1.0	0.93	0.167	<0.010		25.2	<0.0018	<0.0020	0.02	0.0048	0.13	0.14	0.0047		1.26	1.4		0.00243	0.000046	0.000367	0.0872
GW-10B	GW-10B	20-May-2020 13:30	<1.0	<1.0	1.15	0.162	<0.010		24	<0.0018	<0.0020	0.019	0.0076	0.13	0.14	<0.0030		1.06	1.2		0.00221	0.000035	0.000301	0.0791
GW-10B	Field Blank	20-May-2020 13:50	<1.0	<1.0	0.61	<0.050	<0.010		<1.0	<0.0018	<0.0020	<0.015	<0.0010	0.0058	0.0055	<0.0030		<0.50	<0.50		0.0008	<0.00002	<0.00002	<0.00002
GW-10B	GW-10B	30-Jul-2020 13:30	<1.0	<1.0	0.91	0.131	<0.010		23.5	0.0032	0.0034	0.02	<0.0010	0.16	0.16	0.0036		1.32	1.5		0.00165	0.000055	0.000194	0.109
GW-6	GW-6	03-Oct-2016 10:30			5.3	0.97	<0.10		600	<0.0050	<0.0053	0.42	<0.0020	0.0048	0.0048	<0.0050			5.24		3.47	0.000459	0.00389	0.203
GW-6	GW-6	12-Oct-2016 15:00			6.3	0.9	<0.10		690	<0.0050	<0.0053	0.7	<0.0020	<0.0020	<0.0020	<0.0050		6.25	6.95		4.86	<0.00050	0.00623	0.227
GW-6	GW-6	25-Oct-2016 14:30	<0.50	<0.50	5.9	0.94	0.073		684	<0.0050	<0.0050	0.65	<0.0050	<0.020	<0.020	<0.0050		5.96	5.18		5.15	<0.00050	0.00789	0.225
GW-6	GW-6	07-Feb-2017 11:45	<0.50	<0.50	5.7	0.870	<0.10		643	0.0072	0.0080	0.67	<0.0020	0.0037	0.0037	0.233		4.36	3.92		0.0079	<0.0005	0.00115	0.0626
GW-6	GW-6	11-May-2017 11:00	<0.50	<0.50	6.7	0.76	<0.10		596	<0.0050	<0.0050	0.62	0.028	0.034	0.062	0.328		4.08	4.16		0.0084	<0.0005	0.00073	0.043
GW-6	GW-6	18-Aug-2017 11:00	<1.0	<1.0	19	0.66	0.107		724	0.0073	0.008	0.56	<0.0020	<0.0020	<0.0020	0.0158		4.2	4.4		0.0093	<0.0001	0.00062	0.052
GW-6	GW-6	09-Nov-2017 11:30	<1.0	<1.0	44	0.59	0.175		664	0.0146	0.016	0.62	<0.0020	<0.0020	<0.0020	<0.0050		4.48	4.79		0.00229	0.000033	0.00061	0.0422
GW-6	GW-6	07-Dec-2017 15:00	<1.0	<1.0	52.4	0.61	0.171		668	0.0245	0.026	0.57	<0.0020	<0.0020	<0.0020	<0.0050		4.24	3.93		<0.0025	<0.0001	0.00063	0.0423
GW-6	JH41-600	07-Dec-2017 15:00	<1.0	<1.0	52.8	0.62	0.176		646	0.0205	0.022	0.62	<0.0020	0.0048	0.0048	<0.0050		5.48	4.8		<0.0025	<0.0001	0.00061	0.0418
GW-6	FB	07-Dec-2017 15:30	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	0.013	0.014	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.00073	<0.00002	<0.00002	<0.00002
GW-6	GW-6	15-Feb-2018 11:00	<1.0	<1.0	59	0.6	0.217		706	0.0257	0.027	0.6	<0.0020	<0.0020	<0.0020	<0.0050		4.14	4.09		0.00472	0.000052	0.000607	0.0595
GW-6	GW-6	10-May-2018 16:15	<1.0	<1.0	66.8	0.59	0.33		480	0.013	0.014	0.6	<0.0020	0.0217	0.0217	<0.0050		3.99	4.06		<0.015	<0.0001	0.00045	0.0455
GW-6	GW-6	01-Aug-2018 16:00	<1.0	<1.0	64	0.52	0.34		502	0.0165	0.018	0.48	<0.0020	<0.0020	<0.0020	<0.0050		4.2	3.7		0.00258	0.000031	0.000548	0.0421
GW-6	GW-81B	01-Aug-2018 16:45	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	0.0097		<0.50	<0.50		0.00139	<0.00002	<0.00002	0.000027
GW-6	GW-6	08-Nov-2018 08:30	<1.0	<1.0	62.8	0.61	0.37		450	0.0123	0.013	0.54	<0.0020	<0.0020	<0.0020	<0.0050		3.68	3.3		0.0089	<0.00004	0.000568	0.0433
GW-6	GW-6	15-Feb-2019 10:30	<1.0	<1.0	61.1	0.57	0.37		493	0.0083	0.009	0.48	<0.0020	0.0046	0.0046	<0.0050		3.2	3.5		0.00721	0.000062	0.000724	0.038
GW-6	BD-Q1	15-Feb-2019 11:00	<1.0	<1.0	61.1	0.61	0.39		480	0.01	0.011	0.48	<0.0020	0.0028	0.0028	<0.0050		2.5	3.2		0.0039	0.000021	0.000719	0.0388
GW-6	GW-6	29-May-2019 15:30	<1.0	<1.0	55.9	0.49	0.43		573	0.018	0.019	0.48	<0.0020	<0.0020	<0.0020	<0.0050		3.1	3		0.0068	<0.0001	0.00045	0.0442
GW-6	GW-6	14-Aug-2019 14:45	<1.0	<1.0	57	0.44	0.5		640	0.011	0.012	0.56	<0.0020	<0.0020	<0.0020	0.0049		3.3	3.4		0.00462	0.00002	0.000603	0.0418
GW-6	GW-6	07-Nov-2019 11:25	<1.0	<1.0	50	0.5	0.53		620	0.012	0.013	0.56	<0.0010	<0.0020	<0.0022	<0.0030		2.5	3		0.0065	<0.00002	0.000526	0.0416
GW-6	GW-6	19-Feb-2020 14:30	<1.0	<1.0	53.1	0.558	0.561		683	0.0099	0.011	0.563	<0.0010	<0.0020	<0.0022	0.0032		2.97	2.9		0.00236	<0.00002	0.000878	0.0363
GW-6	GW-6	19-May-2020 14:00	<1.0	<1.0	50.5	0.515	0.634		595	0.0084	0.0089	0.594	<0.0010	<0.0020	<0.0022	<0.0030		3.21	3.5		0.00284	0.000028	0.000398	0.0445
GW-6	GW-6	30-Jul-2020 15:40	<1.0	<1.0	49.9	0.402	0.671		620	0.0095	0.01	0.529	<0.0010	<0.0020	<0.0022	<0.0030		3.52	3.6		0.00212	0.000024	0.000642	0.0379
GW-7	GW-7	02-Oct-2016 14:00			<1.0	0.99	0.012		45	0.0072	0.008	0.13	0.0021	0.007	0.0091	0.035			3.35		0.0498	0.000155	0.00116	0.0388
GW-7	GW-7	12-Oct-2016 11:00			1.5	0.74	0.016		45	0.0067	0.007	0.18	<0.0020	<0.0020	<0.0020	0.0209		2.88	2.91		0.0245	<0.00050	0.00079	0.046
GW-7	GW-7	24-Oct-2016 17:30	<0.50	<0.50	1.4	0.94	0.012		34.2	0.0087	0.009	0.13	<0.0050	<0.020	<0.020	<0.0050		3.78	3.93		0.0111	<0.00050	0.0007	0.0487
GW-7	GW-7	07-Feb-2017 17:00	<0.50	<0.50	1.5	0.790	<0.10		36.0	0.0059	0.0060	0.17	<0.0020	0.0038	0.0038	0.0100		2.35	2.60		0.0032	<0.0005	0.00102	0.0531
GW-7	GW-7	11-May-2017 14:30	6.42	<0.50	1.4	0.91	0.017		46.1	<0.0050	<0.0050	0.14	0.0033	<0.0020	0.0029	<0.0050		2.35	1.98		<0.003	<0.0005	0.001	0.0485
GW-7	GW-7	18-Aug-2017 14:00	5.9	<1.0	1.7	0.83	0.026		89.4	0.0076	0.008	0.16	<0.0020	<0.0020	<0.0020	0.0141		2	2.1		0.00389	0.000023	0.00106	0.0542
GW-7	JH41-300	18-Aug-2017 15:00	5.5	<1.0	1.8	0.83	0.026		87.6	<0.0050	<0.0050	0.18	<0.0020	<0.0020	<0.0020	0.0108		1.8	2.3		<0.003	<0.0005	0.00107	0.0551
GW-7	GW-7	09-Nov-2017 14:30	5	<1.0	4.7	0.81	0.085		322	0.0134	0.014	0.24	<0.0020	<0.0020	<0.0020	<0.0050		5.01	3.84		0.00248	0.000021	0.0012	0.0949
GW-7	GW-7	08-Dec-2017 10:00	<1.0	<1.0	4.87	0.73	0.092		337	0.018	0.019	0.22	<0.0020	0.0028	0.0028	<0.0050		4.17	4.1		0.00195	0.000022	0.00129	0.0967

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	Carbonate (CO3)	Hydroxide (OH)	Dissolved Chloride (Cl)	Fluoride (F)	Bromide (Br)	Anions and Nutrients	Dissolved Sulphate (SO4)	Total Sulphide	Total Sulphide (as H2S)	Total Ammonia (N)	Nitrite (N)	Nitrate (N)	Nitrate plus Nitrite (N)	Orthophosphate (P)	Organic / Inorganic Carbon	TOC	DOC	Total Metals	T-Al	T-Sb	T-As	T-Ba
			mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L
			0.50	0.50	0.50	0.010	0.010		0.50	0.0019	0.0020	0.0050	0.0020	0.0020	0.0020	0.0030		0.50	0.50		0.00050	0.00002	0.00002	0.00002
GW-7	GW-7	15-Feb-2018 13:15	7.4	<1.0	5.93	0.77	0.102		412	0.0122	0.013	0.23	<0.0020	<0.0020	<0.0020	<0.0050		3.59	3.56		0.00216	<0.00002	0.00118	0.0795
GW-7	GW-7	16-Mar-2018 12:30	5.6	<1.0	5.42	0.840	0.18		384	<0.0050	<0.0050	0.23	<0.0020	<0.0020	<0.0020	<0.0050		3.69	3.40		0.00218	<0.00002	0.00178	0.087
GW-7	GW-7	13-Apr-2018 11:00	<0.50	<0.50	6.4	0.77	0.19		439	<0.0050	<0.0050	0.31	<0.0020	0.0025	0.0025	<0.0050		3.05	3.81		0.00248	<0.00002	0.00149	0.0875
GW-7	JH42-01	13-Apr-2018 12:00	<0.50	<0.50	6.21	0.68	0.19		408	<0.0050	<0.0050	0.32	<0.0020	<0.0020	<0.0020	<0.0050		2.9	2.77		0.00242	<0.00002	0.00158	0.0889
GW-7	FB	13-Apr-2018 12:00	<0.50	<0.50	<0.50	0.012	<0.010		0.84	<0.0050	<0.0050	0.012	<0.0020	0.002	0.002	<0.0050		2.71	2.45		<0.0005	<0.00002	<0.00002	<0.00002
GW-7	GW-7	10-May-2018 18:15	<1.0	<1.0	5.89	0.79	0.17		427	<0.0019	<0.0020	0.25	0.0021	0.0043	0.0064	<0.0050		1.18	0.99		<0.003	0.000022	0.00142	0.0965
GW-7	GW-7	02-Jun-2018 10:00	<1.0	<1.0	4.75	0.76	0.18		501	<0.0050	<0.0050	0.25	<0.0020	<0.0020	<0.0020	<0.0050		4.4	3.8		0.00214	<0.00002	0.00139	0.0921
GW-7	GW-7	04-Jul-2018 08:55	<1.0	<1.0	4.7	0.74	0.17		563	0.0056	0.006	0.31	<0.0020	<0.0020	<0.0020	<0.0050		4.23	4.36		<0.003	0.000023	0.00132	0.0776
GW-7	GW-7 DUP	04-Jul-2018 09:10	<1.0	<1.0	4.8	0.73	0.18		586	0.0059	0.006	0.39	<0.0020	<0.0020	<0.0020	<0.0050		3.9	3.96		<0.003	0.000025	0.00143	0.0772
GW-7	FB	04-Jul-2018 10:15	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	0.0098	0.01	0.17	<0.0020	0.0028	0.0028	<0.0050		0.71	1.2		0.00086	<0.00002	<0.00002	<0.00002
GW-7	GW-7	02-Aug-2018 10:15	<1.0	<1.0	5.92	0.74	0.17		517	<0.0050	<0.0050	0.33	<0.0020	0.011	0.011	<0.0050		4.39	3.95		<0.003	0.000027	0.00184	0.0632
GW-7	GW-7	29-Aug-2018 10:00	<1.0	<1.0	2.82	1.3	0.19		551	<0.0050	<0.0050	0.32	<0.0020	<0.0020	<0.0020	<0.0050		4.4	4.6		0.00294	0.000022	0.00181	0.0707
GW-7	GW-7	16-Oct-2018 09:45	<1.0	<1.0	8.05	0.76	0.2		498	0.0066	0.007	0.41	<0.0020	<0.0020	<0.0020	<0.0050		3.2	3.8		0.00211	<0.00002	0.00166	0.0584
GW-7	GW-OCT	16-Oct-2018 09:50	<1.0	<1.0	8.04	0.76	0.22		533	0.006	0.006	0.4	<0.0020	0.0028	0.0028	<0.0050		3.2	3.9		0.00173	<0.00002	0.00168	0.0579
GW-7	GW-7	08-Nov-2018 10:00	<1.0	<1.0	6.44	0.77	0.2		556	<0.0050	<0.0053	0.32	<0.0020	<0.0020	<0.0020	<0.0050		3.7	4.87		0.0048	0.000055	0.00185	0.0625
GW-7	FB-Q4	08-Nov-2018 10:30	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0050	<0.0053	0.033	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.00197	<0.00002	<0.00002	<0.00002
GW-7	GW-7	14-Dec-2018 10:00	<1.0	<1.0	5.81	0.75	0.17		604	<0.0019	<0.0020	0.56	<0.0020	0.0176	0.0176	<0.0050		3.9	4.1		0.0048	<0.00002	0.0018	0.0617
GW-7	GW-7	15-Feb-2019 12:30	<1.0	<1.0	9.52	0.75	0.2		464	<0.0019	<0.0020	0.27	<0.0020	0.0032	0.0032	<0.0050		3.3	3.5		0.0048	0.000031	0.00206	0.0457
GW-7	GW-7	15-Mar-2019 10:00	<1.0	<1.0	5.48	0.89	0.21		573	<0.0019	<0.0020	0.27	<0.0020	<0.0020	<0.0020	<0.0050		4.6	4.3		<0.003	0.000021	0.00139	0.058
GW-7	GW-7	16-Apr-2019 11:30	<1.0	<1.0	7.77	0.78	0.21		642	<0.0019	<0.0020	0.47	<0.0020	0.0023	0.0023	<0.0030		4.1	4.3		0.0016	0.000027	0.00197	0.0515
GW-7	GW-74	16-Apr-2019 12:00	<1.0	<1.0	7.92	0.78	0.21		638	<0.0019	<0.0020	0.28	<0.0020	0.0023	0.0023	<0.0030		4	4.4		0.00129	<0.00002	0.00191	0.0515
GW-7	GW-A	16-Apr-2019 12:30	<1.0	<1.0	<0.50	<0.010	<0.010		<1.0	<0.0019	<0.0020	<0.015	<0.0020	<0.0020	<0.0020	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
GW-7	GW-7	30-May-2019 09:00	<1.0	<1.0	9.64	0.73	0.24		872	<0.0019	<0.0019	0.36	<0.0020	0.0022	0.0022	<0.0050		4.9	5.1		0.0236	0.00029	0.00176	0.0554
GW-7	GW-7	26-Jun-2019 16:20	<1.0	<1.0	14	0.71	0.26		1000	<0.0019	<0.0020	0.41	<0.0020	<0.0020	<0.0020	<0.0050		5.1	5.3		<0.006	<0.00004	0.00169	0.05
GW-7	GW-7	24-Jul-2019 08:00	<1.0	<1.0	13	0.78	0.23		950	<0.0019	<0.0020	0.37	<0.0020	<0.0020	<0.0020	<0.0050		5.5	5.8		<0.006	0.000069	0.00293	0.0462
GW-7	BD-7	24-Jul-2019 08:30	<1.0	<1.0	13	0.79	0.21		930	<0.0019	<0.0020	0.37	<0.0020	<0.0020	<0.0020	<0.0050		5.1	5.5		<0.006	<0.00004	0.00281	0.0461
GW-7	GW-7	14-Aug-2019 16:30	<1.0	<1.0	13	0.68	0.24		810	<0.0018	<0.0020	0.43	<0.0020	<0.0020	<0.0020	<0.0030		5.4	5.4		0.0076	0.000062	0.002	0.0434
GW-7	GW-7	17-Sep-2019 14:00	<1.0	<1.0	12	0.72	0.28		900	<0.0020	<0.0018	0.41	<0.0020	<0.0020	<0.0020	<0.0030		5.5	5.2		<0.006	<0.00004	0.00165	0.0451
GW-7	GW-7	07-Nov-2019 13:20	<1.0	<1.0	13	0.71	0.24		880	<0.0018	<0.0020	0.44	<0.0010	<0.0020	<0.0022	<0.0030		4.8	5.3		0.0101	<0.00004	0.00217	0.0397
GW-7	GW-FD	07-Nov-2019 13:31	<1.0	<1.0	13	0.69	0.25		880	<0.0018	<0.0020	0.42	<0.0010	0.0024	0.0024	<0.0030		5	5		0.008	<0.00004	0.00223	0.0401
GW-7	GW-7	18-Dec-2019 13:40	<1.0	<1.0	13.8	0.660	0.235		884	<0.0018	<0.0020	0.380	0.0031	<0.0020	0.0031	<0.0030		5.12	5.3		0.004	<0.00004	0.00151	0.0428
GW-7	GW-7	29-Jan-2020 17:40	<1.0	<1.0	10.8	0.712	0.214		819	<0.0018	<0.0020	0.405	0.0028	0.0022	0.005	<0.0030		5.37	5.7		0.0036	<0.00004	0.00199	0.0388
GW-7	GW-7	19-Feb-2020 16:25	<1.0	<1.0	15.5	0.741	0.228		965	<0.0018	<0.0020	0.44	0.0034	0.002	0.0054	<0.0030		4.63	4.6		0.0036	<0.00004	0.00205	0.0382
GW-7	GW-7	26-Mar-2020 13:15	<1.0	<1.0	14.5	0.682	0.261		895	<0.0018	<0.0020	0.386	<0.0010	<0.0020	<0.0022	<0.0030		4.6	1.5		0.00079	0.00004	0.00213	0.039
GW-7	GW-7	05-Apr-2020 15:55	<1.0	<1.0	15.6	0.667	0.266		937	<0.0018	<0.0020	0.434	0.0016	0.0033	0.0048	<0.0030		5.02	5		0.00317	<0.00002	0.00165	0.0393
GW-7	GW-7	22-Apr-2020 12:00	<1.0	<1.0	10.7	0.701	0.236		705	<0.0018	<0.0020	0.332	0.0026	0.0037	0.0063	<0.0030		3.95	5.2		0.00182	<0.00002	0.00152	0.0393
GW-7	GW-7	12-May-2020 16:00	<1.0	<1.0	10.1	0.688	0.257		660	<0.0018	<0.0020	0.398	0.0014	<0.0020	<0.0022	<0.0030		5.12	5.8		0.0018	0.000032	0.00185	0.0465
GW-7	GW-7	24-Jun-2020 11:25	<1.0	<1.0	18.5	0.167	0.303		920	<0.0018	<0.0020	0.397	0.0026	0.0028	0.0054	<0.0030		4.57	5.4		0.447	0.00514	0.00185	0.0398
GW-7	GW-7	18-Jul-2020 16:30	<1.0	<1.0	24.1	0.601	0.311		766	<0.0018	<0.0020	0.499	<0.0010	<0.0020	<0.0022	<0.0030		4.37	4.2		0.0014	<0.00004	0.00254	0.0298
GW-8	GW-8	03-Oct-2016 14:30			1.4	0.71	0.018		79	<0.0050	<0.0053	0.048	0.0034	0.0588	0.0622	<0.0050			2.93		0.306	0.000128	0.000402	0.0602
GW-8	GW-8	11-Oct-2016 17:00			1.8	0.78	0.019		90	0.0058	0.006	0.069	<0.0020	0.0037	0.0037	0.0132		1.98	1.98		0.139	<0.00050	0.00041	0.0551
GW-8	GW-8	25-Oct-2016 11:30	<0.50	<0.50	1.7	0.72	0.016		90.8	0.008	0.008	0.022	<0.0050	<0.020	<0.020	0.0065		1.46	1.72		0.051	<0.00050	0.00059	0.0573
GW-8	GW-A	08-Feb-2017 12:00	<0.50	<0.50	2.2	0.640	<0.10		83.3	0.0089	0.0090	0.043	0.0026	0.0124	0.0150	<0.0050		1.66	1.59		<0.003	<0.0005	0.00074	0.0571
GW-8	GW-8	08-Feb-2017 12:50	<0.50	<0.50	1.6	0.640	<0.10		91.9	0.0088	0.0090	0.033	0.0037	0.0123	0.0160	<0.0050		1.61	1.66		<0.003	<0.0005	0.00075	0.0585
GW-8	GW-FB	08-Feb-2017 15:00	<0.50	<0.50	<0.50	<0.010	<0.010		0.76	0.0069	0.0070	<0.0050	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001
GW-8	GW-8	12-May-2017 11:00	4	<0.50	97	0.58	0.248		152	<0.0050	<0.0050	0.04	<0.0020	0.398	0.398	<0.0050		1.26	1.68		0.0036	<0.0005	0.00046	0.0749
GW-8	GW-8	19-Aug-2017 10:30	<1.0	<1.0	69	0.81	0.271		132	<0.0050	<0.0050	0.031	<0.0050	0.284	0.284	<0.0050		0.96	1.6		0.00515	0.000078	0.000247	0.0577
GW-8	GW-8	10-Nov-2017 11:30	<1.0	<1.0	75	0.61	0.224		487	0.0088	0.009	0.11	<0.0020	0.0021	0.0021	<0.0050		3.39	3.38		0.00439	0.00005	0.000529	0.0682
GW-8	GW-8	08-Dec-2017 12:30	<1.0	<1.0	79	0.54	0.274		408	0.0187	0.02	0.058	<0.0020	0.0801	0.0801	<0.0050		3.22	3.09		0.0031	0.000046	0.000431	0.0629
GW-8	GW-8	15-Feb-2018 16:15	4.6	<1.0	78.5	0.61	0.302		386	0.0155	0.016	0.31	<0.0020	0.0091	0.0091	<0.0050		2.29	2.27		0.00243	0.000032	0.000427	0.0558
GW-8	GW-8	16-Mar-2018 14:45	<1.0	<1.0	67.3	0.620	0.33		325	0.0173	0.018	0.098	<0.0020	<0.0020	<0.0020	<0.0050		2.78	2.94		0.00241	0.000031	0.000621	0.0552
GW-8	GW-8	13-Apr-2018 14:00	<0.50	<0.50	75.1	0.51	0.33		296	<0.0050	<0.0050	0.084	<0.0020	0.0157	0.0157	<0.0050		2.14	2.03		0.00219	0.000044	0.000317	0.0647
GW-8	GW-8	11-May-2018 10:15	<1.0	<1.0	67.2	0.59	0.46		443	<0.0019	<0.0020	<0.020	<0.0020	1.11	1.11	<0.0050		<0.50	<0.50		<0.003	0.000073	0.000106	0.0486
GW-8	GW-8	02-Jun-2018 12:00	<1.0	<1.0	66.1	0.7	0.49		456	<0.0050	<0.0053	0.035	<0.0020	0.0647	0.0647	<0.0050		2.67	2.62		0.00383	0.000031	0.000364	0.0468
GW-8	GW-8	04-Jul-2018 13:30	<1.0	<1.0	63.2	0.78	0.42		259	0.0072	0.008	0.096	<0.0020	0.305	0.305	<0.0050		2.08	1.14		0.00153	0.000061	0.000295	0.0353
GW-8	GW-8	02-Aug-2018 13:15	<1.0	<1.0	55.8	0.79	0.51		487	<0.0050	<0.0050	0.17	0.0033	0.227	0.23	<0.0050		1.87	1.62		<0.003	0.000055	0.000188	0.0458

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	Carbonate (CO3)	Hydroxide (OH)	Dissolved Chloride (Cl)	Fluoride (F)	Bromide (Br)	Anions and Nutrients	Dissolved Sulphate (SO4)	Total Sulphide	Total Sulphide (as H2S)	Total Ammonia (N)	Nitrite (N)	Nitrate (N)	Nitrate plus Nitrite (N)	Orthophosphate (P)	Organic / Inorganic Carbon	TOC	DOC	Total Metals	T-Al	T-Sb	T-As	T-Ba
			mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L		mg/L	mg/L	mg/L	mg/L
			0.50	0.50	0.50	0.010	0.010		0.50	0.0019	0.0020	0.0050	0.0020	0.0020	0.0020	0.0030		0.50	0.50		0.00050	0.00002	0.00002	0.00002
GW-8	GW-8	29-Aug-2018 12:30	<1.0	<1.0	61.9	0.75	0.43		452	<0.0050	<0.0050	0.21	0.0064	0.141	0.148	<0.0050		1.9	2.1		0.00326	0.000059	0.000251	0.0508
GW-8	GW-8	16-Oct-2018 12:00	<1.0	<1.0	56.2	0.76	0.54		540	<0.0050	<0.0050	0.089	<0.0020	0.532	0.532	<0.0050		<0.50	0.71		0.0061	0.000096	0.000247	0.0411
GW-8	FB	16-Oct-2018 12:30	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	0.0073	0.008	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
GW-8	GW-8	08-Nov-2018 13:30	<1.0	<1.0	55.5	0.61	0.51		540	<0.0050	<0.0053	0.08	0.0069	0.239	0.246	<0.0050		1.6	2.01		0.0042	0.000053	0.000132	0.0438
GW-8	GW-8	14-Dec-2018 12:30	<1.0	<1.0	47.5	0.65	0.48		452	<0.0019	<0.0020	0.059	<0.0020	0.648	0.648	<0.0050		<0.50	0.53		<0.003	0.000059	0.000105	0.0351
GW-8	GW-8	15-Feb-2019 14:30	<1.0	<1.0	55.8	0.73	0.57		542	<0.0019	<0.0020	0.035	0.0047	0.27	0.275	<0.0050		1.3	1.3		<0.003	0.00004	0.000147	0.0344
GW-8	GW-8	15-Mar-2019 12:00	1.7	<1.0	55.3	0.73	0.66		601	<0.0019	<0.0020	0.025	0.0051	0.282	0.287	<0.0050		1.4	0.71		<0.003	0.000068	0.000114	0.0349
GW-8	GW-8	16-Apr-2019 16:00	<1.0	<1.0	45.3	0.65	0.5		487	<0.0019	<0.0020	<0.015	<0.0020	0.692	0.692	0.0038		1.3	1.6		0.00271	0.000045	0.000097	0.0266
GW-8	GW-8	30-May-2019 12:10	<1.0	<1.0	49.1	0.76	0.99		519	<0.0019	<0.0019	<0.015	<0.0020	0.632	0.632	<0.0050		0.98	1.1		0.0157	0.000228	0.000138	0.026
GW-8	GW-8	26-Jun-2019 12:25	<1.0	<1.0	43	0.93	1		520	<0.0019	<0.0020	<0.015	<0.0020	0.396	0.396	<0.0050		1.2	1.2		0.0032	0.000068	0.000146	0.0253
GW-8	GW-8	24-Jul-2019 10:00	<1.0	<1.0	49	0.99	0.81		650	<0.0019	<0.0020	<0.015	0.0025	0.929	0.931	<0.0050		1.1	1.5		<0.003	0.000082	0.000455	0.0394
GW-8	FB	24-Jul-2019 10:15	<1.0	<1.0	<0.50	<0.050	<0.010		0.99	<0.0019	<0.0020	<0.015	<0.0020	0.0023	0.0023	<0.0050		<0.50	<0.50		0.00055	<0.00002	<0.00002	<0.00002
GW-8	GW-8	15-Aug-2019 09:15	<1.0	<1.0	63	0.89	0.9		490	0.0019	0.002	0.029	<0.0020	0.565	0.565	0.0055		1.5	1.7		0.00204	0.000092	0.000172	0.0279
GW-8	GW-8	17-Sep-2019 14:00	<1.0	<1.0	75	0.85	1.1		660	<0.0020	<0.0018	0.028	<0.0020	1.33	1.33	<0.0030		1.2	1.2		0.00204	0.000076	0.00016	0.038
GW-8	GW-8	07-Nov-2019 15:10	<1.0	<1.0	51	0.9	0.87		620	<0.0018	<0.0020	<0.015	0.0036	0.84	0.85	<0.0030		1	1.2		0.00119	0.000066	0.000172	0.0286
GW-8	GW-8	18-Dec-2019 16:30	<1.0	<1.0	59.1	0.565	0.852		721	<0.0018	<0.0020	<0.015	0.0027	1.7	1.7	0.0036		1.20	1.2		0.0012	0.000076	0.00012	0.0354
GW-8	GW-8	29-Jan-2020 15:20	<1.0	<1.0	62.2	0.712	0.852		768	<0.0018	<0.0020	0.033	0.001	1.2	1.2	0.0037		1.09	2		0.0009	0.000079	0.000144	0.0307
GW-8	GW-8-DUP	29-Jan-2020 15:30	<1.0	<1.0	61.8	0.661	0.892		744	<0.0018	<0.0020	<0.015	0.0022	1.2	1.2	0.0044		1.3	1.9		0.00116	0.000076	0.000169	0.0303
GW-8	Field Blank	29-Jan-2020 15:40	<1.0	<1.0	<0.50	<0.050	<0.010		<1.0	<0.0018	<0.0020	<0.015	<0.0010	0.0028	0.0028	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	0.000036
GW-8	GW-8	19-Feb-2020 00:20	<1.0	<1.0	61.4	0.819	0.915		761	<0.0018	<0.0020	0.028	0.0056	0.31	0.32	0.0033		1.06	1.8		0.00086	0.00008	0.000154	0.0304
GW-8	FIELD DUPLICATE	19-Feb-2020 12:35	<1.0	<1.0	61.2	0.844	0.92		769	<0.0018	<0.0020	0.023	0.0051	0.33	0.34	0.0035		1.31	2.2		0.00074	0.000098	0.000167	0.0298
GW-8	FIELD BLANK	19-Feb-2020 12:50	<1.0	<1.0	0.91	<0.050	<0.010		<1.0	<0.0018	<0.0020	0.02	0.0027	<0.0020	0.0027	<0.0030		<0.50	<0.50		0.00101	<0.00002	<0.00002	<0.00002
GW-8	GW-8	27-Mar-2020 17:20	<1.0	<1.0	63.3	0.699	0.946		658	<0.0018	<0.0020	0.022	<0.0010	1.3	1.3	0.0035		1.2	6.1		0.0007	0.000079	0.000115	0.025
GW-8	GW-8	05-Apr-2020 13:45	<1.0	<1.0	61.8	0.69	0.936		631	<0.0018	<0.0020	0.036	0.0027	0.9	0.91	<0.0030		1.06	1.4		0.00181	0.000053	0.000191	0.0253
GW-8	Duplicate	05-Apr-2020 14:05	<1.0	<1.0	61.7	0.73	0.957		618	<0.0018	<0.0020	0.019	0.0028	0.97	0.97	<0.0030		1.18	1.1		0.00187	0.000044	0.000211	0.0255
GW-8	Field Blank	05-Apr-2020 14:25	<1.0	<1.0	<0.50	<0.050	<0.010		<1.0	<0.0018	<0.0020	<0.015	<0.0010	<0.0020	<0.0022	<0.0030		<0.50	<0.50		0.00071	<0.00002	<0.00002	0.000022
GW-8	GW-8	12-May-2020 14:40	<1.0	<1.0	73.4	0.532	1.05		484	<0.0018	<0.0020	0.038	<0.0010	1.3	1.3	0.0039		0.67	1.3		0.00111	0.000107	0.000067	0.0295
GW-8	GW-8	24-Jun-2020 15:30	<1.0	<1.0	44	0.624	0.728		367	<0.0018	<0.0020	<0.015	0.0059	1.1	1.1	0.005		0.8	1.1		1.04	0.0128	0.000308	0.0204
GW-8	GW-8	29-Jul-2020 15:40	<1.0	<1.0	24.4	0.608	0.393		229	<0.0018	<0.0020	0.02	<0.0010	0.62	0.62	0.0062		1.33	1.8		0.00305	0.000136	0.000174	0.0216
	TRIP BLANK	30-Nov-2016 10:20	<0.50	<0.50	<0.50	<0.010	<0.010		<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.020	<0.020	<0.0050		0.74	<0.50		<0.0030	<0.00050	<0.00010	<0.0010
	TRIP BLANK	09-Feb-2017 00:00	<0.50	<0.50	0.66	<0.010	<0.010		0.67	0.0074	0.0080	<0.0050	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001
	TRIP BLANK	11-May-2017 08:30	<0.50	<0.50	<0.50	0.01	<0.010		<0.50	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001
	TRIP BLANK	16-Aug-2017 00:00	<1.0	<1.0	<0.50	<0.020	<0.010		<0.50	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001
	TRIP BLANK	07-Nov-2017 08:30	<1.0	<1.0	0.83	<0.020	<0.010		<1.0	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	0.0069		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	09-Dec-2017 09:45	<1.0	<1.0	0.5	<0.020	<0.010		<1.0	<0.0050	<0.0053	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	13-Feb-2018 07:40	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	16-Mar-2018 00:00	<1.0	<1.0	0.56	<0.020	<0.010		<1.0	<0.0050	<0.0050	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	14-Apr-2018 11:01	<0.50	<0.50	0.99	0.011	<0.010		<0.50	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	09-May-2018 07:00	<1.0	<1.0	<0.50	<0.020	<0.010		<0.50	<0.0019	<0.0020	0.027	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	04-Jul-2018 10:15	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	0.006	0.006	0.031	<0.0020	<0.0020	<0.0020	0.011		0.67	<0.50		0.00071	<0.00002	<0.00002	<0.00002
	TRIP BLANK	03-Aug-2018 09:00	<1.0	<1.0	<0.50	<0.020	<0.010		1.1	<0.0050	<0.0050	0.038	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		0.00111	<0.00002	<0.00002	<0.00002
	TRIP BLANK	17-Oct-2018 08:00	<1.0	<1.0	<0.50	0.079	<0.010		<1.0	<0.0050	<0.0050	0.029	<0.0020	0.0128	0.0128	0.006		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	08-Nov-2018 08:30	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0050	<0.0053	<0.020	<0.0020	<0.0020	<0.0020	<0.0050		0.74	<0.50		0.00096	<0.00002	<0.00002	<0.00002
	TRIP BLANK	14-Feb-2019 09:50	<1.0	<1.0	<0.50	<0.020	<0.010		<1.0	<0.0019	<0.0020	<0.015	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	16-Apr-2019 16:00	<1.0	<1.0	<0.50	<0.010	<0.010		<1.0	<0.0019	<0.0020	<0.015	<0.0020	<0.0020	<0.0020	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	28-May-2019 00:00	<1.0	<1.0	0.63	<0.050	<0.010		<0.50	<0.0019	<0.0020	<0.015	<0.0020	<0.0020	<0.0020	<0.0050		<0.50	<0.50		<0.003	<0.0005	<0.0001	<0.001
	TRIP BLANK	24-Jul-2019 13:00	<1.0	<1.0	<0.50	<0.050	<0.010		0.68	<0.0019	<0.0020	0.018	<0.0020	<0.0020	<0.0020	<0.0050		0.5	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	14-Aug-2019 07:50	<1.0	<1.0	<0.50	<0.050	<0.010		<0.50	<0.0018	<0.0020	0.016	<0.0020	<0.0020	<0.0020	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	05-Nov-2019 00:00	<1.0	<1.0	<0.50	<0.050	<0.010		<1.0			<0.015	<0.0010	<0.0020	<0.0022	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	TRIP BLANK	20-Feb-2020 00:00	<1.0	<1.0	<0.50	<0.050	<0.010		<1.0	<0.0018	<0.0020	<0.015	0.0035	<0.0020	0.0035	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002
	Trip Blank	20-May-2020 13:30	<1.0	<1.0	0.79	<0.050	<0.010		<1.0	<0.0018	<0.0020	<0.015	<0.0010	<0.0020	<0.0022	<0.0030		<0.50	<0.50		<0.0005	<0.00002	<0.00002	<0.00002

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	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	T-Se	T-Si	T-Ag	T-Na
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.000010	0.000005	0.010	0.000005	0.050	0.00010	0.000005	0.000050	0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.0020	0.050	0.00004	0.05	0.000005	0.050
GW-10B	GW-10B	26-Nov-2016 14:00	<0.00010	<0.0010	<0.05	0.000084	76.6	0.0055	0.00116	0.00234	1.08	0.00056	0.0111	16.7	0.0713	<0.000010	0.0023	0.0063		2.12	0.00337	5.17	<0.000020	4.8
GW-10B	GW-10B	08-Dec-2016 11:30	<0.00010	<0.0010	<0.05	0.000032	71.1	0.005	0.00154	0.00212	0.118	0.00101	0.0127	17.9	0.0975	<0.000010	0.0025	0.0046		2.08	0.00292	4.86	0.00004	5.64
GW-10B	GW-10B	15-Dec-2016 10:00	<0.00010	<0.0010	<0.05	0.000051	70.6	0.0035	0.00122	0.00177	0.547	0.00066	0.0108	16.1	0.127	<0.000010	0.0016	0.0041		1.94	0.00248	4.83	0.000021	5.01
GW-10B	GW-10D	15-Dec-2016 11:00	<0.00010	<0.0010	<0.05	0.000077	69.1	0.0037	0.00151	0.00233	0.752	0.00081	0.0121	17.1	0.141	<0.000010	0.0018	0.0054		2.09	0.00245	4.9	0.000033	5.08
GW-10B	GW-10B	06-Feb-2017 12:00	<0.0001	<0.001	<0.05	0.00002	69.7	<0.001	0.00086	<0.0005	0.109	0.0002	0.012	17.0	0.167	<0.00001	0.0021	0.0032		1.94	0.00148	4.86	<0.00002	5.49
GW-10B	GW-10B	10-May-2017 11:00	<0.0001	<0.001	<0.05	0.000024	66.3	0.0014	0.00048	<0.0005	0.236	<0.0002	0.0106	15.7	0.112	<0.00001	0.0017	0.0023		1.72	0.00165	4.84	<0.00002	4.48
GW-10B	FB-R2	10-May-2017 15:30	<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	<0.00001	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050
GW-10B	GW-10B	17-Aug-2017 14:00	<0.0001	<0.001	<0.05	0.000014	65.3	0.0043	0.00037	<0.0005	0.417	<0.0002	0.0107	17.2	0.11	<0.00001	0.0022	0.0043		1.65	0.00134	4.2	<0.00002	4.74
GW-10B	GW-10B	08-Nov-2017 12:00	<0.00001	<0.000005	0.018	0.0000108	69.4	0.00024	0.000243	0.000233	0.514	0.0000112	0.0116	18	0.116	<0.000002	0.00176	0.00103	0.0208	1.95	0.00143	4.55	<0.000005	4.35
GW-10B	GW-10B	14-Feb-2018 15:00	<0.00001	<0.000005	0.016	0.0000091	66.4	<0.0001	0.00032	0.00015	0.717	0.0000299	0.0117	17.7	0.15	<0.000002	0.00169	0.00102	0.0172	1.78	0.00132	4.54	<0.000005	4.25
GW-10B	GW-10B	10-May-2018 09:30	<0.00001	<0.00001	0.015	0.0000486	68.7	<0.0001	0.000382	0.00024	0.0401	<0.00002	0.011	16	0.0556	<0.000002	0.00165	0.00132	0.0125	1.79	0.00325	4.68	<0.00001	3.17
GW-10B	GW-10B	01-Aug-2018 10:30	<0.00001	<0.000005	0.013	0.0000168	70.1	<0.0001	0.000395	0.000109	0.148	0.0000092	0.0102	17.3	0.0816	<0.000002	0.00163	0.0011	0.0088	1.75	0.00278	3.75	<0.000005	4.06
GW-10B	GW-10B	06-Nov-2018 16:30	<0.00001	<0.00001	0.013	0.0000107	73.1	<0.0001	0.000276	0.00013	0.239	<0.00002	0.00948	16.9	0.083	<0.000002	0.00169	0.00082	0.0145	1.86	0.00214	4.48	<0.00001	3.41
GW-10B	GW-10B	13-Feb-2019 10:30	<0.00001	<0.00001	0.016	0.000009	65.1	<0.0001	0.000282	0.00014	0.429	<0.00002	0.0121	17.5	0.107	0.0000049	0.00165	0.00079	0.0217	1.82	0.00138	4.32	<0.00001	4.04
GW-10B	GW-10B	28-May-2019 10:15	<0.0001	<0.001	<0.05	0.00001	75.8	<0.001	0.00021	<0.0005	0.281	<0.0002	0.0115	19.5	0.0847	<0.000002	0.0016	<0.001		1.99	0.00241	4.86	<0.00002	4
GW-10B	GW-10B	13-Aug-2019 09:30	<0.00001	<0.000005	<0.01	0.0000069	71.9	<0.0001	0.000199	0.000081	0.287	<0.000005	0.0107	17.8	0.0893	<0.000002	0.00162	0.000666	0.0122	1.87	0.00229	4.5	<0.000005	3.72
GW-10B	FB-Q3	13-Aug-2019 10:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-10B	GW-10B	05-Nov-2019 14:14	<0.00001	<0.000005	0.015	<0.000005	72.2	<0.0001	0.000217	0.000188	0.494	<0.000005	0.0112	18.4	0.0968	<0.000002	0.00164	0.000766	0.0193	1.95	0.00186	4.45	<0.000005	4.2
GW-10B	GW FB	05-Nov-2019 14:20	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	0.0000022	<0.00005	<0.00002	0.0049	<0.050	<0.00004	0.062	<0.000005	0.337
GW-10B	GW-10B	23-Feb-2020 16:40	<0.00001	<0.000005	0.021	0.0000096	86.5	<0.0001	0.000222	0.00011	0.282	0.0000151	0.0135	21.8	0.106	<0.0000019	0.00202	0.000765	0.0127	2.29	0.00271	5.28	<0.000005	4.46
GW-10B	GW-10B	20-May-2020 13:30	<0.00001	<0.000005	0.017	0.0000061	73.4	<0.0001	0.000188	0.000089	0.289	0.0000115	0.0118	17.4	0.0883	<0.0000019	0.00172	0.000512	0.0228	1.78	0.00212	4.64	<0.000005	3.8
GW-10B	Field Blank	20-May-2020 13:50	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	0.0048	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-10B	GW-10B	30-Jul-2020 13:30	<0.00001	<0.000005	0.015	0.0000197	79.5	<0.0001	0.000147	0.000184	0.0145	0.0000133	0.00927	18.6	0.0218	<0.0000019	0.00161	0.000735	0.0069	1.86	0.00256	4.15	<0.000005	3.55
GW-6	GW-6	03-Oct-2016 10:30	0.000178	0.000088	0.151	0.000371	223	0.00601	0.00504	0.0124	15.4	0.00575	0.111	60.5	0.9	<0.0000020	0.00314	0.0124	0.327	3.48	0.000256	10.5	0.00009	101
GW-6	GW-6	12-Oct-2016 15:00	0.00023	<0.0010	0.153	0.000722	258	0.0092	0.00697	0.0238	25.3	0.00986	0.116	73.9	1.05	<0.000010	0.002	0.0191		3.76	0.00033	11.7	0.00016	122
GW-6	GW-6	25-Oct-2016 14:30	0.00035	<0.0010	0.151	0.000715	264	0.0101	0.00709	0.0225	23.8	0.0105	0.117	68.8	1.16	<0.000010	0.0018	0.0201		3.11	0.00028	12.2	0.000124	111
GW-6	GW-6	07-Feb-2017 11:45	<0.0001	<0.001	0.151	<0.00001	234	<0.001	0.00026	<0.0005	9.79	<0.0002	0.109	65.0	0.604	<0.00001	<0.001	<0.001		2.69	<0.0001	6.39	<0.00002	109
GW-6	GW-6	11-May-2017 11:00	<0.0001	<0.001	0.124	<0.00001	241	<0.001	<0.0002	<0.0005	10.3	<0.0002	0.0784	62.9	0.387	<0.00001	<0.001	<0.001		2.49	<0.0001	6.34	<0.00002	93.9
GW-6	GW-6	18-Aug-2017 11:00	<0.00005	<0.000025	0.115	<0.000025	284	<0.0005	0.00009	0.00025	13.3	<0.000025	0.0739	80.8	0.481	<0.000010	0.00061	0.00022		2.4	<0.0002	6.16	<0.000025	94.2
GW-6	GW-6	09-Nov-2017 11:30	<0.00001	<0.000005	0.104	<0.000005	271	<0.0001	0.000065	<0.00005	11.1	<0.000005	0.0622	71.6	0.458	0.0000025	0.000615	0.000144	0.382	2.54	0.000044	5.79	<0.000005	93.7
GW-6	GW-6	07-Dec-2017 15:00	<0.00005	<0.000025	0.126	<0.000025	288	<0.0005	0.00007	<0.00025	11.9	<0.000025	0.0734	76.9	0.451	<0.000002	0.00062	0.00015	0.402	2.71	<0.0002	6.47	<0.000025	111
GW-6	JH41-600	07-Dec-2017 15:00	<0.00005	<0.000025	0.126	<0.000025	284	<0.0005	0.000071	<0.00025	11.8	<0.000025	0.0695	76.6	0.45	<0.000002	0.00059	0.00017	0.377	2.72	<0.0002	6.35	<0.000025	112
GW-6	FB	07-Dec-2017 15:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000075	0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0021	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-6	GW-6	15-Feb-2018 11:00	<0.00001	<0.000005	0.109	<0.000005	265	0.00012	0.0000722	0.000301	11	0.0000204	0.0665	65.4	0.404	<0.000002	0.000627	0.00024	0.352	2.6	<0.00004	6.88	<0.000005	106
GW-6	GW-6	10-May-2018 16:15	<0.00005	<0.00005	0.097	<0.000025	205	<0.0005	<0.00005	<0.0005	8.95	<0.0001	0.0552	54	0.324	<0.000002	0.00054	<0.0005	0.383	2.4	<0.0002	5.71	<0.00005	116
GW-6	GW-6	01-Aug-2018 16:00	<0.00001	<0.000005	0.096	<0.000005	211	<0.0001	0.0000432	0.000121	7.77	<0.000005	0.0559	52.7	0.289	<0.000002	0.000665	0.000182	0.399	2.53	0.000044	5.65	<0.000005	164
GW-6	GW-81B	01-Aug-2018 16:45	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	0.0000075	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0025	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-6	GW-6	08-Nov-2018 08:30	<0.00002	<0.00002	0.1	<0.00001	180	0.00021	0.000068	0.00089	7.27	<0.00004	0.0549	48.3	0.255	<0.000002	0.00079	0.00026	0.408	2.43	<0.00008	6.31	<0.00002	196
GW-6	GW-6	15-Feb-2019 10:30	<0.00001	<0.000005	0.104	<0.000005	169	0.00013	0.000085	0.000328	6.92	0.0000089	0.054	44.4	0.255	0.0000037	0.000767	0.000219	0.354	2.36	0.000041	6.12	<0.000005	187
GW-6	BD-Q1	15-Feb-2019 11:00	<0.00001	<0.00001	0.102	<0.000005	170	0.00015	0.00009	0.00037	6.97	<0.00002	0.0576	44.1	0.253	0.0000039	0.000789	0.00022	0.342	2.38	<0.00004	6.23	<0.00001	182
GW-6	GW-6	29-May-2019 15:30	<0.00005	<0.000025	0.096	<0.000025	199	<0.0005	0.000062	0.00092	8.1	<0.000025	0.0554	50.8	0.265	<0.000002	0.00074	0.0002	0.364	2.31	<0.0002	6.03	<0.000025	218
GW-6	GW-6	14-Aug-2019 14:45	<0.00001	<0.000005	0.09	<0.000005	186	0.00026	0.000112	0.00129	7.01	0.0000194	0.0551	48.6	0.248	<0.000002	0.000887	0.000315	0.355	2.44	0.000043	6.01	<0.000005	226
GW-6	GW-6	07-Nov-2019 11:25	<0.00001	<0.00001	0.083	<0.000005	178	0.00019	0.000071	0.00129	6.99	0.000027	0.0464	44.7	0.245	<0.000002	0.000913	0.00044	0.351	2.42	0.000046	5.74	<0.00001	240
GW-6	GW-6	19-Feb-2020 14:30	<0.00001	<0.000005	0.091	<0.000005	170	0.00011	0.000064	0.000249	6.54	0.000016	0.0543	41.2	0.235	<0.0000019	0.000968	0.000185	0.379	2.43	<0.00004	6.34	<0.000005	242
GW-6	GW-6	19-May-2020 14:00	<0.00001	<0.000005	0.103	<0.000005	201	0.0002	0.0000531	0.000311	7.23	0.0000095	0.0524	33.1	0.195	<0.0000019	0.00126	0.000165	0.332	2.03	<0.00004	6.71	<0.000005	206
GW-6	GW-6	30-Jul-2020 15:40	<0.00001	<0.000005	0.08	<0.000005	173	0.00025	0.0000512	0.000848	6.3	0.0000131	0.0423	42.6	0.215	<0.0000019	0.00107	0.000329	0.362	2.29	0.000045	5.14	<0.000005	252
GW-7	GW-7	02-Oct-2016 14:00	<0.000010	<0.0000050	0.047	0.00001	56.1	0.00023	0.000401	0.000234	0.244	0.000032	0.0225	13.1	0.13	<0.0000020	0.00479	0.000976	0.0531	1.58	0.000285	4.91	<0.0000050	13.2
GW-7	GW-7	12-Oct-2016 11:00	<0.00010	<0.0010	0.055	<0.000010	59.9	<0.0010	0.00066	<0.00050	1.07	<0.00020	0.0264	15	0.28	<0.000010	0.0036	<0.0010		1.31	<0.00010	4.96	<0.000020	15.8
GW-7	GW-7	24-Oct-2016 17:30	<0.00010	<0.0010	0.06	<0.000010	61.4	<0.0010	0.0007	<0.00050	1.57	<0.00020	0.0287	16.6	0.758	<0.000010	0.0036	<0.0010		1.08	<0.00010	4.41	<0.000020	13.7
GW-7	GW-7	07-Feb-2017 17:00	<0.0001	<0.001	0.063	<0.00001	63.8	<0.001	0.00049	<0.0005	1.79	<0.0002	0.0312	17.5	0.563	<0.00001	0.0024	0.0011		1.09	<0.0001	4.69	<0.00002	16.4
GW-7	GW-7	11-May-2017 14:30	<0.0001	<0.001	0.059	<0.00001	66	<0.001	0.0004	<0.0005	1.73	<0.0002	0.0312	18.2	0.349	<0.00001	0.0017	<0.001		0.962	<0.0001	4.45	<0.00002	11.8
GW-7	GW-7	18-Aug-2017 14:00	<0.00001	<0.000005	0.066	<0.000005	75.2	<0.0001	0.0013	<0.00005	2.28	<0.000005	0.0365	20.8	0.459	<0.000010	0.0019	0.00124		1.02	<0.00004	4.52	<0.000005	22.5
GW-7	JH41-300	18-Aug-2017 15:00	<0.0001	<0.001	0.065	<0.00001	73.3	<0.001	0.00125	<0.0005	2.15	<0.0002	0.034	20.8	0.457	<0.000010	0.0018	0.0012		1.03	<0.0001	4.28	<0.00002	22.3
GW-7	GW-7	09-Nov-2017 14:30	<0.00001	<0.000005	0.073	<0.000005	152	<0.0001	0.00176	<0.00005	3.37	<0.000005	0.0499	40.5	0.688	<0.000002	0.00152	0.00209	0.0094	1.54	<0.00004	4.89	<0.000005	36.6
GW-7	GW-7	08-Dec-2017 10:00	<0.00001	<0.000005	0.078	<0.000005	160	<0.0001	0.00213	0.000065	3.59	<0.000005	0.0531	43.2	0.697	<0.000002	0.00171	0.00217	0.0108	1.69	<0.00004	4.93	<0.000005	39

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	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	T-Se	T-Si	T-Ag	T-Na
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.000010	0.000005	0.010	0.000005	0.050	0.00010	0.000005	0.000050	0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.0020	0.050	0.00004	0.05	0.000005	0.050
GW-7	GW-7	15-Feb-2018 13:15	<0.00001	<0.000005	0.061	<0.000005	171	<0.0001	0.00185	0.000061	3.32	0.0000092	0.0485	48.2	0.627	<0.000002	0.00129	0.00237	0.0084	1.81	<0.00004	5.15	<0.000005	46.6
GW-7	GW-7	16-Mar-2018 12:30	<0.00001	<0.000005	0.076	<0.000005	184	<0.0001	0.00288	<0.00005	3.73	<0.000005	0.0532	49.3	0.675	<0.000002	0.00163	0.00252	0.0118	1.89	<0.00004	5.02	<0.000005	55.3
GW-7	GW-7	13-Apr-2018 11:00	<0.00001	<0.000005	0.075	<0.000005	185	<0.0001	0.0017	<0.00005	3.96	0.0000081	0.0573	55.2	0.608	<0.000002	0.00148	0.00218	0.0098	2.04	<0.00004	5.29	<0.000005	69
GW-7	JH42-01	13-Apr-2018 12:00	<0.00001	<0.000005	0.074	<0.000005	181	<0.0001	0.00164	<0.00005	4.2	0.0000072	0.0557	54.4	0.61	<0.000002	0.0015	0.00192	0.0116	2.02	0.000049	5.3	<0.000005	68.3
GW-7	FB	13-Apr-2018 12:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-7	GW-7	10-May-2018 18:15	<0.00001	<0.00001	0.081	0.0000149	193	<0.0001	0.00135	<0.0001	3.83	<0.00002	0.0635	51.3	0.627	<0.000002	0.00157	0.00228	0.0074	2.12	<0.00004	5.31	<0.00001	71.9
GW-7	GW-7	02-Jun-2018 10:00	<0.00001	<0.000005	0.084	0.0000168	206	<0.0001	0.0015	0.000079	4.14	<0.000005	0.0636	58.2	0.648	<0.000002	0.00151	0.00221	0.0107	2.01	0.000043	5.24	<0.000005	74.6
GW-7	GW-7	04-Jul-2018 08:55	<0.00001	<0.00001	0.072	0.0000146	219	<0.0001	0.00163	<0.0001	4.52	<0.00002	0.0623	55.3	0.633	<0.000002	0.00146	0.00216	0.007	1.93	<0.00004	4.82	<0.00001	76.5
GW-7	GW-7 DUP	04-Jul-2018 09:10	<0.00001	<0.00001	0.077	0.0000134	210	<0.0001	0.00186	<0.0001	4.54	<0.00002	0.0637	59.7	0.693	<0.000002	0.00142	0.00215	0.0099	2.07	<0.00004	4.75	<0.00001	81.7
GW-7	FB	04-Jul-2018 10:15	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	0.0000064	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0029	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-7	GW-7	02-Aug-2018 10:15	<0.00001	<0.00001	0.085	<0.000005	188	<0.0001	0.00433	<0.0001	4.74	0.00011	0.0569	51.9	0.687	<0.000002	0.00164	0.00218	0.0137	1.96	<0.00004	5.39	<0.00001	67.8
GW-7	GW-7	29-Aug-2018 10:00	<0.00001	<0.000005	0.081	0.0000191	221	<0.0001	0.002	<0.00005	5	0.0000062	0.063	58.5	0.69	<0.000002	0.00165	0.00243	0.0082	2.16	0.000057	5.21	<0.000005	91.5
GW-7	GW-7	16-Oct-2018 09:45	<0.00001	<0.000005	0.078	0.0000086	205	<0.0001	0.00307	<0.00005	4.35	<0.000005	0.0566	56.4	1.1	<0.000002	0.00163	0.00283	0.0114	2.16	0.000084	5.06	<0.000005	81.1
GW-7	GW-OCT	16-Oct-2018 09:50	<0.00001	<0.000005	0.088	0.0000072	203	<0.0001	0.00306	<0.00005	4.43	<0.000005	0.0575	56.3	1.08	<0.000002	0.00167	0.0029	0.0119	2.2	0.000066	5.04	<0.000005	81.2
GW-7	GW-7	08-Nov-2018 10:00	<0.00001	<0.000005	0.088	0.0000166	221	<0.0001	0.0036	0.000054	4.77	<0.000005	0.0649	60.9	0.84	<0.000002	0.00164	0.00284	0.0095	2.39	0.000041	5.36	<0.000005	98.1
GW-7	FB-Q4	08-Nov-2018 10:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0029	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-7	GW-7	14-Dec-2018 10:00	<0.00001	<0.00001	0.082	0.0000126	215	<0.0001	0.00374	<0.0001	4.53	<0.00002	0.0581	59.6	0.97	<0.000002	0.00171	0.00319	0.0115	2.36	<0.00004	4.95	<0.00001	97.6
GW-7	GW-7	15-Feb-2019 12:30	<0.00001	<0.00001	0.086	0.0000094	185	0.00065	0.00732	<0.0001	5.35	0.00002	0.056	50.2	0.743	0.0000036	0.00164	0.00235	0.0152	1.99	<0.00004	5.11	<0.00001	67.6
GW-7	GW-7	15-Mar-2019 10:00	<0.00001	<0.00001	0.101	0.0000235	221	<0.0001	0.00254	<0.0001	3.53	<0.00002	0.0728	60.6	0.996	<0.000002	0.00153	0.00333	0.0117	2.31	0.000041	5.76	<0.00001	101
GW-7	GW-7	16-Apr-2019 11:30	<0.00001	<0.000005	0.078	0.000021	216	<0.0001	0.00253	<0.00005	4.53	0.0000111	0.0604	60.5	0.734	<0.000002	0.00149	0.00305	0.0108	2.26	<0.00004	4.82	<0.000005	100
GW-7	GW-74	16-Apr-2019 12:00	<0.00001	<0.000005	0.073	0.0000163	217	<0.0001	0.00271	<0.00005	4.62	0.0000063	0.0579	59.2	0.73	<0.000002	0.00151	0.00269	0.0083	2.25	<0.00004	4.77	<0.000005	99.8
GW-7	GW-A	16-Apr-2019 12:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	0.000029	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-7	GW-7	30-May-2019 09:00	<0.00005	<0.000025	0.093	0.000041	320	<0.0005	0.00229	<0.00025	7.47	<0.000025	0.0792	90.1	1.05	<0.000002	0.00162	0.00344	<0.01	2.66	<0.0002	5.57	<0.000025	145
GW-7	GW-7	26-Jun-2019 16:20	<0.00002	<0.00002	0.082	0.000059	314	<0.0002	0.00184	<0.0002	6.62	<0.00004	0.0772	86.2	0.993	<0.000002	0.00147	0.00323	0.015	2.81	<0.00008	5.61	<0.00002	141
GW-7	GW-7	24-Jul-2019 08:00	<0.00002	<0.00002	0.083	0.000033	293	0.00042	0.00324	<0.0002	7.85	<0.00004	0.0738	81.9	0.872	<0.00002	0.0017	0.00353	0.012	2.67	0.000171	5.23	<0.00002	138
GW-7	BD-7	24-Jul-2019 08:30	<0.00002	<0.00002	0.083	0.000032	294	0.00038	0.00315	<0.0002	7.86	<0.00004	0.0757	82.6	0.881	<0.00002	0.00172	0.00343	0.013	2.71	0.000113	5.25	<0.00002	140
GW-7	GW-7	14-Aug-2019 16:30	0.000238	0.000025	0.099	0.000263	299	0.00024	0.0037	0.0006	6.22	0.000243	0.0805	86	0.929	<0.000002	0.00159	0.00395	0.0361	2.84	0.000421	5.91	0.000017	146
GW-7	GW-7	17-Sep-2019 14:00	<0.00002	<0.00002	0.084	0.000034	290	<0.0002	0.00221	<0.0002	5.85	<0.00004	0.0726	78.6	0.988	<0.000002	0.00153	0.0035	<0.01	2.76	<0.00008	5.27	<0.00002	143
GW-7	GW-7	07-Nov-2019 13:20	<0.00002	<0.00002	0.085	0.00002	279	<0.0002	0.00683	0.00038	7.4	<0.00004	0.0633	78.6	1.07	<0.000002	0.0016	0.00348	0.014	2.61	<0.00008	5.16	<0.00002	131
GW-7	GW-FD	07-Nov-2019 13:31	<0.00002	<0.00002	0.085	0.00002	282	<0.0002	0.00743	<0.0002	7.5	<0.00004	0.0632	77.9	1.08	<0.000002	0.00158	0.00346	0.012	2.6	<0.00008	5.27	<0.00002	130
GW-7	GW-7	18-Dec-2019 13:40	<0.00002	<0.00001	0.093	0.000047	272	0.00032	0.00273	0.00011	5.02	<0.00001	0.0709	84.2	1.23	<0.000002	0.00151	0.00453	0.011	2.90	<0.00008	5.18	<0.00001	151
GW-7	GW-7	29-Jan-2020 17:40	<0.00002	<0.00001	0.097	0.000025	272	<0.0002	0.00293	<0.0001	5.8	0.000017	0.0769	72.9	1.02	<0.000002	0.00168	0.00334	0.0136	2.84	<0.00008	6.08	<0.00001	138
GW-7	GW-7	19-Feb-2020 16:25	<0.00002	<0.00001	0.096	0.00002	297	<0.0002	0.00484	<0.0001	6.6	<0.00001	0.0686	80.4	1.14	<0.0000019	0.00166	0.00347	0.0106	2.86	<0.00008	5.67	<0.00001	137
GW-7	GW-7	26-Mar-2020 13:15	<0.00001	<0.000005	0.086	0.0000362	285	<0.0001	0.00184	0.00006	6.49	<0.000005	0.0669	78.6	0.972	<0.0000019	0.00161	0.00307	0.0092	2.78	0.00005	5.29	<0.000005	148
GW-7	GW-7	05-Apr-2020 15:55	<0.00001	<0.000005	0.092	0.0000294	286	0.00016	0.0047	<0.00005	6.43	0.0000177	0.0769	80.1	1.23	<0.0000019	0.00144	0.00393	0.0155	2.72	<0.00004	6.05	0.0000104	138
GW-7	GW-7	22-Apr-2020 12:00	<0.00001	<0.000005	0.1	0.000058	261	<0.0001	0.00154	<0.00005	4.4	<0.000005	0.0765	67.4	0.828	<0.0000019	0.00167	0.00294	<0.002	2.75	<0.00004	5.94	<0.000005	145
GW-7	GW-7	12-May-2020 16:00	<0.00001	<0.000005	0.115	0.0000623	307	<0.0001	0.00163	0.000099	4.7	<0.000005	0.0855	66.5	0.865	<0.0000019	0.00209	0.00295	0.0139	3.15	0.000046	5.76	<0.000005	156
GW-7	GW-7	24-Jun-2020 11:25	<0.00002	<0.00001	0.158	0.000049	288	0.00024	0.00252	<0.0001	5.91	0.000181	0.0767	81.3	1.15	<0.0000019	0.00149	0.00391	0.0198	2.84	<0.00008	5.67	<0.00001	153
GW-7	GW-7	18-Jul-2020 16:30	<0.00002	<0.00001	0.098	0.000021	259	<0.0002	0.00381	<0.0001	8.49	<0.00001	0.0665	72.7	0.876	<0.0000019	0.0015	0.00309	0.0207	2.6	<0.00008	5.95	<0.00001	122
GW-8	GW-8	03-Oct-2016 14:30	0.000024	<0.000010	0.036	0.000028	72	0.00055	0.000549	0.0008	0.39	0.000187	0.0169	16.7	0.118	<0.0000020	0.00657	0.00123	0.0261	2.26	0.000644	4.24	0.00001	18.6
GW-8	GW-8	11-Oct-2016 17:00	<0.00010	<0.0010	<0.05	0.00002	83.7	<0.0010	0.00078	0.0005	0.61	0.00024	0.0204	23.2	0.368	0.000051	0.0029	0.0014		1.87	0.00019	4.12	<0.000020	19.7
GW-8	GW-8	25-Oct-2016 11:30	<0.00010	<0.0010	<0.05	0.000026	91	<0.0010	0.00085	<0.00050	0.656	<0.00020	0.0242	21	0.519	<0.000010	0.0031	0.0019		1.43	0.00016	4.04	<0.000020	17
GW-8	GW-A	08-Feb-2017 12:00	<0.0001	<0.001	<0.05	<0.00001	84.9	<0.001	0.00058	<0.0005	0.486	<0.0002	0.0252	22.6	0.439	<0.00001	0.0023	0.0014		1.40	0.00021	4.41	<0.00002	18.6
GW-8	GW-8	08-Feb-2017 12:50	<0.0001	<0.001	<0.05	<0.00001	84.8	<0.001	0.00056	<0.0005	0.477	<0.0002	0.026	22.6	0.437	<0.00001	0.0023	0.0014		1.41	0.00022	4.27	<0.00002	18.8
GW-8	GW-FB	08-Feb-2017 15:00	<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	<0.00001	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050
GW-8	GW-8	12-May-2017 11:00	<0.0001	<0.001	<0.05	0.000049	86.3	<0.001	<0.0002	<0.0005	0.039	<0.0002	0.0349	22.4	0.0364	<0.00001	0.0017	0.0019		1.63	0.00286	3.26	<0.00002	86
GW-8	GW-8	19-Aug-2017 10:30	<0.00001	<0.000005	0.091	0.000016	88.2	0.00015	0.000126	0.000704	0.0899	0.000033	0.0505	20.9	0.0606	<0.000010	0.00164	0.0258		2.55	0.00109	4.21	<0.000005	98.8
GW-8	GW-8	10-Nov-2017 11:30	<0.00001	<0.000005	0.087	0.000059	220	<0.0001	0.00124	0.000172	0.881	0.000007	0.0556	56.6	0.484	<0.000002	0.000878	0.00173	0.0043	3.04	0.000059	5.42	<0.000005	126
GW-8	GW-8	08-Dec-2017 12:30	<0.00001	<0.00001	0.088	0.000047	195	<0.0001	0.00085	0.00021	0.713	<0.00002	0.0632	56.4	0.326	<0.000002	0.00113	0.00144	0.0067	3.14	0.000675	5.09	<0.00001	134
GW-8	GW-8	15-Feb-2018 16:15	<0.00001	<0.000005	0.076	0.0000275	174	<0.0001	0.000804	0.000162	0.798	0.0000097	0.0547	50.3	0.299	<0.000002	0.000861	0.00121	0.0075	2.8	0.000191	5.07	<0.000005	129
GW-8	GW-8	16-Mar-2018 14:45	<0.00001	<0.000005	0.071	0.0000201	163	<0.0001	0.00086	0.000117	0.845	0.0000074	0.0445	43.7	0.351	<0.000002	0.000998	0.00126	0.007	2.62	0.00008	4.87	<0.000005	130
GW-8	GW-8	13-Apr-2018 14:00	<0.00001	<0.000005	0.093	0.0000365	149	<0.0001	0.000676	0.000273	0.415	<0.000005	0.0563	50.5	0.241	<0.000002	0.00111	0.00137	0.0099	3.13	0.000265	4.86	<0.000005	177
GW-8	GW-8	11-May-2018 10:15	<0.00001	<0.00001	0.112	0.0000473	106	<0.0001	0.000145	0.00037	0.0298	<0.00002	0.0658	33.2	0.0161	<0.000002	0.00135	0.001	0.0081	2.65	0.00328	3.5	<0.00001	187
GW-8	GW-8	02-Jun-2018 12:00	<0.00001	<0.000005	0.102	0.0000803	124	<0.0001	0.000413	0.000676	0.211	0.0000459	0.0474	33.2	0.242	<0.000002	0.001	0.000926	0.0092	2.93	0.000291	3.83	<0.000005	197
GW-8	GW-8	04-Jul-2018 13:30	<0.00001	<0.000005	0.123	0.0000169	78.6	<0.0001	0.000116	0.000252	0.0882	<0.000005	0.0635	21.8	0.0628	<0.000002	0.00139	0.000501	0.0049	2.66	0.00134	3.79	<0.000005	145
GW-8	GW-8	02-Aug-2018 13:15	<0.00001	<0.00001	0.123	0.0000231	110	<0.0001	0.000114	0.0003	0.0364	<0.00002	0.0699	31.1	0.0714	<0.000002	0.0012	0.00063	0.008	2.97	0.00126	4.38	<0.00001	155

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	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	T-Se	T-Si	T-Ag	T-Na
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.000010	0.000005	0.010	0.000005	0.050	0.00010	0.000005	0.000050	0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.0020	0.050	0.00004	0.05	0.000005	0.050
GW-8	GW-8	29-Aug-2018 12:30	<0.00001	<0.000005	0.125	0.0000398	140	<0.0001	0.000218	0.000281	0.0589	0.0000112	0.0685	37.9	0.195	<0.000002	0.00124	0.000908	0.0076	3.32	0.00102	4.8	<0.000005	192
GW-8	GW-8	16-Oct-2018 12:00	<0.00001	<0.000005	0.115	0.0000169	133	0.00015	0.000124	0.000312	0.16	0.0000067	0.0885	41	0.0562	<0.000002	0.00129	0.000645	0.0084	3.54	0.00261	3.87	<0.000005	179
GW-8	FB	16-Oct-2018 12:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0031	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-8	GW-8	08-Nov-2018 13:30	<0.00001	<0.00001	0.111	0.0000315	146	<0.0001	0.000082	0.00031	0.0237	<0.00002	0.0786	43.2	0.0616	<0.000002	0.00127	0.00077	0.0095	3.47	0.000966	4.46	<0.00001	205
GW-8	GW-8	14-Dec-2018 12:30	<0.00001	<0.00001	0.089	0.0000132	118	<0.0001	0.000038	0.00026	0.0082	<0.00002	0.0688	36.7	0.00483	<0.000002	0.00137	0.00045	0.005	3.12	0.00177	3.5	<0.00001	153
GW-8	GW-8	15-Feb-2019 14:30	<0.00001	<0.00001	0.092	0.0000198	137	<0.0001	0.000162	0.00021	0.0494	<0.00002	0.0721	41.2	0.109	<0.000002	0.00102	0.0006	0.0077	2.95	0.000807	3.71	<0.00001	176
GW-8	GW-8	15-Mar-2019 12:00	<0.00001	<0.00001	0.109	0.0000208	142	0.0001	0.00005	0.00021	0.0162	<0.00002	0.0842	45.9	0.0193	<0.000002	0.00123	0.00052	0.0059	3.16	0.000664	4.1	<0.00001	183
GW-8	GW-8	16-Apr-2019 16:00	<0.00001	<0.000005	0.101	0.0000152	106	0.00013	0.0000346	0.000264	0.0091	<0.000005	0.0744	39.1	0.0143	<0.000002	0.00142	0.000539	<0.002	2.65	0.00127	2.85	<0.000005	160
GW-8	GW-8	30-May-2019 12:10	<0.00001	<0.000005	0.148	0.000024	84.8	0.00091	0.0000484	0.000341	0.0168	0.0000154	0.079	28	0.0135	<0.000002	0.00265	0.000355	0.0054	2.81	0.00275	2.46	<0.000005	211
GW-8	GW-8	26-Jun-2019 12:25	<0.00001	<0.00001	0.19	0.000013	79.9	0.00038	0.00006	0.00035	0.0119	<0.00002	0.0823	24.6	0.0405	<0.000002	0.00302	0.00035	0.0089	3	0.00256	3.06	<0.00001	227
GW-8	GW-8	24-Jul-2019 10:00	<0.00001	<0.00001	0.169	0.0000119	108	0.0004	0.000119	0.00026	0.0242	<0.00002	0.0939	33.5	0.0207	<0.000002	0.00306	0.00044	0.0087	3.68	0.00417	2.69	<0.00001	226
GW-8	FB	24-Jul-2019 10:15	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	0.0013	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	0.000053	<0.00002	0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-8	GW-8	15-Aug-2019 09:15	<0.00001	<0.000005	0.199	0.0000089	83.2	0.0002	0.0000789	0.0003	0.0092	<0.000005	0.0965	26.5	0.00501	<0.000002	0.00442	0.00032	0.0079	3.53	0.00238	3.16	<0.000005	208
GW-8	GW-8	17-Sep-2019 14:00	<0.00001	<0.000005	0.161	0.0000113	118	0.00011	0.0000613	0.000214	0.0038	<0.000005	0.0896	35.3	0.00193	<0.000002	0.00306	0.000314	0.0041	3.92	0.00348	3.02	<0.000005	232
GW-8	GW-8	07-Nov-2019 15:10	<0.00001	<0.000005	0.135	0.0000102	84.7	0.00035	0.0000287	0.000244	0.0237	<0.000005	0.0735	30.4	0.00569	<0.000002	0.00402	0.000226	0.006	3.59	0.00445	2.67	<0.000005	233
GW-8	GW-8	18-Dec-2019 16:30	<0.00001	<0.000005	0.113	0.0000222	100	0.00106	0.0000432	0.000231	0.0024	0.0000056	0.0749	46.2	0.000682	<0.000002	0.00449	0.000322	0.0067	3.62	0.004	2.48	<0.000005	250
GW-8	GW-8	29-Jan-2020 15:20	<0.00001	<0.000005	0.121	0.000017	105	0.00033	0.0000416	0.000221	0.0081	<0.000005	0.0815	42.6	0.00564	<0.000002	0.00378	0.000276	0.0062	3.46	0.00331	2.77	<0.000005	235
GW-8	GW-8-DUP	29-Jan-2020 15:30	<0.00001	<0.000005	0.117	0.000018	111	0.00038	0.0000394	0.000234	0.0084	0.0000203	0.0788	41.6	0.00467	<0.000002	0.00373	0.000265	0.0056	3.36	0.00333	2.87	<0.000005	233
GW-8	Field Blank	29-Jan-2020 15:40	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	0.0011	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0022	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-8	GW-8	19-Feb-2020 00:20	<0.00001	<0.000005	0.121	0.0000199	114	<0.0001	0.0000283	0.000221	0.0065	0.000007	0.075	39.6	0.00601	<0.0000019	0.00289	0.000299	0.0082	3.46	0.00169	2.91	<0.000005	244
GW-8	FIELD DUPLICATE	19-Feb-2020 12:35	<0.00001	<0.000005	0.119	0.0000184	114	<0.0001	0.0000298	0.000223	0.0041	0.0000075	0.0714	40	0.00565	<0.0000019	0.00282	0.000328	0.0073	3.55	0.00149	2.77	<0.000005	251
GW-8	FIELD BLANK	19-Feb-2020 12:50	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	<0.002	<0.050	<0.00004	0.063	<0.000005	<0.050
GW-8	GW-8	27-Mar-2020 17:20	<0.00001	<0.000005	0.116	0.000016	98.1	0.00029	0.0000345	0.000227	0.0016	0.0000101	0.0643	37.5	0.00858	<0.0000019	0.00321	0.000269	0.0061	3.2	0.00348	2.49	<0.000005	241
GW-8	GW-8	05-Apr-2020 13:45	<0.00001	<0.000005	0.123	0.0000217	97.3	0.00027	0.0000293	0.000173	0.0038	0.0000093	0.0764	37.1	0.00612	<0.0000019	0.00283	0.000209	0.0122	3.07	0.00243	2.82	<0.000005	230
GW-8	Duplicate	05-Apr-2020 14:05	<0.00001	<0.000005	0.124	0.0000153	91.5	0.00031	0.000019	0.000159	0.003	0.0000092	0.0762	36.9	0.00624	<0.0000019	0.00287	0.000236	0.0151	3.12	0.00207	2.58	0.0000051	231
GW-8	Field Blank	05-Apr-2020 14:25	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	0.0000052	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	0.000052	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
GW-8	GW-8	12-May-2020 14:40	<0.00001	<0.000005	0.175	0.0000123	95.3	0.00171	0.0000377	0.000246	0.0043	<0.000005	0.107	41.6	0.000725	<0.0000019	0.00572	0.000319	0.0099	4.02	0.00548	3.08	<0.000005	275
GW-8	GW-8	24-Jun-2020 15:30	0.000029	<0.000005	0.343	0.0000117	60.5	0.00138	0.0000637	0.000398	0.0244	0.000431	0.0777	25.4	0.00165	<0.0000019	0.00568	0.000437	0.018	2.84	0.00317	2.77	0.0000078	179
GW-8	GW-8	29-Jul-2020 15:40	<0.00001	<0.000005	0.194	0.0000074	48.7	0.0004	0.0000348	0.000264	0.009	<0.000005	0.0673	21.8	0.00125	<0.0000019	0.00571	0.000205	0.0084	2.82	0.00289	2.76	<0.000005	97.7
	TRIP BLANK	30-Nov-2016 10:20	<0.00010	<0.0010	<0.05	<0.000010	<0.050	<0.001	<0.00050	0.00399	<0.01	<0.00020	<0.0050	<0.050	<0.0010	<0.000010	<0.0010	<0.0010		<0.050	<0.00010	<0.1	<0.000020	<0.050
	TRIP BLANK	09-Feb-2017 00:00	<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	<0.00001	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050
	TRIP BLANK	11-May-2017 08:30	<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	<0.00001	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050
	TRIP BLANK	16-Aug-2017 00:00	<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	<0.00001	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050
	TRIP BLANK	07-Nov-2017 08:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	09-Dec-2017 09:45	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	13-Feb-2018 07:40	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	0.0000051	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	16-Mar-2018 00:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	14-Apr-2018 11:01	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	09-May-2018 07:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0026	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	04-Jul-2018 10:15	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	03-Aug-2018 09:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000348	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	0.000042	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	17-Oct-2018 08:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	08-Nov-2018 08:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	14-Feb-2019 09:50	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	16-Apr-2019 16:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	0.0000054	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	28-May-2019 00:00	<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	<0.000002	<0.001	<0.001		<0.050	<0.0001	<0.1	<0.00002	<0.050
	TRIP BLANK	24-Jul-2019 13:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	14-Aug-2019 07:50	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	05-Nov-2019 00:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	TRIP BLANK	20-Feb-2020 00:00	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050
	Trip Blank	20-May-2020 13:30	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	0.0026	<0.050	<0.00004	<0.05	<0.000005	<0.050

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	Dissolved Metals	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001		0.0005	0.00002	0.00002	0.00002	0.00001	0.000005	0.01	0.000005	0.050	0.0001	0.000005	0.00005
GW-10B	GW-10B	26-Nov-2016 14:00	0.203	8.3	<0.000050	<0.0050	<0.0050	0.0127	<0.0050	0.0118	<0.00050		<0.0030	0.00057	0.00083	0.127	<0.00010	<0.0010	<0.05	0.000023	68.1	<0.0010	<0.00050	0.00023
GW-10B	GW-10B	08-Dec-2016 11:30	0.215	8.5	<0.000050	<0.0050	<0.0050	0.011	<0.0050	<0.0050	<0.00050		0.003	<0.00050	0.00067	0.11	<0.00010	<0.0010	<0.05	0.000026	69.6	0.0012	0.00063	0.00127
GW-10B	GW-10B	15-Dec-2016 10:00	0.18	7	<0.000050	<0.0050	<0.0050	0.0088	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	0.0006	0.115	<0.00010	<0.0010	<0.05	0.000033	68.3	<0.0010	0.00083	0.00069
GW-10B	GW-10D	15-Dec-2016 11:00	0.199	4.7	<0.000050	<0.0050	<0.0050	0.00974	<0.0050	0.0063	<0.00050		<0.0030	<0.00050	0.0006	0.111	<0.00010	<0.0010	<0.05	0.000032	67.5	<0.0010	0.00083	0.00064
GW-10B	GW-10B	06-Feb-2017 12:00	0.215	8.6	0.000034	<0.005	<0.005	0.00999	<0.005	<0.005	<0.0005		<0.003	<0.0005	0.00067	0.0967	<0.0001	<0.001	<0.05	0.00002	66.0	<0.001	0.00081	0.00042
GW-10B	GW-10B	10-May-2017 11:00	0.188	7.9	0.000035	<0.005	<0.005	0.00753	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00061	0.0956	<0.0001	<0.001	<0.05	0.000017	68.3	<0.001	0.00042	0.00032
GW-10B	FB-R2	10-May-2017 15:30	<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	<0.0002	<0.0002
GW-10B	GW-10B	17-Aug-2017 14:00	0.191	6.9	0.000022	<0.005	<0.005	0.00867	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00065	0.0913	<0.0001	<0.001	<0.05	0.000015	65	<0.001	0.00039	<0.0002
GW-10B	GW-10B	08-Nov-2017 12:00	0.2	7.6	0.0000191	<0.0002	<0.0005	0.00757	0.00021	0.00072	<0.0001		0.00146	0.000091	0.000609	0.0958	<0.00001	<0.000005	0.015	0.000009	69.5	<0.0001	0.000234	0.000098
GW-10B	GW-10B	14-Feb-2018 15:00	0.206	8.2	0.0000077	<0.0002	0.00052	0.00799	<0.0002	0.00065	<0.0001		0.0024	0.00009	0.000822	0.107	<0.00001	<0.000005	0.014	<0.000005	66.2	<0.0001	0.000316	0.000092
GW-10B	GW-10B	10-May-2018 09:30	0.207	6.4	0.0000241	<0.0002	<0.002	0.00641	<0.0002	<0.001	<0.0001		0.00183	0.00013	0.000219	0.123	<0.00001	<0.000005	0.016	0.0000456	71.9	<0.0001	0.000394	0.000242
GW-10B	GW-10B	01-Aug-2018 10:30	0.197	7.8	0.0000118	<0.0002	<0.0005	0.0083	<0.0002	0.0005	<0.0001		0.0012	0.000037	0.00043	0.0893	<0.00001	<0.000005	0.013	0.0000144	68.5	<0.0001	0.000348	0.000118
GW-10B	GW-10B	06-Nov-2018 16:30	0.227	6.4	0.0000132	<0.0002	<0.002	0.00733	<0.0002	<0.001	<0.0001		0.00123	0.000037	0.000356	0.1	<0.00001	<0.000005	0.014	0.0000134	74.1	<0.0001	0.000259	0.000105
GW-10B	GW-10B	13-Feb-2019 10:30	0.215	7.3	0.0000058	<0.0002	<0.002	0.00896	<0.0002	<0.001	<0.0001		0.00051	0.000026	0.000374	0.0798	<0.00001	<0.000005	0.014	0.0000059	67.7	<0.0001	0.000265	0.000083
GW-10B	GW-10B	28-May-2019 10:15	0.203	7.7	0.00001	<0.005	<0.005	0.00845	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00035	0.0843	<0.0001	<0.001	<0.05	<0.00001	71.4	<0.001	0.0002	<0.0005
GW-10B	GW-10B	13-Aug-2019 09:30	0.217	6.2	0.0000081	<0.0002	<0.0005	0.0086	<0.0002	0.00033	<0.0001		0.00057	0.00003	0.000348	0.0808	<0.00001	<0.000005	0.011	<0.000005	72.7	<0.0001	0.000202	0.000069
GW-10B	FB-Q3	13-Aug-2019 10:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		0.00064	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-10B	GW-10B	05-Nov-2019 14:14	0.221	7.7	0.0000076	<0.0002	<0.0005	0.00921	<0.0002	0.00035	<0.0001		0.00054	0.00003	0.000305	0.076	<0.00001	<0.000005	0.015	<0.000005	74.4	<0.0001	0.000203	0.000072
GW-10B	GW FB	05-Nov-2019 14:20	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.0397	<0.0001		<0.0005	<0.00002	<0.00002	0.000028	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-10B	GW-10B	23-Feb-2020 16:40	0.259	9.2	0.0000077	<0.0002	<0.0005	0.00999	<0.0002	0.00061	<0.0001		<0.0005	0.00004	0.000323	0.0747	<0.00001	<0.000005	0.016	0.0000061	71.3	0.00011	0.000207	0.000091
GW-10B	GW-10B	20-May-2020 13:30	0.233	7.9	0.0000047	0.00034	<0.0005	0.00912	<0.0002	0.00018	<0.0001		0.00179	0.000027	0.000256	0.0781	<0.00001	<0.000005	0.019	<0.000005	74.4	<0.0001	0.000188	0.000084
GW-10B	Field Blank	20-May-2020 13:50	<0.00005	<3.0	0.0000026	0.00029	<0.0005	<0.000002	<0.0002	0.00036	<0.0001		<0.0005	<0.00002	<0.00002	0.000054	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000074
GW-10B	GW-10B	30-Jul-2020 13:30	0.217	6.7	0.0000104	<0.0002	<0.0005	0.00842	<0.0002	0.00081	<0.0001		<0.0005	0.000047	0.000182	0.115	<0.00001	<0.000005	0.016	0.0000227	82.5	0.00018	0.000148	0.000163
GW-6	GW-6	03-Oct-2016 10:30	0.569	213	0.000054	<0.00020	0.0655	0.00157	0.00961	0.0407	0.0121		0.111	0.000151	0.00129	0.117	<0.000010	0.000006	0.138	0.000015	210	0.00027	0.00173	0.000707
GW-6	GW-6	12-Oct-2016 15:00	0.584	247	0.000104	<0.0050	0.0856	0.00125	0.0141	0.0767	0.00093		0.0084	<0.00050	0.00097	0.0956	<0.00010	<0.0010	0.144	<0.000010	218	<0.0010	<0.00050	<0.00020
GW-6	GW-6	25-Oct-2016 14:30	0.566	233	0.000104	<0.0050	0.0815	0.00143	0.0156	0.0849	0.00076		0.0054	<0.00050	0.00119	0.0818	<0.00010	<0.0010	0.148	<0.000010	246	<0.0010	<0.00050	<0.00020
GW-6	GW-6	07-Feb-2017 11:45	0.566	238	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0005		0.004	<0.0005	0.00117	0.0631	<0.0001	<0.001	0.133	<0.00001	240	<0.001	<0.0005	<0.0002
GW-6	GW-6	11-May-2017 11:00	0.527	195	<0.00001	<0.005	<0.005	0.00034	<0.005	<0.005	0.00012		<0.003	<0.0005	0.00078	0.037	<0.0001	<0.001	0.117	<0.00001	252	<0.001	<0.0002	<0.0002
GW-6	GW-6	18-Aug-2017 11:00	0.683	228	<0.00001	<0.001	<0.0025	0.000422	<0.001	0.00091	<0.0005		0.0053	<0.0001	0.00063	0.0436	<0.00005	<0.000025	0.114	<0.000025	313	<0.0005	0.000089	<0.00025
GW-6	GW-6	09-Nov-2017 11:30	0.7	222	<0.000002	<0.0002	<0.0005	0.000372	<0.0002	0.00045	<0.0001		0.00191	<0.00002	0.000593	0.0368	<0.00001	<0.000005	0.087	<0.000005	301	<0.0001	0.00006	<0.00005
GW-6	GW-6	07-Dec-2017 15:00	0.658	219	<0.00001	<0.001	<0.0025	0.000364	<0.001	<0.0005	<0.0005		0.00268	0.000026	0.000582	0.0431	<0.00001	<0.000005	0.119	<0.000005	301	<0.0001	0.0000746	<0.00005
GW-6	JH41-600	07-Dec-2017 15:00	0.651	214	<0.00001	<0.001	<0.0025	0.000348	<0.001	<0.0005	<0.0005		0.002	0.000021	0.000607	0.0425	<0.00001	<0.000005	0.116	<0.000005	299	<0.0001	0.0000755	<0.00005
GW-6	FB	07-Dec-2017 15:30	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00032	<0.0001		0.00086	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-6	GW-6	15-Feb-2018 11:00	0.675	200	<0.000002	<0.0002	0.00074	0.000329	<0.0002	0.00045	<0.0001		0.00263	0.000028	0.000669	0.043	<0.00001	<0.000005	0.117	<0.000005	271	<0.0001	0.0000845	<0.00005
GW-6	GW-6	10-May-2018 16:15	0.538	148	<0.00001	<0.001	<0.01	0.000301	<0.001	<0.005	<0.0005		0.0026	0.000029	0.000483	0.0384	<0.00001	<0.000005	0.105	<0.000005	239	<0.0001	0.000052	<0.00005
GW-6	GW-6	01-Aug-2018 16:00	0.597	161	0.0000032	<0.0002	<0.0005	0.000352	<0.0002	<0.0001	0.00012		0.00382	0.000027	0.000431	0.0433	<0.00001	<0.000005	0.096	<0.000005	208	<0.0001	0.0000389	<0.00005
GW-6	GW-81B	01-Aug-2018 16:45	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00065	<0.0001		0.00124	<0.00002	<0.00002	0.000054	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-6	GW-6	08-Nov-2018 08:30	0.498	172	<0.000004	<0.0004	<0.004	0.000293	<0.0004	<0.002	<0.0002		0.00243	<0.00002	0.000557	0.0347	<0.00001	<0.000005	0.098	<0.000005	171	<0.0001	0.0000517	<0.00005
GW-6	GW-6	15-Feb-2019 10:30	0.483	173	<0.000002	<0.0002	0.00051	0.000269	<0.0002	0.00015	0.00012		0.00161	<0.00002	0.000703	0.0357	<0.00001	<0.000005	0.093	<0.000005	168	<0.0001	0.0000883	<0.00005
GW-6	BD-Q1	15-Feb-2019 11:00	0.498	170	<0.000002	<0.0002	<0.002	0.000276	0.00025	<0.001	0.00014		0.00202	<0.00002	0.000679	0.0356	<0.00001	<0.000005	0.094	<0.000005	163	0.00011	0.0000885	<0.00005
GW-6	GW-6	29-May-2019 15:30	0.459	209	<0.00001	<0.001	<0.0025	0.000289	<0.001	<0.0005	<0.0005		0.0034	0.000046	0.000481	0.0361	<0.00001	<0.000005	0.088	<0.000005	188	<0.0001	0.0000482	0.000077
GW-6	GW-6	14-Aug-2019 14:45	0.508	213	<0.000002	<0.0002	0.00142	0.000311	<0.0002	0.00016	0.00014		0.00177	0.00002	0.000672	0.0376	<0.00001	<0.000005	0.09	<0.000005	185	0.00014	0.0000927	<0.00005
GW-6	GW-6	07-Nov-2019 11:25	0.485	203	<0.000002	<0.0002	<0.002	0.000294	<0.0002	<0.001	0.00012		<0.0005	<0.00002	0.000175	0.0294	<0.00001	<0.000005	0.09	<0.000005	180	<0.0001	0.0000454	<0.00005
GW-6	GW-6	19-Feb-2020 14:30	0.462	204	<0.000002	<0.0002	<0.0005	0.000249	<0.0002	0.0022	0.00012		0.00142	<0.00002	0.000805	0.0368	<0.00001	<0.000005	0.089	<0.000005	171	<0.0001	0.0000698	<0.00005
GW-6	GW-6	19-May-2020 14:00	0.414	184	<0.000002	<0.0002	<0.0005	0.000314	<0.0002	<0.0001	0.00022		0.00217	0.000024	0.000509	0.0441	<0.00001	<0.000005	0.103	<0.000005	204	<0.0001	0.0000504	<0.00005
GW-6	GW-6	30-Jul-2020 15:40	0.463	186	<0.000002	<0.0002	0.00105	0.000293	<0.0002	0.00012	0.00013		0.00136	<0.00002	0.000628	0.036	<0.00001	<0.000005	0.087	<0.000005	181	0.00034	0.0000471	<0.00005
GW-7	GW-7	02-Oct-2016 14:00	0.195	14	0.000003	<0.00020	0.00115	0.000351	0.00094	0.00438	<0.00010		0.00812	0.000154	0.001	0.0401	<0.000010	0.000005	0.044	0.000006	55.6	<0.00010	0.000385	0.000095
GW-7	GW-7	12-Oct-2016 11:00	0.208	14.8	<0.000050	<0.0050	<0.0050	0.00017	<0.0050	0.0078	<0.00050		0.0077	<0.00050	0.00075	0.0445	<0.00010	<0.0010	<0.05	<0.000010	57.7	<0.0010	0.00066	<0.00020
GW-7	GW-7	24-Oct-2016 17:30	0.206	11.7	<0.000050	<0.0050	<0.0050	0.00016	<0.0050	0.0058	<0.00050		0.0059	<0.00050	0.00067	0.0473	<0.00010	<0.0010	0.059	<0.000010	61.1	<0.0010	0.00072	<0.00020
GW-7	GW-7	07-Feb-2017 17:00	0.226	13.8	<0.00001	<0.005	<0.005	0.00017	<0.005	<0.005	<0.0005		0.0031	<0.0005	0.0009	0.0517	<0.0001	<0.001	0.055	<0.00001	61.8	<0.001	<0.0005	<0.0002
GW-7	GW-7	11-May-2017 14:30	0.211	15.4	<0.00001	<0.005	<0.005	0.00017	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00091	0.0467	<0.0001	<0.001	0.057	<0.00001	68.6	<0.001	0.00046	<0.0002
GW-7	GW-7	18-Aug-2017 14:00	0.256	27	0.000003	<0.0002	<0.0005	0.000259	<0.0002	0.00109	<0.0001		0.00255	<0.00002	0.00109	0.0549	<0.00001	<0.000005	0.069	<0.000005	76.4	<0.0001	0.00129	<0.00005
GW-7	JH41-300	18-Aug-2017 15:00	0.243	27	<0.00001	<0.005	<0.005	0.00024	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00113	0.0552	<0.0001	<0.001	0.066	<0.00001	74.3	<0.001	0.00133	<0.0002
GW-7	GW-7	09-Nov-2017 14:30	0.525	106	0.000009	<0.0002	<0.0005	0.000764	<0.0002	0.00118	<0.0001		0.00194	<0.00002	0.00124	0.0948	<0.00001	<0.000005	0.067	<0.000005	159	<0.0001	0.00186	<0.00005
GW-7	GW-7	08-Dec-2017 10:00	0.569	119	0.0000098	<0.0002	<0.0005	0.000875	<0.0002	0.00102	<0.0001		0.00211	<0.00002	0.00142	0.0986	<0.00001	<0.000005	0.079	<0.000005	164	<0.0001	0.00203	<0.00005

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	Dissolved Metals	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001		0.0005	0.00002	0.00002	0.00002	0.00001	0.000005	0.01	0.000005	0.050	0.0001	0.000005	0.00005
GW-7	GW-7	15-Feb-2018 13:15	0.574	121	0.0000099	<0.0002	<0.0005	0.000921	<0.0002	0.00103	<0.0001		0.00238	<0.00002	0.00124	0.0882	<0.00001	<0.000005	0.063	<0.000005	166	<0.0001	0.00199	<0.00005
GW-7	GW-7	16-Mar-2018 12:30	0.728	139	0.00001	<0.0002	<0.0005	0.00106	<0.0002	0.00147	<0.0001		0.00132	<0.00002	0.00157	0.0895	<0.00001	<0.000005	0.087	<0.000005	188	<0.0001	0.00277	0.000055
GW-7	GW-7	13-Apr-2018 11:00	0.612	157	0.0000094	<0.0002	<0.0005	0.00108	<0.0002	0.00139	<0.0001		0.00273	<0.00002	0.00146	0.0834	<0.00001	<0.000005	0.078	<0.000005	188	<0.0001	0.00155	0.00008
GW-7	JH42-01	13-Apr-2018 12:00	0.61	156	0.0000101	<0.0002	<0.0005	0.00105	<0.0002	0.00119	<0.0001		0.00233	<0.00002	0.00137	0.0822	<0.00001	<0.000005	0.076	<0.000005	184	<0.0001	0.0015	0.000071
GW-7	FB	13-Apr-2018 12:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00021	<0.0001		0.00066	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-7	GW-7	10-May-2018 18:15	0.696	155	0.0000142	<0.0002	<0.002	0.00129	<0.0002	0.0016	<0.0001		0.00182	0.000022	0.00143	0.0907	<0.00001	<0.000005	0.084	0.0000132	203	<0.0001	0.00131	0.000067
GW-7	GW-7	02-Jun-2018 10:00	0.702	170	0.0000094	<0.0002	<0.0005	0.00132	<0.0002	0.00127	<0.0001		0.00186	0.000023	0.00139	0.0904	<0.00001	<0.000005	0.073	0.0000141	206	<0.0001	0.00142	0.00006
GW-7	GW-7	04-Jul-2018 08:55	0.634	165	0.000012	<0.0002	<0.002	0.00142	<0.0002	0.0013	<0.0001		0.00158	0.000023	0.00155	0.0802	<0.00001	<0.000005	0.088	0.0000143	212	<0.0001	0.00168	0.000093
GW-7	GW-7 DUP	04-Jul-2018 09:10	0.68	179	0.0000118	<0.0002	<0.002	0.00143	<0.0002	0.0014	<0.0001		0.00173	0.000026	0.00148	0.0806	<0.00001	<0.000005	0.09	0.0000145	209	<0.0001	0.00169	0.000113
GW-7	FB	04-Jul-2018 10:15	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00034	<0.0001		0.00094	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000093
GW-7	GW-7	02-Aug-2018 10:15	0.648	158	0.0000101	<0.0002	<0.002	0.000978	<0.0002	0.002	<0.0001		0.00063	<0.00002	0.00157	0.0551	<0.00001	<0.000005	0.076	<0.000005	178	<0.0001	0.00405	<0.00005
GW-7	GW-7	29-Aug-2018 10:00	0.699	187	0.0000082	<0.0002	<0.0005	0.00141	<0.0002	0.00209	<0.0001		0.0237	0.000156	0.0019	0.0725	<0.00001	<0.000005	0.09	0.0000145	218	0.0001	0.00213	0.0001
GW-7	GW-7	16-Oct-2018 09:45	0.635	182	0.0000149	<0.0002	<0.0005	0.0011	<0.0002	0.00203	<0.0001		0.00147	<0.00002	0.00158	0.0607	<0.00001	<0.000005	0.081	0.0000081	204	<0.0001	0.00315	0.000071
GW-7	GW-OCT	16-Oct-2018 09:50	0.645	182	0.0000147	<0.0002	<0.0005	0.00111	<0.0002	0.0022	<0.0001		0.00256	<0.00002	0.00162	0.0608	<0.00001	<0.000005	0.084	0.0000077	202	<0.0001	0.00312	0.000093
GW-7	GW-7	08-Nov-2018 10:00	0.716	206	0.0000142	<0.0002	<0.0005	0.00135	<0.0002	0.0021	<0.0001		0.00141	<0.00002	0.00188	0.0664	<0.00001	<0.000005	0.086	0.0000118	218	<0.0001	0.00354	<0.00005
GW-7	FB-Q4	08-Nov-2018 10:30	0.000096	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00047	<0.0001		0.00057	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-7	GW-7	14-Dec-2018 10:00	0.714	196	0.0000135	<0.0002	<0.002	0.00143	<0.0002	0.0033	<0.0001		0.00351	<0.00002	0.00174	0.0573	<0.00001	<0.000005	0.078	0.0000108	213	<0.0001	0.00372	<0.00005
GW-7	GW-7	15-Feb-2019 12:30	0.637	167	0.0000078	<0.0002	<0.002	0.00102	<0.0002	0.0028	<0.0001		0.0012	<0.00002	0.00195	0.0457	<0.00001	<0.000005	0.077	0.0000072	189	<0.0001	0.00761	<0.00005
GW-7	GW-7	15-Mar-2019 10:00	0.757	215	0.0000148	<0.0002	<0.002	0.00157	<0.0002	0.0017	<0.0001		0.00147	0.000026	0.00135	0.0575	<0.00001	<0.000005	0.093	0.0000236	224	<0.0001	0.0027	<0.00005
GW-7	GW-7	16-Apr-2019 11:30	0.646	215	0.0000101	<0.0002	<0.0005	0.00152	<0.0002	0.00159	0.00012		0.00111	<0.00002	0.00161	0.0517	<0.00001	<0.000005	0.079	0.0000238	215	<0.0001	0.00257	<0.00005
GW-7	GW-74	16-Apr-2019 12:00	0.643	215	0.000012	<0.0002	<0.0005	0.00152	<0.0002	0.00203	0.0001		0.00146	<0.00002	0.00153	0.0518	<0.00001	<0.000005	0.075	0.0000211	217	<0.0001	0.00257	0.000051
GW-7	GW-A	16-Apr-2019 12:30	0.000121	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-7	GW-7	30-May-2019 09:00	0.921	309	0.000013	<0.001	<0.0025	0.00222	<0.001	0.00202	<0.0005		<0.0025	<0.0001	0.00174	0.0505	<0.00005	<0.000025	0.088	0.000034	302	<0.0005	0.00216	<0.00005
GW-7	GW-7	26-Jun-2019 16:20	0.949	319	0.0000137	<0.0004	<0.004	0.00235	<0.0004	0.002	<0.0002		0.0034	<0.00004	0.00211	0.0499	<0.00002	<0.00001	0.085	0.000054	309	<0.0002	0.00178	<0.0001
GW-7	GW-7	24-Jul-2019 08:00	0.836	295	0.0000138	<0.0004	<0.004	0.00214	<0.0004	0.0024	<0.0002		0.0039	<0.00004	0.00283	0.0468	<0.00002	<0.00001	0.085	0.000029	297	0.00041	0.00334	<0.0001
GW-7	BD-7	24-Jul-2019 08:30	0.84	300	0.0000135	<0.0004	<0.004	0.00214	<0.0004	0.0025	<0.0002		0.0031	0.000061	0.00279	0.0458	<0.00002	<0.00001	0.085	0.000026	297	0.00063	0.00341	<0.0001
GW-7	GW-7	14-Aug-2019 16:30	0.856	316	0.0000393	<0.0004	<0.001	0.00254	<0.0004	0.00442	<0.0002		0.0042	<0.00004	0.00182	0.0419	<0.00002	<0.00001	0.092	0.000031	291	<0.0002	0.00346	<0.0001
GW-7	GW-7	17-Sep-2019 14:00	0.829	289	0.0000183	<0.0004	<0.004	0.0023	<0.0004	<0.002	<0.0002		0.0021	<0.00004	0.00157	0.0448	<0.00002	<0.00001	0.101	0.000039	288	<0.0002	0.00206	<0.0001
GW-7	GW-7	07-Nov-2019 13:20	0.809	274	0.0000128	<0.0004	<0.004	0.00198	<0.0004	0.0037	<0.0002		0.0025	<0.00004	0.00218	0.0386	<0.00002	<0.00001	0.091	0.00002	284	<0.0002	0.00659	<0.0001
GW-7	GW-FD	07-Nov-2019 13:31	0.818	273	0.0000128	<0.0004	<0.004	0.00192	<0.0004	0.0039	<0.0002		0.0024	<0.00004	0.00217	0.039	<0.00002	<0.00001	0.092	0.000022	289	<0.0002	0.00717	<0.0001
GW-7	GW-7	18-Dec-2019 13:40	0.778	278	0.0000192	<0.0004	<0.001	0.00221	<0.0004	0.00309	<0.0002		0.0039	<0.00004	0.00156	0.044	<0.00002	<0.00001	0.092	0.000043	278	<0.0002	0.00266	0.00013
GW-7	GW-7	29-Jan-2020 17:40	0.806	261	0.000015	<0.0004	<0.001	0.002	<0.0004	0.00246	<0.0002		0.0031	<0.00004	0.00183	0.0386	<0.00002	<0.00001	0.085	0.000025	257	<0.0002	0.00281	<0.0001
GW-7	GW-7	19-Feb-2020 16:25	0.853	289	0.0000138	<0.0004	<0.001	0.00194	<0.0004	0.00527	<0.0002		0.0024	<0.00004	0.00182	0.0358	<0.00002	<0.00001	0.087	0.000023	266	<0.0002	0.00449	<0.0001
GW-7	GW-7	26-Mar-2020 13:15	0.831	278	0.0000132	<0.0002	<0.0005	0.00227	<0.0002	0.00155	<0.0001		0.0014	<0.00004	0.00204	0.0383	<0.00002	<0.00001	0.09	0.000043	279	<0.0002	0.00183	<0.0001
GW-7	GW-7	05-Apr-2020 15:55	0.836	303	0.0000126	<0.0002	<0.0005	0.00224	0.00024	0.00696	<0.0001		0.00083	<0.00002	0.000717	0.0346	<0.00001	<0.000005	0.09	0.0000079	286	<0.0001	0.00476	<0.00005
GW-7	GW-7	22-Apr-2020 12:00	0.703	238	<0.000002	<0.0002	<0.0005	0.00235	<0.0002	<0.0001	<0.0001		0.00052	<0.00002	0.00135	0.0323	<0.00001	<0.000005	0.088	0.00005	219	0.0002	0.00136	<0.00005
GW-7	GW-7	12-May-2020 16:00	0.983	280	<0.000002	<0.0002	<0.0005	0.00255	<0.0002	0.0006	<0.0001		0.00175	0.000032	0.0017	0.0493	<0.00001	<0.000005	0.112	0.0000453	324	<0.0001	0.00159	0.000086
GW-7	GW-7	24-Jun-2020 11:25	0.836	294	0.0000172	0.00041	<0.001	0.0021	<0.0004	0.00301	<0.0002		0.0013	<0.00004	0.0018	0.0403	<0.00002	<0.00001	0.1	0.000055	305	<0.0002	0.00255	<0.0001
GW-7	GW-7	18-Jul-2020 16:30	0.79	252	0.0000087	<0.0004	<0.001	0.00143	<0.0004	0.00272	<0.0002		<0.0025	<0.0001	0.00229	0.0325	<0.00005	<0.000025	0.097	<0.000025	280	<0.0005	0.00407	<0.00025
GW-8	GW-8	03-Oct-2016 14:30	0.229	24.1	0.000016	<0.00020	0.0085	0.000586	0.00085	0.0019	0.00043		0.00645	0.000132	0.000328	0.0546	<0.000010	<0.0000050	0.036	0.000014	72.4	<0.00010	0.000474	0.000298
GW-8	GW-8	11-Oct-2016 17:00	0.243	25.8	<0.000050	<0.0050	<0.0050	0.00046	<0.0050	<0.0050	<0.00050		0.0063	<0.00050	0.00038	0.0499	<0.00010	<0.0010	<0.05	<0.000010	74.9	<0.0010	0.00063	<0.00020
GW-8	GW-8	25-Oct-2016 11:30	0.247	27.4	<0.000050	<0.0050	<0.0050	0.00063	<0.0050	<0.0050	<0.00050		0.0125	<0.00050	0.00054	0.0521	<0.00010	<0.0010	<0.05	0.000019	80.1	<0.0010	0.00089	<0.00020
GW-8	GW-A	08-Feb-2017 12:00	0.272	28.6	<0.00001	<0.005	<0.005	0.00068	<0.005	<0.005	<0.0005		<0.003	<0.0005	0.00069	0.0556	<0.0001	<0.001	<0.05	<0.00001	81.2	<0.001	0.00056	<0.0002
GW-8	GW-8	08-Feb-2017 12:50	0.27	28.9	<0.00001	<0.005	<0.005	0.00068	<0.005	<0.005	<0.0005		<0.003	<0.0005	0.00069	0.0546	<0.0001	<0.001	<0.05	<0.00001	81.4	<0.001	0.00054	<0.0002
GW-8	GW-FB	08-Feb-2017 15:00	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0005		<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0005	<0.0002
GW-8	GW-8	12-May-2017 11:00	0.285	43.1	0.000024	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001		<0.003	<0.0005	0.00021	0.0799	<0.0001	<0.001	<0.05	0.000061	105	<0.001	0.00041	0.00033
GW-8	GW-8	19-Aug-2017 10:30	0.289	47	0.000021	<0.0002	<0.0005	0.000977	<0.0002	0.00051	<0.0001		0.00557	0.000141	0.000211	0.0577	<0.00001	<0.000005	0.091	0.000017	82	<0.0001	0.000099	0.000293
GW-8	GW-8	10-Nov-2017 11:30	0.757	159	0.000021	<0.0002	<0.0005	0.00233	<0.0002	0.00079	<0.0001		0.0011	0.000048	0.000442	0.0701	<0.00001	<0.000005	0.085	0.000063	217	<0.0001	0.00124	0.000142
GW-8	GW-8	08-Dec-2017 12:30	0.704	155	0.0000187	<0.0002	<0.002	0.00246	<0.0002	0.0012	0.0003		0.00201	0.000049	0.000419	0.0642	<0.00001	<0.000005	0.088	0.0000479	199	<0.0001	0.000923	0.000127
GW-8	GW-8	15-Feb-2018 16:15	0.584	119	0.0000106	<0.0002	<0.0005	0.00218	<0.0002	0.00063	<0.0001		0.00165	0.000034	0.00042	0.0572	<0.00001	<0.000005	0.082	0.0000257	168	<0.0001	0.00082	0.000095
GW-8	GW-8	16-Mar-2018 14:45	0.637	110	0.00001	<0.0002	<0.0005	0.00231	<0.0002	0.00065	<0.0001		0.00142	0.000027	0.00053	0.055	<0.00001	<0.000005	0.094	0.0000099	160	<0.0001	0.000919	0.000085
GW-8	GW-8	13-Apr-2018 14:00	0.537	127	0.0000113	<0.0002	<0.0005	0.00224	<0.0002	0.00075	<0.0001		0.00144	0.000048	0.000318	0.0604	<0.00001	<0.000005	0.093	0.0000373	149	<0.0001	0.000609	0.000248
GW-8	GW-8	11-May-2018 10:15	0.414	150	0.0000178	<0.0002	<0.002	0.00206	<0.0002	<0.001	<0.0001		0.00198	0.000074	0.0001	0.0469	<0.00001	<0.000005	0.113	0.0000477	110	<0.0001	0.000137	0.000345
GW-8	GW-8	02-Jun-2018 12:00	0.446	165	0.0000143	<0.0002	<0.0005	0.00111	<0.0002	0.00082	<0.0001		0.00183	0.000053	0.00031	0.045	<0.00001	<0.000005	0.095	0.0000543	125	<0.0001	0.000417	0.000237
GW-8	GW-8	04-Jul-2018 13:30	0.302	87.3	0.0000083	<0.0002	<0.0005	0.00109	<0.0002	0.00045	<0.0001		0.00246	0.000067	0.000291	0.0346	<0.00001	<0.000005	0.138	0.0000141	79	<0.0001	0.000112	0.000339
GW-8	GW-8	02-Aug-2018 13:15	0.416	133	0.0000137	<0.0002	<0.002	0.00133	<0.0002	<0.001	<0.0001		0.00169	0.000045	0.000196	0.0457	<0.00001	<0.000005	0.127	0.0000264	117	<0.0001	0.000106	0.000231

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	Dissolved Metals	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co	D-Cu
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001		0.0005	0.00002	0.00002	0.00002	0.00001	0.000005	0.01	0.000005	0.050	0.0001	0.000005	0.00005
GW-8	GW-8	29-Aug-2018 12:30	0.495	157	0.000013	<0.0002	<0.0005	0.00177	<0.0002	0.00107	<0.0001		0.0143	0.000119	0.000261	0.0526	<0.00001	<0.000005	0.124	0.0000407	142	<0.0001	0.000208	0.000337
GW-8	GW-8	16-Oct-2018 12:00	0.495	184	0.0000079	<0.0002	<0.0005	0.00193	<0.0002	0.00058	<0.0001		0.00103	0.000049	0.000139	0.043	<0.00001	<0.000005	0.115	0.0000181	133	<0.0001	0.0001	0.000262
GW-8	FB	16-Oct-2018 12:30	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00012	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-8	GW-8	08-Nov-2018 13:30	0.518	190	0.0000173	<0.0002	<0.002	0.00215	<0.0002	<0.001	<0.0001		0.00156	0.000049	0.000128	0.0454	<0.00001	<0.000005	0.106	0.0000299	142	<0.0001	0.0000754	0.000323
GW-8	GW-8	14-Dec-2018 12:30	0.449	157	0.0000095	<0.0002	<0.002	0.00192	<0.0002	<0.001	<0.0001		0.0015	0.000051	0.000103	0.0332	<0.00001	<0.000005	0.085	0.0000102	119	<0.0001	0.0000182	0.000235
GW-8	GW-8	15-Feb-2019 14:30	0.513	181	0.0000064	<0.0002	<0.002	0.00202	<0.0002	<0.001	<0.0001		<0.0005	0.000033	0.000134	0.0341	<0.00001	<0.000005	0.087	0.0000184	142	<0.0001	0.000168	0.000194
GW-8	GW-8	15-Mar-2019 12:00	0.552	197	0.0000092	<0.0002	<0.002	0.00276	<0.0002	<0.001	<0.0001		0.00083	0.000048	0.000112	0.036	<0.00001	<0.000005	0.098	0.0000218	146	<0.0001	0.000041	0.000225
GW-8	GW-8	16-Apr-2019 16:00	0.361	161	0.0000077	<0.0002	<0.0005	0.0022	<0.0002	0.00028	<0.0001		0.00057	0.000043	0.000057	0.0263	<0.00001	<0.000005	0.098	0.0000165	106	<0.0001	0.0000404	0.000272
GW-8	GW-8	30-May-2019 12:10	0.306	179	0.0000059	<0.0002	<0.0005	0.00164	<0.0002	0.00025	<0.0001		0.00205	0.000067	0.000115	0.025	<0.00001	<0.000005	0.15	0.0000235	82.2	0.00092	0.0000365	0.000302
GW-8	GW-8	26-Jun-2019 12:25	0.304	183	0.0000066	<0.0002	<0.002	0.00146	<0.0002	<0.001	<0.0001		0.00124	0.000044	0.000135	0.0261	<0.00001	<0.000005	0.173	0.0000109	82.1	0.0004	0.0000783	0.000264
GW-8	GW-8	24-Jul-2019 10:00	0.392	238	0.0000129	<0.0002	<0.002	0.0013	<0.0002	<0.001	<0.0001		0.00115	0.000067	0.000353	0.0382	<0.00001	<0.000005	0.181	0.000014	110	0.00028	0.000116	0.000255
GW-8	FB	24-Jul-2019 10:15	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		0.00053	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
GW-8	GW-8	15-Aug-2019 09:15	0.312	172	0.0000117	<0.0002	<0.0005	0.00153	<0.0002	0.00024	<0.0001		0.00124	0.000099	0.000133	0.0275	<0.00001	<0.000005	0.208	0.0000081	80.7	0.00022	0.0000711	0.00031
GW-8	GW-8	17-Sep-2019 14:00	0.422	235	0.0000097	<0.0002	<0.0005	0.00159	<0.0002	0.00015	<0.0001		0.00135	0.000075	0.00015	0.0424	<0.00001	<0.000005	0.209	0.0000095	119	0.00014	0.0000509	0.000271
GW-8	GW-8	07-Nov-2019 15:10	0.321	199	0.0000061	<0.0002	<0.0005	0.00162	<0.0002	<0.0001	<0.0001		0.00097	0.000077	0.000143	0.0286	<0.00001	<0.000005	0.148	0.0000104	88.3	0.00039	0.0000241	0.000236
GW-8	GW-8	18-Dec-2019 16:30	0.39	231	0.0000058	<0.0002	<0.0005	0.00278	<0.0002	0.00019	<0.0001		0.00069	0.000071	0.000136	0.0361	<0.00001	<0.000005	0.116	0.0000237	102	0.00096	0.0000353	0.000258
GW-8	GW-8	29-Jan-2020 15:20	0.429	236	0.0000044	<0.0002	<0.0005	0.00247	<0.0002	0.00014	<0.0001		0.0012	0.000072	0.000125	0.0309	<0.00001	<0.000005	0.113	0.0000147	107	0.00036	0.0000333	0.000251
GW-8	GW-8-DUP	29-Jan-2020 15:30	0.42	235	0.000005	<0.0002	<0.0005	0.0024	<0.0002	0.00021	<0.0001		0.00058	0.000071	0.000114	0.0298	<0.00001	<0.000005	0.11	0.0000179	105	0.00035	0.000032	0.000419
GW-8	Field Blank	29-Jan-2020 15:40	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	0.000183	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000292
GW-8	GW-8	19-Feb-2020 00:20	0.427	226	0.0000083	<0.0002	<0.0005	0.00194	<0.0002	0.00186	<0.0001		0.00073	0.000053	0.000107	0.0304	<0.00001	<0.000005	0.115	0.000019	114	<0.0001	0.0000226	0.000297
GW-8	FIELD DUPLICATE	19-Feb-2020 12:35	0.425	221	0.0000095	<0.0002	<0.0005	0.00197	<0.0002	0.00384	<0.0001		0.00071	0.000055	0.00012	0.0301	<0.00001	<0.000005	0.117	0.0000178	116	<0.0001	0.0000238	0.000259
GW-8	FIELD BLANK	19-Feb-2020 12:50	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00011	<0.0001		<0.0005	<0.00002	<0.00002	0.000041	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000459
GW-8	GW-8	27-Mar-2020 17:20	0.349	199	0.0000033	<0.0002	<0.0005	0.00207	<0.0002	0.0001	<0.0001		0.00062	0.000069	0.000134	0.0251	<0.00001	<0.000005	0.117	0.0000153	94.4	0.00033	0.0000342	0.000214
GW-8	GW-8	05-Apr-2020 13:45	0.341	210	0.0000064	<0.0002	<0.0005	0.00201	0.00022	<0.0001	<0.0001		0.00148	0.000055	0.000199	0.025	<0.00001	<0.000005	0.119	0.000012	93.3	0.00033	0.0000174	0.000298
GW-8	Duplicate	05-Apr-2020 14:05	0.345	208	0.0000054	<0.0002	<0.0005	0.00206	<0.0002	0.00457	<0.0001		0.00126	0.000031	0.000173	0.0249	<0.00001	<0.000005	0.121	0.0000143	95.6	0.00045	0.0000287	0.000199
GW-8	Field Blank	05-Apr-2020 14:25	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		0.00085	<0.00002	<0.00002	0.000047	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000089
GW-8	GW-8	12-May-2020 14:40	0.394	260	<0.000002	<0.0002	<0.0005	0.00278	<0.0002	0.00058	<0.0001		0.00826	0.000096	0.000089	0.0262	<0.00001	<0.000005	0.154	0.0000102	86.3	0.00149	0.0000318	0.000264
GW-8	GW-8	24-Jun-2020 15:30	0.252	120	0.0000082	0.00099	0.00194	0.00179	0.00061	0.00243	<0.0001		0.00071	0.000139	0.000205	0.0189	<0.00001	<0.000005	0.191	0.0000115	59.3	0.00084	0.0000364	0.000298
GW-8	GW-8	29-Jul-2020 15:40	0.185	65.3	0.0000043	<0.0002	<0.0005	0.00114	<0.0002	0.00077	<0.0001		0.00121	0.000127	0.000146	0.0222	<0.00001	<0.000005	0.193	0.0000067	48.8	0.00049	0.0000296	0.000262
	TRIP BLANK	30-Nov-2016 10:20	<0.0010	<3.0	<0.000050	<0.0050	<0.0050	<0.00010	<0.0050	<0.0050	<0.00050		<0.0030	<0.00050	<0.00010	<0.0010	<0.00010	<0.0010	<0.05	<0.000010	<0.050	<0.0010	<0.00050	0.0003
	TRIP BLANK	09-Feb-2017 00:00	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0005		<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0005	<0.0002
	TRIP BLANK	11-May-2017 08:30	<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	<0.0002	<0.0002
	TRIP BLANK	16-Aug-2017 00:00	<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	<0.0002	<0.0002
	TRIP BLANK	07-Nov-2017 08:30	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00017	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	09-Dec-2017 09:45	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	13-Feb-2018 07:40	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	0.0000028	<0.0002	0.00011	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	16-Mar-2018 00:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	14-Apr-2018 11:01	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00012	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	09-May-2018 07:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	04-Jul-2018 10:15	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		0.00085	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	0.000405
	TRIP BLANK	03-Aug-2018 09:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		0.0006	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	17-Oct-2018 08:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	08-Nov-2018 08:30	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		0.0007	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	0.0000128	<0.00005
	TRIP BLANK	14-Feb-2019 09:50	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	16-Apr-2019 16:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	28-May-2019 00:00	<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	<0.0002	<0.0005
	TRIP BLANK	24-Jul-2019 13:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	14-Aug-2019 07:50	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	05-Nov-2019 00:00	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	TRIP BLANK	20-Feb-2020 00:00	<0.00005	<3.0	0.0000028	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005
	Trip Blank	20-May-2020 13:30	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001		<0.0005	<0.00002	<0.00002	<0.00002	<0.00001	<0.000005	<0.01	<0.000005	<0.050	<0.0001	<0.000005	<0.00005

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	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	Metals Filtration and Preservation
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.002	0.050	0.00004	0.05	0.000005	0.050	0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001	-
GW-10B	GW-10B	26-Nov-2016 14:00	0.0312	<0.00020	0.0117	15.3	0.0426	<0.000010	0.002	0.0018		2.04	0.00345	4.67	<0.000020	4.53	0.209	7.3	<0.000050	<0.0050	<0.0050	0.0121	<0.0050	0.0052	<0.00050	FIELD
GW-10B	GW-10B	08-Dec-2016 11:30	0.0411	0.00052	0.012	16.8	0.0875	<0.000010	0.0022	0.0029		1.99	0.00293	4.79	<0.000020	5.15	0.212	7.2	<0.000050	<0.0050	<0.0050	0.0106	<0.0050	<0.0050	<0.00050	FIELD
GW-10B	GW-10B	15-Dec-2016 10:00	0.0337	0.00021	0.0126	16.6	0.129	<0.000010	0.0019	0.0025		1.96	0.00266	4.83	<0.000020	4.68	0.214	8.1	<0.000050	<0.0050	<0.0050	0.00896	<0.0050	<0.0050	<0.00050	FIELD
GW-10B	GW-10D	15-Dec-2016 11:00	0.0339	0.00022	0.0116	17	0.124	<0.000010	0.002	0.0024		1.91	0.00264	4.78	<0.000020	4.94	0.215	7.8	<0.000050	<0.0050	<0.0050	0.00925	<0.0050	<0.0050	<0.00050	FIELD
GW-10B	GW-10B	06-Feb-2017 12:00	0.102	<0.0002	0.0109	15.9	0.164	<0.00001	0.0019	0.003		1.77	0.00144	4.52	<0.00002	5.05	0.204	7.8	0.000033	<0.005	<0.005	0.0095	<0.005	<0.005	<0.0005	FIELD
GW-10B	GW-10B	10-May-2017 11:00	0.191	<0.0002	0.0108	17.2	0.115	<0.00001	0.0018	0.0021		1.85	0.00145	4.69	<0.00002	5.13	0.196	8.4	0.000033	<0.005	<0.005	0.00786	<0.005	<0.005	<0.0001	FIELD
GW-10B	FB-R2	10-May-2017 15:30	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.00001	<0.001	<0.001		<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	FIELD
GW-10B	GW-10B	17-Aug-2017 14:00	0.36	<0.0002	0.0117	18.2	0.12	<0.00001	0.0024	0.0049		1.9	0.00137	4.56	<0.00002	4.91	0.202	8.6	0.000023	<0.005	<0.005	0.00846	<0.005	<0.005	<0.0001	FIELD
GW-10B	GW-10B	08-Nov-2017 12:00	0.485	<0.000005	0.0107	18	0.119	<0.000002	0.0018	0.00102	0.0167	1.83	0.00148	4.45	<0.000005	4.37	0.207	7.7	0.000019	<0.0002	<0.0005	0.00837	<0.0002	0.00081	<0.0001	FIELD
GW-10B	GW-10B	14-Feb-2018 15:00	0.689	0.0000098	0.0115	17.4	0.146	<0.000002	0.00172	0.00103	0.0129	1.88	0.00125	4.39	<0.000005	4.01	0.204	7.5	0.0000076	<0.0002	<0.0005	0.00831	<0.0002	0.00041	<0.0001	FIELD
GW-10B	GW-10B	10-May-2018 09:30	0.0061	<0.000005	0.011	17.4	0.0579	<0.000002	0.00159	0.00129	0.0074	1.87	0.00312	4.61	<0.000005	3.49	0.208	6.4	0.0000234	<0.0002	<0.0005	0.00658	<0.0002	0.00078	<0.0001	FIELD
GW-10B	GW-10B	01-Aug-2018 10:30	0.125	0.0000146	0.0106	17.4	0.0716	<0.000002	0.00168	0.00103	0.007	1.71	0.00269	4.09	<0.000005	3.89	0.195	6.7	0.0000118	<0.0002	<0.0005	0.00811	<0.0002	0.00044	<0.0001	FIELD
GW-10B	GW-10B	06-Nov-2018 16:30	0.208	<0.000005	0.011	18.4	0.0799	<0.000002	0.00175	0.000843	0.0121	1.8	0.00218	4.83	<0.000005	3.7	0.232	7.2	0.000014	<0.0002	<0.0005	0.00745	<0.0002	0.00038	<0.0001	FIELD
GW-10B	GW-10B	13-Feb-2019 10:30	0.337	<0.000005	0.0106	16.9	0.0997	0.0000034	0.00167	0.000795	0.0129	1.84	0.00175	4.25	<0.000005	3.91	0.209	6.9	0.0000032	<0.0002	<0.0005	0.00875	<0.0002	0.00031	<0.0001	FIELD
GW-10B	GW-10B	28-May-2019 10:15	0.259	<0.0002	0.0115	17.3	0.083	<0.000002	0.0016	<0.001		1.77	0.0022	4.53	<0.00002	3.56	0.219	6.8	0.000011	<0.005	<0.005	0.00814	<0.005	<0.005	<0.0001	FIELD
GW-10B	GW-10B	13-Aug-2019 09:30	0.295	<0.000005	0.0114	18.2	0.0913	<0.000002	0.00164	0.000639	0.0119	1.87	0.00229	4.6	<0.000005	3.82	0.222	6.8	0.000008	<0.0002	<0.0005	0.00882	<0.0002	0.00032	<0.0001	FIELD
GW-10B	FB-Q3	13-Aug-2019 10:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	FIELD
GW-10B	GW-10B	05-Nov-2019 14:14	0.0019	<0.000005	0.0121	18.4	0.0995	<0.000002	0.00165	0.000726	0.0034	1.98	0.00207	4.54	<0.000005	4.03	0.223	7.1	0.0000077	<0.0002	<0.0005	0.00919	<0.0002	0.00028	<0.0001	FIELD
GW-10B	GW FB	05-Nov-2019 14:20	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	FIELD
GW-10B	GW-10B	23-Feb-2020 16:40	0.24	0.0000087	0.0116	18.8	0.0936	<0.0000019	0.00167	0.000721	0.0104	2.02	0.00224	4.4	0.0000054	3.86	0.226	6.8	0.0000071	<0.0002	<0.0005	0.00867	<0.0002	0.00086	<0.0001	FIELD
GW-10B	GW-10B	20-May-2020 13:30	0.34	<0.000005	0.0123	17.7	0.0916	<0.0000019	0.00182	0.000574	0.0208	1.8	0.00195	4.73	0.0000088	3.95	0.238	8.3	0.0000035	<0.0002	<0.0005	0.00941	<0.0002	<0.0001	<0.0001	
GW-10B	Field Blank	20-May-2020 13:50	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	0.000053	0.00004	0.0044	<0.050	<0.00004	<0.05	<0.000005	<0.050	0.000082	<3.0	<0.000002	<0.0002	0.00067	0.0000039	<0.0002	<0.0001	<0.0001	
GW-10B	GW-10B	30-Jul-2020 13:30	0.0096	<0.000005	0.0106	19.9	0.0234	<0.0000019	0.00158	0.000782	0.0067	1.94	0.00232	4.41	<0.000005	3.76	0.232	7.6	0.0000095	<0.0002	<0.0005	0.00861	<0.0002	0.00065	<0.0001	
GW-6	GW-6	03-Oct-2016 10:30	6.69	0.000162	0.109	54.3	0.692	<0.0000020	0.00248	0.00288	0.129	2.94	0.000138	5.53	<0.0000050	97.3	0.55	192	0.000006	<0.00020	0.00402	0.00114	0.00059	0.00214	0.00014	FIELD
GW-6	GW-6	12-Oct-2016 15:00	7.87	0.00029	0.109	66.2	0.684	<0.000010	0.0019	<0.0010		2.85	<0.00010	5.38	<0.000020	113	0.548	234	<0.000050	<0.0050	<0.0050	0.00099	<0.0050	<0.0050	<0.00050	FIELD
GW-6	GW-6	25-Oct-2016 14:30	7.26	<0.00020	0.109	71.7	0.821	<0.000010	0.0014	<0.0010		3.23	<0.00010	6.2	<0.000020	119	0.527	246	<0.000050	<0.0050	<0.0050	0.00074	<0.0050	<0.0050	<0.00050	FIELD
GW-6	GW-6	07-Feb-2017 11:45	10.3	<0.0002	0.0991	64.8	0.598	<0.00001	<0.001	<0.001		2.56	<0.0001	6.19	<0.00002	104	0.555	226	<0.00001	<0.005	<0.005	0.00042	<0.005	<0.005	<0.0005	FIELD
GW-6	GW-6	11-May-2017 11:00	10.6	<0.0002	0.0754	70.1	0.369	<0.00001	<0.001	<0.001		2.46	<0.0001	6.45	<0.00002	98.5	0.518	193	<0.00001	<0.005	<0.005	0.00034	<0.005	<0.005	0.0001	FIELD
GW-6	GW-6	18-Aug-2017 11:00	13.3	0.000057	0.0766	86.5	0.501	<0.00001	0.00058	0.00015		2.8	<0.0002	6.75	<0.000025	100	0.652	267	<0.00001	<0.001	<0.0025	0.000457	<0.001	0.00176	<0.0005	FIELD
GW-6	GW-6	09-Nov-2017 11:30	11.8	<0.000005	0.0511	77.4	0.466	<0.000002	0.00054	0.00015	0.399	2.78	0.000047	5.36	<0.000005	103	0.686	225	<0.000002	<0.0002	<0.0005	0.000356	<0.0002	0.0003	0.0001	FIELD
GW-6	GW-6	07-Dec-2017 15:00	11.3	<0.000005	0.069	70.8	0.428	<0.000002	0.000695	0.000174	0.382	2.72	0.000042	6.11	<0.000005	107	0.707	221	<0.000002	<0.0002	<0.0005	0.000409	<0.0002	0.00236	0.00011	FIELD
GW-6	JH41-600	07-Dec-2017 15:00	11.3	<0.000005	0.0688	70.5	0.431	<0.000002	0.000671	0.000165	0.375	2.72	<0.00004	6.09	<0.000005	107	0.692	218	<0.000002	<0.0002	<0.0005	0.000409	<0.0002	0.00056	0.00011	FIELD
GW-6	FB	07-Dec-2017 15:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0057	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00069	<0.0001	FIELD
GW-6	GW-6	15-Feb-2018 11:00	9.93	0.000006	0.061	64.2	0.465	<0.000002	0.000576	0.000193	0.426	2.76	0.00006	6.47	<0.000005	107	0.71	210	<0.000002	<0.0002	<0.0005	0.000337	<0.0002	0.00026	0.00012	FIELD
GW-6	GW-6	10-May-2018 16:15	9.67	<0.000005	0.0633	62	0.355	<0.000002	0.00061	0.000186	0.369	2.66	0.000081	6.25	<0.000005	135	0.622	166	<0.000002	<0.0002	<0.0005	0.000362	<0.0002	0.00025	0.00012	FIELD
GW-6	GW-6	01-Aug-2018 16:00	7.8	<0.000005	0.0619	54	0.274	<0.000002	0.000698	0.000177	0.376	2.54	0.000041	5.72	<0.000005	169	0.583	158	0.0000034	<0.0002	<0.0005	0.000383	<0.0002	<0.0001	0.0001	FIELD
GW-6	GW-81B	01-Aug-2018 16:45	<0.001	0.0000071	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0027	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00034	<0.0001	FIELD
GW-6	GW-6	08-Nov-2018 08:30	7.08	<0.000005	0.0544	47	0.24	<0.000002	0.000749	0.000189	0.394	2.54	<0.00004	6.29	<0.000005	194	0.473	168	<0.000002	<0.0002	<0.0005	0.000283	<0.0002	0.00038	0.00013	FIELD
GW-6	GW-6	15-Feb-2019 10:30	6.89	<0.000005	0.0513	41.9	0.25	0.0000032	0.000761	0.000238	0.345	2.4	<0.00004	6.11	<0.000005	182	0.469	164	<0.000002	<0.0002	<0.0005	0.000265	0.0002	0.0001	0.00012	FIELD
GW-6	BD-Q1	15-Feb-2019 11:00	6.69	<0.000005	0.0509	41.1	0.248	0.0000029	0.000771	0.000204	0.339	2.34	<0.00004	5.82	<0.000005	179	0.456	164	<0.000002	<0.0002	<0.0005	0.00027	<0.0002	<0.0001	0.00014	FIELD
GW-6	GW-6	29-May-2019 15:30	7.46	0.0000285	0.055	45.5	0.259	<0.000002	0.000749	0.000251	0.319	2.33	<0.00004	5.87	<0.000005	206	0.471	187	<0.000002	<0.0002	<0.0005	0.000281	<0.0002	0.00021	0.0001	FIELD
GW-6	GW-6	14-Aug-2019 14:45	6.94	<0.000005	0.0531	48.1	0.249	<0.000002	0.000865	0.000285	0.351	2.44	0.000047	5.8	<0.000005	228	0.496	208	<0.000002	<0.0002	0.0015	0.00029	<0.0002	0.00012	0.00012	FIELD
GW-6	GW-6	07-Nov-2019 11:25	0.0038	<0.000005	0.0537	43.4	0.25	<0.000002	0.000879	0.000276	0.005	2.48	<0.00004	5.88	<0.000005	241	0.479	209	<0.000002	<0.0002	<0.0005	0.000267	<0.0002	<0.0001	<0.0001	FIELD
GW-6	GW-6	19-Feb-2020 14:30	6.63	<0.000005	0.0522	42.7	0.249	<0.0000019	0.00101	0.000224	0.373	2.45	<0.00004	6.2	<0.000005	254	0.499	203	<0.000002	<0.0002	<0.0005	0.000266	<0.0002	0.00188	0.00014	FIELD
GW-6	GW-6	19-May-2020 14:00	7.27	<0.000005	0.054	44.7	0.27	<0.0000019	0.00128	0.000224	0.415	2.85	<0.00004	6.53	<0.000005	281	0.617	245	<0.000002	<0.0002	<0.0005	0.000344	0.00022	<0.0001	0.00016	FIELD
GW-6	GW-6	30-Jul-2020 15:40	6.4	<0.000005	0.0484	43.6	0.227	<0.0000019	0.001	0.000295	0.363	2.43	0.000041	5.42	<0.000005	268	0.485	198	<0.000002	<0.0002	0.001	0.000301	<0.0002	<0.0001	0.00014	
GW-7	GW-7	02-Oct-2016 14:00	0.142	0.000006	0.0215	12.3	0.131	<0.0000020	0.00461	0.001	0.0429	1.56	0.000262	4.6	<0.0000050	13	0.198	12.8	0.000005	<0.00020	<0.00050	0.000364	0.00074	0.00315	<0.00010	FIELD
GW-7	GW-7	12-Oct-2016 11:00	1.08	<0.00020	0.0263	15.4	0.278	<0.000010	0.0036	<0.0010		1.29	<0.00010	4.32	<0.000020	17.5	0.221	14.8	<0.000050	<0.0050	<0.0050	0.00017	<0.0050	0.0079	<0.00050	FIELD
GW-7	GW-7	24-Oct-2016 17:30	1.57	0.00037	0.0299	17.6	0.709	<0.000010	0.0034	<0.0010		1.27	<0.00010	4.18	<0.000020	14.9	0.202	12.5	<0.000050	<0.0050	<0.0050	0.00016	<0.0050	0.0051	<0.00050	FIELD
GW-7	GW-7	07-Feb-2017 17:00	1.74	<0.0002	0.0271	16.0	0.548	<0.00001	0.0022	0.001		0.992	<0.0001	4.29	<0.00002	14.9	0.219	12.1	<0.00001	<0.005	<0.005	0.00018	<0.005	<0.005	<0.0005	FIELD
GW-7	GW-7	11-May-2017 14:30	1.64	<0.0002	0.0315	19.5	0.382	<0.00001	0.0017	0.0011		1	<0.0001	4.36	<0.00002	12.2	0.213	15.2	<0.00001	<0.005	<0.005	0.00018	<0.005	<0.005	<0.0001	FIELD
GW-7	GW-7	18-Aug-2017 14:00	2.26	<0.000005	0.0369	22.2	0.457	<0.00001	0.00189	0.00117		1.23	<0.00004	4.72	<0.000005	23.4	0.258	33	0.000003	<0.0002	<0.0005	0.000259	<0.0002	0.00081	<0.0001	FIELD
GW-7	JH41-300	18-Aug-2017 15:00	2.29	<0.0002	0.0365	21.4	0.462	<0.00001	0.0019	0.0012		1.2	<0.0001	4.68	<0.00002	23	0.254	31.7	<0.00001	<0.005	<0.005	0.00025	<0.005	<0.005	<0.0001	FIELD
GW-7	GW-7	09-Nov-2017 14:30	3.51	<0.000005	0.0441	43.2	0.663	<0.000002	0.00151	0.00217	0.0095	1.64	<0.00004	4.39	<0.000005	39.2	0.502	109	0.000009	<0.0002	<0.0005	0.000734	<0.0002	0.001	<0.0001	FIELD
GW-7	GW-7	08-Dec-2017 10:00	3.65	<0.000005	0.0532	45.2	0.698	<0.000002	0.00178	0.00229	0.0085	1.7	<0.00004	4.98	<0.000005	41.6	0.603	120	0.0000089	<0.0002	<0.0005	0.000839	<0.0002	0.00156	<0.0001	FIELD

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	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	Metals Filtration and Preservation
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.002	0.050	0.00004	0.05	0.000005	0.050	0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001	-
GW-7	GW-7	15-Feb-2018 13:15	3.34	<0.000005	0.0544	50.3	0.662	<0.000002	0.00151	0.00239	0.0077	1.83	<0.00004	4.93	<0.000005	52.6	0.558	130	0.0000101	<0.0002	<0.0005	0.00105	<0.0002	0.00111	<0.0001	FIELD
GW-7	GW-7	16-Mar-2018 12:30	3.89	<0.000005	0.0587	56.1	0.65	<0.000002	0.00156	0.00243	0.0066	2.02	<0.00004	5.14	<0.000005	64.1	0.594	132	0.0000114	<0.0002	<0.0005	0.000953	0.00023	0.00135	<0.0001	FIELD
GW-7	GW-7	13-Apr-2018 11:00	4.09	0.0000085	0.0566	53.4	0.593	<0.000002	0.00153	0.00209	0.0046	1.92	0.000048	5.31	<0.000005	68.5	0.581	144	0.000009	<0.0002	<0.0005	0.000994	<0.0002	0.00113	<0.0001	FIELD
GW-7	JH42-01	13-Apr-2018 12:00	3.9	0.0000075	0.0544	53.2	0.583	0.000002	0.00144	0.00213	0.0084	1.94	0.000044	5.19	<0.000005	66.5	0.58	141	0.0000127	<0.0002	<0.0005	0.00102	<0.0002	0.00119	<0.0001	FIELD
GW-7	FB	13-Apr-2018 12:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0061	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00019	<0.0001	FIELD
GW-7	GW-7	10-May-2018 18:15	3.88	<0.000005	0.0639	56	0.636	<0.000002	0.00154	0.0022	0.0113	2.13	0.000045	5.21	<0.000005	79.1	0.676	151	0.0000121	<0.0002	<0.0005	0.00128	<0.0002	0.00948	<0.0001	FIELD
GW-7	GW-7	02-Jun-2018 10:00	4.09	<0.000005	0.0575	55.7	0.635	<0.000002	0.00149	0.00215	0.0078	2.15	<0.00004	4.96	<0.000005	72.6	0.686	162	0.0000102	<0.0002	<0.0005	0.00132	<0.0002	0.00109	<0.0001	FIELD
GW-7	GW-7	04-Jul-2018 08:55	4.38	<0.000005	0.0666	61.1	0.698	<0.000002	0.00145	0.00229	0.0094	2.2	0.000057	5.09	<0.000005	82.5	0.722	189	0.0000112	<0.0002	<0.0005	0.0014	<0.0002	0.00134	<0.0001	FIELD
GW-7	GW-7 DUP	04-Jul-2018 09:10	4.25	<0.000005	0.0674	61	0.691	<0.000002	0.00141	0.00228	0.0081	2.13	0.000047	5.15	<0.000005	83.3	0.724	186	0.0000109	<0.0002	<0.0005	0.0014	<0.0002	0.00131	<0.0001	FIELD
GW-7	FB	04-Jul-2018 10:15	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0048	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00029	<0.0001	FIELD
GW-7	GW-7	02-Aug-2018 10:15	4.66	<0.000005	0.0542	48.6	0.609	<0.000002	0.00152	0.0021	0.0145	1.82	<0.00004	4.85	<0.000005	63.3	0.553	149	0.0000065	<0.0002	<0.0005	0.000873	<0.0002	0.00179	<0.0001	FIELD
GW-7	GW-7	29-Aug-2018 10:00	4.83	0.0000189	0.0625	60.4	0.719	<0.000002	0.00159	0.00259	0.0106	2.27	0.000069	5.12	<0.000005	95.7	0.718	188	0.0000107	<0.0002	<0.0005	0.00145	<0.0002	0.00286	<0.0001	FIELD
GW-7	GW-7	16-Oct-2018 09:45	4.16	0.0000093	0.0553	56.2	1.14	0.0000034	0.00161	0.00308	0.0085	2.1	0.000078	5	<0.000005	80.8	0.69	174	0.0000131	<0.0002	0.00099	0.00113	<0.0002	0.00206	<0.0001	FIELD
GW-7	GW-OCT	16-Oct-2018 09:50	4.21	<0.000005	0.0557	56	1.15	<0.000002	0.00162	0.00292	0.0104	2.02	0.000056	5.05	<0.000005	81.3	0.692	171	0.0000131	<0.0002	0.00112	0.00111	<0.0002	0.00198	<0.0001	FIELD
GW-7	GW-7	08-Nov-2018 10:00	4.76	<0.000005	0.0614	61.6	0.838	<0.000002	0.00164	0.00287	0.0103	2.49	0.000048	5.24	<0.000005	98.1	0.727	193	0.0000152	<0.0002	<0.0005	0.00137	<0.0002	0.00195	<0.0001	FIELD
GW-7	FB-Q4	08-Nov-2018 10:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	0.00051	<0.000002	<0.0002	<0.0001	<0.0001	FIELD
GW-7	GW-7	14-Dec-2018 10:00	4.58	<0.000005	0.0622	58.2	0.976	<0.000002	0.00161	0.00302	0.0084	2.30	0.000053	4.88	<0.000005	97.5	0.681	189	0.0000129	<0.0002	<0.0005	0.00139	<0.0002	0.00298	<0.0001	FIELD
GW-7	GW-7	15-Feb-2019 12:30	5.31	<0.000005	0.0498	51.2	0.764	0.000004	0.00161	0.00235	0.0088	2.06	<0.00004	4.88	<0.000005	69.7	0.612	163	0.0000094	<0.0002	<0.0005	0.00103	<0.0002	0.00265	<0.0001	FIELD
GW-7	GW-7	15-Mar-2019 10:00	3.61	<0.000005	0.0701	61.9	1.04	<0.000002	0.00152	0.00352	0.0087	2.38	0.000042	5.39	<0.000005	105	0.747	204	0.0000158	<0.0002	<0.0005	0.00161	<0.0002	0.00168	<0.0001	FIELD
GW-7	GW-7	16-Apr-2019 11:30	4.46	0.0000115	0.0594	60	0.721	<0.000002	0.00144	0.00293	0.0098	2.21	<0.00004	4.81	<0.000005	101	0.644	212	0.0000116	<0.0002	<0.0005	0.0015	<0.0002	0.00157	<0.0001	FIELD
GW-7	GW-74	16-Apr-2019 12:00	4.52	0.0000163	0.059	59.8	0.74		0.00146	0.00283	0.01	2.23	0.000042	4.77	<0.000005	99.5	0.645	214	0.000013	<0.0002	<0.0005	0.00154	<0.0002	0.0016	<0.0001	FIELD
GW-7	GW-A	16-Apr-2019 12:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00014	<0.0001	FIELD
GW-7	GW-7	30-May-2019 09:00	7.32	<0.000025	0.0768	81.3	0.921	<0.000002	0.00149	0.00306	<0.01	2.44	<0.0002	5.26	<0.000025	135	0.851	277	<0.00001	<0.001	<0.0025	0.00209	<0.001	0.00211	<0.0005	FIELD
GW-7	GW-7	26-Jun-2019 16:20	6.23	0.000018	0.0828	86.5	0.871	<0.000002	0.0015	0.00317	0.015	2.76	<0.00008	5.86	<0.00001	136	0.967	330	0.0000145	<0.0004	<0.001	0.0023	<0.0004	0.00238	<0.0002	LAB
GW-7	GW-7	24-Jul-2019 08:00	7.89	<0.00001	0.0779	85.3	0.893	<0.000002	0.00189	0.00346	0.0121	2.9	<0.00008	5.36	<0.00001	145	0.852	307	0.0000187	<0.0004	0.0011	0.00217	<0.0004	0.00209	<0.0002	FIELD
GW-7	BD-7	24-Jul-2019 08:30	7.97	<0.00001	0.0784	85.6	0.894	<0.000002	0.00175	0.0036	0.0121	2.8	<0.00008	5.3	<0.00001	146	0.848	307	0.0000154	<0.0004	0.0013	0.00219	<0.0004	0.00236	<0.0002	FIELD
GW-7	GW-7	14-Aug-2019 16:30	6.22	<0.00001	0.0803	84.6	0.908	<0.000002	0.00165	0.00338	0.0101	2.82	<0.00008	5.32	<0.00001	142	0.854	305	0.0000152	<0.0004	<0.001	0.00219	<0.0004	0.00291	<0.0002	FIELD
GW-7	GW-7	17-Sep-2019 14:00	5.73	<0.00001	0.0787	76.6	0.956	<0.000002	0.0014	0.00334	0.0071	2.73	<0.00008	5.63	<0.00001	141	0.827	287	0.0000167	<0.0004	<0.001	0.0021	<0.0004	0.00209	<0.0002	FIELD
GW-7	GW-7	07-Nov-2019 13:20	7.27	<0.00001	0.0716	78.6	1.08	<0.000002	0.00151	0.00315	0.0098	2.74	<0.00008	5.41	<0.00001	129	0.814	286	0.0000114	<0.0004	<0.001	0.00195	<0.0004	0.00293	<0.0002	FIELD
GW-7	GW-FD	07-Nov-2019 13:31	7.43	<0.00001	0.0709	78.9	1.07	<0.000002	0.00158	0.00318	0.0104	2.73	<0.00008	5.35	<0.00001	132	0.799	288	0.0000103	<0.0004	<0.001	0.00196	<0.0004	0.00323	<0.0002	FIELD
GW-7	GW-7	18-Dec-2019 13:40	5.13	<0.00001	0.0789	83.8	1.21	<0.000002	0.00154	0.0038	0.0102	2.86	<0.00008	5.52	<0.00001	148	0.82	282	0.0000187	<0.0004	<0.001	0.00222	<0.0004	0.00255	<0.0002	FIELD
GW-7	GW-7	29-Jan-2020 17:40	5.59	<0.00001	0.0605	68.2	1.03	<0.000002	0.00158	0.00337	0.0072	2.65	0.000047	4.8	<0.00001	134	0.729	244	0.0000212	<0.0004	<0.001	0.002	<0.0004	0.00288	<0.0002	FIELD
GW-7	GW-7	19-Feb-2020 16:25	5.95	<0.00001	0.0652	75.7	1.09	<0.0000019	0.00147	0.00326	0.0058	2.63	<0.00008	4.68	<0.00001	131	0.806	274	0.0000065	<0.0004	<0.001	0.00181	<0.0004	0.00399	<0.0002	FIELD
GW-7	GW-7	26-Mar-2020 13:15	6.46	<0.00001	0.0734	77.3	0.958	<0.0000019	0.00154	0.00303	0.0134	2.78	<0.00008	5.31	<0.00001	146	0.806	284	0.0000131	<0.0004	<0.001	0.00218	<0.0004	0.00181	<0.0002	FIELD
GW-7	GW-7	05-Apr-2020 15:55	1.12	<0.000005	0.0752	79.5	1.24	<0.0000019	0.00156	0.0035	0.0122	2.69	<0.00004	5.74	<0.000005	138	0.819	289	0.0000112	<0.0002	<0.0005	0.0021	0.00025	0.00176	<0.0001	LAB
GW-7	GW-7	22-Apr-2020 12:00	3.86	<0.000005	0.0652	58.7	0.738	<0.0000019	0.00155	0.00257	<0.002	2.35	0.000045	5.1	<0.000005	126	0.621	215	<0.000002	<0.0002	<0.0005	0.002	<0.0002	0.0002	<0.0001	FIELD
GW-7	GW-7	12-May-2020 16:00	5.11	0.0000093	0.0991	66.1	0.866	<0.0000019	0.00213	0.00288	0.0174	3.09	0.000042	5.77	<0.000005	154	1	281	<0.000002	<0.0002	<0.0005	0.00255	<0.0002	0.00082	<0.0001	FIELD
GW-7	GW-7	24-Jun-2020 11:25	6.12	<0.00001	0.0823	84.4	1.19	<0.0000019	0.00135	0.00389	0.0154	2.95	<0.00008	6.17	<0.00001	158	0.851	312	0.0000182	<0.0004	<0.001	0.00218	<0.0004	0.00206	<0.0002	FIELD
GW-7	GW-7	18-Jul-2020 16:30	8.99	<0.000025	0.0707	78.1	0.915	<0.0000019	0.00129	0.0032	0.023	2.61	<0.0002	6.15	<0.000025	128	0.846	280	<0.00001	<0.001	<0.0025	0.00146	<0.001	0.00342	<0.0005	
GW-8	GW-8	03-Oct-2016 14:30	0.0086	<0.0000050	0.0174	17.8	0.115	<0.0000020	0.00687	0.000883	0.013	2.42	0.000656	3.53	<0.0000050	19.1	0.227	24.2	0.000006	<0.00020	<0.00050	0.000599	<0.00020	0.0007	<0.00010	FIELD
GW-8	GW-8	11-Oct-2016 17:00	0.217	<0.00020	0.0216	20.4	0.378	<0.000010	0.0031	0.001		1.79	<0.00010	3.66	<0.000020	17.6	0.249	27.4	<0.000050	<0.0050	<0.0050	0.00048	<0.0050	<0.0050	<0.00050	FIELD
GW-8	GW-8	25-Oct-2016 11:30	0.49	<0.00020	0.0235	21.6	0.513	<0.000010	0.0031	0.0019		1.55	0.00014	3.76	<0.000020	17.7	0.249	29.4	<0.000050	<0.0050	<0.0050	0.00061	<0.0050	<0.0050	<0.00050	FIELD
GW-8	GW-A	08-Feb-2017 12:00	0.46	<0.0002	0.0232	21.6	0.44	<0.00001	0.0022	0.0013		1.32	0.00019	3.96	<0.00002	17.6	0.262	26.9	<0.00001	<0.005	<0.005	0.00065	<0.005	<0.005	<0.0005	FIELD
GW-8	GW-8	08-Feb-2017 12:50	0.467	<0.0002	0.0223	21.4	0.427	<0.00001	0.0022	0.0013		1.29	0.00018	4	<0.00002	17.2	0.26	26.4	<0.00001	<0.005	<0.005	0.00066	<0.005	<0.005	<0.0005	FIELD
GW-8	GW-FB	08-Feb-2017 15:00	<0.005	<0.0002	<0.005	<0.050	<0.001	<0.00001	<0.001	<0.001		<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	<0.0005	FIELD
GW-8	GW-8	12-May-2017 11:00	0.0302	<0.0002	0.0341	25.5	0.0378	<0.00001	0.0018	0.0023		1.67	0.00336	3.56	<0.00002	88.4	0.307	50.1	0.000023	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	FIELD
GW-8	GW-8	19-Aug-2017 10:30	0.0189	<0.000005	0.0523	20.4	0.0627	<0.00001	0.0016	0.000561		2.46	0.00102	4.42	<0.000005	93.6	0.295	45	0.000021	<0.0002	<0.0005	0.000983	<0.0002	0.00057	<0.0001	FIELD
GW-8	GW-8	10-Nov-2017 11:30	0.762	<0.000005	0.0538	56.8	0.463	<0.000002	0.000924	0.00172	0.0048	3.13	0.000065	4.96	<0.000005	128	0.712	163	0.000021	<0.0002	<0.0005	0.00242	<0.0002	0.00101	<0.0001	FIELD
GW-8	GW-8	08-Dec-2017 12:30	0.703	<0.000005	0.0621	56.4	0.351	<0.000002	0.00114	0.00144	0.0039	3.14	0.000675	5.22	<0.000005	138	0.726	159	0.0000182	<0.0002	<0.0005	0.00246	<0.0002	0.00087	<0.0001	FIELD
GW-8	GW-8	15-Feb-2018 16:15	0.725	<0.000005	0.054	55.4	0.304	<0.000002	0.000901	0.00122	0.0066	3	0.000173	4.86	<0.000005	149	0.569	128	0.0000115	<0.0002	<0.0005	0.00226	<0.0002	0.00069	<0.0001	FIELD
GW-8	GW-8	16-Mar-2018 14:45	0.896	0.0000056	0.0568	47.1	0.365	<0.000002	0.000931	0.00133	<0.002	2.72	0.000078	5.09	<0.000005	149	0.539	125	0.0000076	<0.0002	<0.0005	0.00208	<0.0002	0.00077	<0.0001	FIELD
GW-8	GW-8	13-Apr-2018 14:00	0.363	<0.000005	0.0536	47.4	0.222	0.0000025	0.00102	0.00127	0.0086	2.83	0.000246	4.71	<0.000005	168	0.49	114	0.0000116	<0.0002	<0.0005	0.00208	<0.0002	0.00082	<0.0001	FIELD
GW-8	GW-8	11-May-2018 10:15	0.0202	0.0000079	0.0684	35.2	0.0166	<0.000002	0.00127	0.000985	0.0036	2.7	0.00319	3.32	<0.000005	201	0.401	142	0.0000176	<0.0002	<0.0005	0.0021	<0.0002	0.00045	<0.0001	FIELD
GW-8	GW-8	02-Jun-2018 12:00	0.105	<0.000005	0.047	31.3	0.219	<0.000002	0.00102	0.000833	0.002	2.99	0.00038	3.75	<0.000005	190	0.426	160	0.0000135	<0.0002	<0.0005	0.00113	<0.0002	0.0006	<0.0001	FIELD
GW-8	GW-8	04-Jul-2018 13:30	0.0579	<0.000005	0.0653	22.8	0.0594	<0.000002	0.0014	0.000474	0.006	2.7	0.00134	4.02	<0.000005	152	0.296	90.4	0.0000069	<0.0002	<0.0005	0.00101	<0.0002	0.00055	<0.0001	FIELD
GW-8	GW-8	02-Aug-2018 13:15	0.0113	0.0000065	0.073	33.5	0.0739	<0.000002	0.00126	0.000704	0.0077	3.14	0.00129	4.4	<0.000005	168	0.426	145	0.0000126	<0.0002	<0.0005	0.00141	<0.0002	0.00044	<0.0001	FIELD

Table 2: 2016-2020 Groundwater Quality Data for RSEM Area R5b

Station	Field Sample ID	Sample Date/Time	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	Metals Filtration and Preservation
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			0.001	0.000005	0.0005	0.050	0.00005	0.000002	0.00005	0.00002	0.002	0.050	0.00004	0.05	0.000005	0.050	0.00005	3.0	0.000002	0.0002	0.0005	0.000002	0.0002	0.0001	0.0001	-
GW-8	GW-8	29-Aug-2018 12:30	0.0259	0.0000145	0.07	39.6	0.198	<0.000002	0.00132	0.00094	0.0069	3.45	0.000968	4.76	<0.000005	197	0.505	158	0.0000138	<0.0002	<0.0005	0.00184	<0.0002	0.00129	<0.0001	FIELD
GW-8	GW-8	16-Oct-2018 12:00	0.0369	<0.000005	0.082	40.9	0.0538	0.0000038	0.00133	0.00056	0.0059	3.53	0.00225	3.88	<0.000005	183	0.523	181	0.0000072	<0.0002	<0.0005	0.00195	<0.0002	0.00051	<0.0001	FIELD
GW-8	FB	16-Oct-2018 12:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	0.0000028	<0.00005	<0.00002	0.0024	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	0.00085	<0.000002	<0.0002	0.00034	<0.0001	FIELD
GW-8	GW-8	08-Nov-2018 13:30	0.008	<0.000005	0.0738	43.3	0.0636	<0.000002	0.00129	0.000748	0.0044	3.66	0.000895	4.35	0.0000051	206	0.534	185	0.0000166	<0.0002	<0.0005	0.00219	<0.0002	0.0006	<0.0001	FIELD
GW-8	GW-8	14-Dec-2018 12:30	0.0016	<0.000005	0.071	36.2	0.00311	<0.000002	0.00137	0.00046	0.0046	3.10	0.00169	3.42	<0.000005	162	0.43	155	0.0000103	<0.0002	<0.0005	0.00188	<0.0002	0.00046	<0.0001	FIELD
GW-8	GW-8	15-Feb-2019 14:30	0.0537	<0.000005	0.0665	40.9	0.118	<0.000002	0.00101	0.000643	0.0039	3.03	0.000732	3.84	<0.000005	182	0.504	187	0.0000038	<0.0002	<0.0005	0.00206	<0.0002	0.00028	<0.0001	FIELD
GW-8	GW-8	15-Mar-2019 12:00	<0.001	<0.000005	0.0843	47	0.0181	<0.000002	0.00127	0.00054	0.0033	3.2	0.000679	3.62	<0.000005	193	0.558	188	0.0000114	<0.0002	<0.0005	0.0028	<0.0002	0.00023	<0.0001	FIELD
GW-8	GW-8	16-Apr-2019 16:00	0.0037	<0.000005	0.0777	39	0.012	<0.000002	0.00133	0.000442	<0.002	2.6	0.00137	2.87	<0.000005	158	0.375	161	0.0000065	<0.0002	<0.0005	0.00222	<0.0002	0.00023	<0.0001	FIELD
GW-8	GW-8	30-May-2019 12:10	0.0016	0.0000066	0.0807	28	0.00994	<0.000002	0.00245	0.000368	0.0036	2.81	0.00282	2.41	<0.000005	212	0.3	178	0.0000048	<0.0002	<0.0005	0.0016	<0.0002	0.00019	<0.0001	FIELD
GW-8	GW-8	26-Jun-2019 12:25	0.0125	<0.000005	0.0841	25.8	0.0402	<0.000002	0.00285	0.00038	0.0052	3.16	0.00244	2.9	<0.000005	233	0.305	177	0.0000074	<0.0002	<0.0005	0.00147	<0.0002	<0.0001	<0.0001	LAB
GW-8	GW-8	24-Jul-2019 10:00	0.001	<0.000005	0.102	34.6	0.0167	<0.000002	0.00305	0.000425	0.0064	3.7	0.0044	2.76	<0.000005	235	0.394	240	0.0000121	<0.0002	<0.0005	0.00133	<0.0002	0.00014	<0.0001	FIELD
GW-8	FB	24-Jul-2019 10:15	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	0.0021	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	FIELD
GW-8	GW-8	15-Aug-2019 09:15	<0.001	<0.000005	0.0938	26.7	0.00279	<0.000002	0.00439	0.000301	0.0067	3.6	0.0024	3.02	<0.000005	211	0.299	163	0.0000106	<0.0002	<0.0005	0.00145	<0.0002	0.00015	<0.0001	FIELD
GW-8	GW-8	17-Sep-2019 14:00	<0.001	<0.000005	0.104	36.5	0.00108	<0.000002	0.00307	0.000306	0.0053	4.07	0.00324	3.43	<0.000005	236	0.442	236	0.0000115	<0.0002	<0.0005	0.00164	<0.0002	0.00016	<0.0001	FIELD
GW-8	GW-8	07-Nov-2019 15:10	0.003	<0.000005	0.0805	29.8	0.0017	0.0000023	0.00424	0.000223	0.0052	3.6	0.00459	2.66	<0.000005	238	0.321	199	0.0000054	<0.0002	<0.0005	0.00164	<0.0002	0.00013	<0.0001	FIELD
GW-8	GW-8	18-Dec-2019 16:30	<0.001	<0.000005	0.0819	46.0	0.000262	<0.000002	0.00448	0.000294	0.0064	3.63	0.00413	2.5	<0.000005	245	0.408	231	0.0000059	<0.0002	<0.0005	0.00276	<0.0002	0.00019	<0.0001	FIELD
GW-8	GW-8	29-Jan-2020 15:20	<0.001	<0.000005	0.071	42.9	0.000093	<0.000002	0.00373	0.000248	0.0049	3.4	0.00299	2.37	<0.000005	239	0.393	232	0.0000051	<0.0002	<0.0005	0.00246	<0.0002	0.00016	<0.0001	FIELD
GW-8	GW-8-DUP	29-Jan-2020 15:30	<0.001	0.0000081	0.0669	40.8	0.000093	<0.000002	0.00368	0.000291	0.0038	3.27	0.00276	2.22	<0.000005	233	0.385	224	0.0000051	<0.0002	<0.0005	0.00238	<0.0002	0.00024	<0.0001	FIELD
GW-8	Field Blank	29-Jan-2020 15:40	<0.001	0.000006	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	0.000033	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00025	<0.0001	FIELD
GW-8	GW-8	19-Feb-2020 00:20	0.0064	0.0000091	0.0744	39.3	0.0034	<0.0000019	0.00298	0.000342	0.0041	3.4	0.00177	2.72	<0.000005	250	0.448	230	0.0000059	<0.0002	<0.0005	0.00204	<0.0002	0.00176	<0.0001	FIELD
GW-8	FIELD DUPLICATE	19-Feb-2020 12:35	0.0017	0.0000123	0.0727	39.6	0.00345	<0.0000019	0.00297	0.000349	0.0051	3.43	0.00168	2.74	<0.000005	251	0.444	228	0.0000058	<0.0002	<0.0005	0.002	<0.0002	0.00211	<0.0001	FIELD
GW-8	FIELD BLANK	19-Feb-2020 12:50	0.0013	0.0000142	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.00055	<0.0001	FIELD
GW-8	GW-8	27-Mar-2020 17:20	<0.001	0.0000106	0.0734	35.9	0.00756	<0.0000019	0.00323	0.000249	0.0051	3.18	0.00345	2.37	<0.000005	230	0.348	189	0.0000039	<0.0002	<0.0005	0.00205	<0.0002	0.00013	<0.0001	FIELD
GW-8	GW-8	05-Apr-2020 13:45	0.0012	<0.000005	0.0735	36	0.00524	<0.0000019	0.00277	0.000306	0.0105	3	0.00216	2.58	<0.000005	223	0.33	199	0.0000024	<0.0002	<0.0005	0.002	0.00025	<0.0001	<0.0001	FIELD
GW-8	Duplicate	05-Apr-2020 14:05	0.0046	0.0000057	0.0739	36.8	0.00499	<0.0000019	0.00274	0.00037	0.0137	3.06	0.00255	2.62	0.000008	227	0.344	207	0.0000025	<0.0002	<0.0005	0.00192	0.0002	<0.0001	<0.0001	FIELD
GW-8	Field Blank	05-Apr-2020 14:25	<0.001	0.0000052	<0.0005	<0.050	<0.00005	<0.0000019	0.000069	0.000021	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	0.0002	<0.0001	FIELD
GW-8	GW-8	12-May-2020 14:40	0.0024	<0.000005	0.0972	38.8	<0.00005	<0.0000019	0.00507	0.000293	0.009	3.81	0.00483	2.75	<0.000005	258	0.363	245	<0.000002	<0.0002	<0.0005	0.00256	<0.0002	0.00035	0.00011	FIELD
GW-8	GW-8	24-Jun-2020 15:30	<0.001	<0.000005	0.0776	25.3	0.000073	<0.0000019	0.00571	0.000238	0.0085	2.88	0.00327	2.81	<0.000005	176	0.222	120	0.0000071	<0.0002	<0.0005	0.00175	<0.0002	0.00043	<0.0001	FIELD
GW-8	GW-8	29-Jul-2020 15:40	<0.001	<0.000005	0.0757	21.2	0.000073	<0.0000019	0.00547	0.000174	0.0093	2.94	0.00263	3.04	<0.000005	93.4	0.195	67.1	0.0000051	<0.0002	<0.0005	0.00121	<0.0002	0.00062	<0.0001	
	TRIP BLANK	30-Nov-2016 10:20	<0.0050	<0.00020	<0.0050	<0.050	<0.0010	<0.000010	<0.0010	<0.0010		<0.050	<0.00010	<0.1	<0.000020	<0.050	<0.0010	<3.0	<0.000050	<0.0050	<0.0050	<0.00010	<0.0050	<0.0050	<0.00050	LAB
	TRIP BLANK	09-Feb-2017 00:00	<0.005	<0.0002	<0.005	<0.050	<0.001	<0.00001	<0.001	<0.001		<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	<0.0005	LAB
	TRIP BLANK	11-May-2017 08:30	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.00001	<0.001	<0.001		<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	LAB
	TRIP BLANK	16-Aug-2017 00:00	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.00001	<0.001	<0.001		<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	LAB
	TRIP BLANK	07-Nov-2017 08:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	09-Dec-2017 09:45	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	0.00013	0.004	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	13-Feb-2018 07:40	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	16-Mar-2018 00:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	14-Apr-2018 11:01	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	09-May-2018 07:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	04-Jul-2018 10:15	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	0.000024	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	03-Aug-2018 09:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	17-Oct-2018 08:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	08-Nov-2018 08:30	<0.001	<0.000005	<0.0005	<0.050	0.000891	<0.000002	<0.00005	<0.00002	0.0028	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	14-Feb-2019 09:50	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	16-Apr-2019 16:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	28-May-2019 00:00	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.000002	<0.001	<0.001		<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	LAB
	TRIP BLANK	24-Jul-2019 13:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	14-Aug-2019 07:50	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	05-Nov-2019 00:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.000002	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	TRIP BLANK	20-Feb-2020 00:00	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	<0.002	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	<0.000002	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB
	Trip Blank	20-May-2020 13:30	<0.001	<0.000005	<0.0005	<0.050	<0.00005	<0.0000019	<0.00005	<0.00002	0.0033	<0.050	<0.00004	<0.05	<0.000005	<0.050	<0.00005	<3.0	0.0000027	<0.0002	<0.0005	<0.000002	<0.0002	<0.0001	<0.0001	LAB