

**NEW GOLD RAINY RIVER MINE
APPENDIX O
SURFACE WATER REPORT**



2023 Annual Surface Water Report
Per Environmental Compliance Approval
#2290-CAVKGN Condition 12(9)

Prepared By:

New Gold Inc.
Rainy River Mine
5967 HWY 11/71, P.O. Box 5
Emo, ON P0W 1E0
T 807- 234-8200
F 807-482-2834
<http://www.newgold.com>

March 2024

Table of Contents

- 1. Introduction 1**
- 2. Surface Water Monitoring Program Overview 2**
- 3. Pinewood River 3**
 - 3.1. Area Creeks..... 3
 - 3.2. Rainy River 4
- 4. Surface Water Quality Data and Trends 4**
 - 4.1. Pinewood River 4
 - 4.2. Area Creeks..... 7
 - 4.3. Rainy River 9
- 5. Discharge Water Quality Data and Trends 12**
 - 5.1. Sediment Pond 2..... 12
 - 5.2. EDL1..... 12
 - 5.3. EDL2..... 12
- 6. Effluent Discharge Rates and Mixing Ratios 13**
 - 6.1. Sediment Pond 2..... 13
 - 6.2. EDL1..... 13
 - 6.3. EDL2..... 13
- 7. Incidents of Non-Compliance 14**
- 8. Closing 14**

List of Tables

Table 1: Updated Receiving Surface Water Sampling Location..... 15

Table 2: Average 2023 Pinewood River Water Quality for Selected Parameters..... 16

Table 3: Average 2022 Pinewood River Water Quality for Selected Parameters..... 17

Table 4: Average 2021 Pinewood River Water Quality for Selected Parameters..... 18

Table 5: Average 2020 Pinewood River Water Quality for Selected Parameters..... 19

Table 6: Average 2019 Pinewood River Water Quality for Selected Parameters..... 20

Table 7: Average 2018 Pinewood River Water Quality for Selected Parameters..... 21

Table 8: Average 2017 Pinewood River Water Quality for Selected Parameters..... 22

Table 9: Average 2016 Pinewood River Water Quality for Selected Parameters..... 23

Table 10: 2023 ECA Surface Water Trigger Values for Surface Water Location SW22A 24

Table 11: 2023 ECA Surface Water Trigger Values for Surface Water Location SW24..... 24

Table 12: 2022 ECA Surface Water Trigger Values for Surface Water Location SW22A 25

Table 13: 2022 ECA Surface Water Trigger Values for Surface Water Location SW24..... 25

Table 14: 2021 ECA Surface Water Trigger Values for Surface Water Location SW22A 26

Table 15: 2021 ECA Surface Water Trigger Values for Surface Water Location SW24..... 26

Table 16: 2020 ECA Surface Water Trigger Values for Surface Water Location SW22A 27

Table 17: 2020 ECA Surface Water Trigger Values for Surface Water Location SW24..... 27

Table 18: 2019 ECA Surface Water Trigger Values for Surface Water Location SW22A 28

Table 19: 2019 ECA Surface Water Trigger Values for Surface Water Location SW24..... 28

Table 20: 2018 ECA Surface Water Trigger Values for Surface Water Location SW22A 29

Table 21: 2018 ECA Surface Water Trigger Values for Surface Water Location SW24..... 29

Table 22: 2017 ECA Surface Water Trigger Values for Surface Water Location SW22A 30

Table 23: 2016 ECA Surface Water Trigger Values for Surface Water Location SW22A 30

Table 24: Average 2023 Area Creek and Rainy River Water Quality for Selected Parameters 31

Table 25: Average 2022 Area Creek and Rainy River Water Quality for Selected Parameters 32

Table 26: Average 2021 Area Creek and Rainy River Water Quality for Selected Parameters 33

Table 27: Average 2020 Area Creek and Rainy River Water Quality for Selected Parameters 34

Table 28: Average 2019 Area Creek and Rainy River Water Quality for Selected Parameters 35

Table 29: Average 2018 Area Creek and Rainy River Water Quality for Selected Parameters 36

Table 30: Average 2017 Area Creek and Rainy River Water Quality for Selected Parameters 37

Table 31: Average 2016 Area Creek and Rainy River Water Quality for Selected Parameters 38

List of Figures

Figure 1: RRM Site Plan with Discharge and Surface Water Monitoring Locations 2023..... 39

Figure 2: Rainy River Mine, Field pH Levels in Pinewood River 2015-2023 40

Figure 3: Rainy River Mine, Field pH Levels in Pinewood River 2023 41

Figure 4: Rainy River Mine, Total Suspended Solids Concentration in Pinewood River 2015-2023 42

Figure 5: Rainy River Mine, Total Suspended Solids Concentration in Pinewood River 2023..... 43

Figure 6: Rainy River Mine, Total Arsenic in Pinewood River 2015-2023..... 44

Figure 7: Rainy River Mine, Total Arsenic in Pinewood River 2023 45

Figure 8: Rainy River Mine, Total Copper in Pinewood River 2015-2023 46

Figure 9: Rainy River Mine, Total Copper in Pinewood River 2023 47

Figure 10: Rainy River Mine, Total Lead in Pinewood River 2015-2023 48

Figure 11: Rainy River Mine, Total Lead in Pinewood River 2023 49

Figure 12: Rainy River Mine, Total Nickel in Pinewood River 2015-2023..... 50

Figure 13: Rainy River Mine, Total Nickel in Pinewood River 2023 51

Figure 14: Rainy River Mine, Total Phosphorus in Pinewood River 2017-2023..... 52

Figure 15: Rainy River Mine, Total Phosphorus in Pinewood River 2023..... 53

Figure 16: Rainy River Mine, Total Zinc in Pinewood River 2015-2023 54

Figure 17: Rainy River Mine, Total Zinc in Pinewood River 2023 55

Figure 18: Rainy River Mine, Total Mercury in Pinewood River 2015-2023 56

Figure 19: Rainy River Mine, Total Mercury in Pinewood River 2023 57

Figure 20: Rainy River Mine, Un-ionized Ammonia in Pinewood River 2015-2023..... 58

Figure 21: Rainy River Mine, Un-ionized Ammonia in Pinewood River 2023 59

Figure 22: Rainy River Mine, Free Cyanide in Pinewood River 2018-2023..... 60

Figure 23: Rainy River Mine, Free Cyanide in Pinewood River 2023 61

Figure 24: Rainy River Mine, Field pH levels in Area Creeks 2015-2023 62

Figure 25: Rainy River Mine, Field pH levels in Area Creeks 2023 63

Figure 26: Rainy River Mine, Total Suspended Solids Concentration in Area Creeks 2015-2023 64

Figure 27: Rainy River Mine, Total Suspended Solids Concentration in Area Creeks 2023..... 65

Figure 28: Rainy River Mine, Total Arsenic in Area Creeks 2015-2023..... 66

Figure 29: Rainy River Mine, Total Arsenic in Area Creeks 2023 67

Figure 30: Rainy River Mine, Total Copper in Area Creeks 2015-2023 68

Figure 31: Rainy River Mine, Total Copper in Area Creeks 2023 69

Figure 32: Rainy River Mine, Total Lead in Area Creeks 2015-2023 70

Figure 33: Rainy River Mine, Total Lead in Area Creeks 2023 71

Figure 34: Rainy River Mine, Total Nickel in Area Creeks 2015-2023..... 72

Figure 35: Rainy River Mine, Total Nickel in Area Creeks 2023 73

Figure 36: Rainy River Mine, Total Phosphorus in Area Creeks 2017-2023..... 74

Figure 37: Rainy River Mine, Total Phosphorus in Area Creeks 2023..... 75

Figure 38: Rainy River Mine, Total Zinc in Area Creeks 2015-2023 76

Figure 39: Rainy River Mine, Total Zinc in Area Creeks 2023 77

Figure 40: Rainy River Mine, Total Mercury in Area Creeks 2015-2023..... 78

Figure 41: Rainy River Mine, Total Mercury in Area Creeks 2023 79

Figure 42: Rainy River Mine, Un-ionized Ammonia in Area Creeks 2015-2023..... 80

Figure 43: Rainy River Mine, Un-ionized Ammonia in Area Creeks 2023 81

Figure 44: Rainy River Mine, Free Cyanide in Area Creeks 2018-2023..... 82

Figure 45: Rainy River Mine, Free Cyanide in Area Creeks 2023 83

Figure 46: Rainy River Mine, Field pH Levels in Rainy River 2015-2023 84

Figure 47: Rainy River Mine, Field pH Levels in Rainy River 2023 85

Figure 48: Rainy River Mine, Total Suspended Solids Concentration in Rainy River 2015-2023..... 86

Figure 49: Rainy River Mine, Total Suspended Solids Concentration in Rainy River 2023 87

Figure 50: Rainy River Mine, Total Arsenic in Rainy River 2015-2023 88

Figure 51: Rainy River Mine, Total Arsenic in Rainy River 2023 89

Figure 52: Rainy River Mine, Total Copper in Rainy River 2015-2023 90

Figure 53: Rainy River Mine, Total Copper in Rainy River 2023 91

Figure 54: Rainy River Mine, Total Lead in Rainy River 2015-2023 92

Figure 55: Rainy River Mine, Total Lead in Rainy River 2023..... 93

Figure 56: Rainy River Mine, Total Nickel in Rainy River 2015-2023 94

Figure 57: Rainy River Mine, Total Nickel in Rainy River 2023 95

Figure 58: Rainy River Mine, Total Phosphorus in Rainy River 2017-2023 96

Figure 59: Rainy River Mine, Total Phosphorus in Rainy River 2023 97

Figure 60: Rainy River Mine, Total Zinc in Rainy River 2015-2023 98

Figure 61: Rainy River Mine, Total Zinc in Rainy River 2023..... 99

Figure 62: Rainy River Mine, Total Mercury in Rainy River 2015-2023 100

Figure 63: Rainy River Mine, Total Mercury in Rainy River 2023..... 101

Figure 64: Rainy River Mine, Un-ionized Ammonia in Rainy River 2015-2023 102

Figure 65: Rainy River Mine, Un-ionized Ammonia in Rainy River 2023 103

Figure 66: Rainy River Mine, Free Cyanide in Rainy River 2018-2023 104

Figure 67: Rainy River Mine, Free Cyanide in Rainy River 2023 105

Appendices

- Appendix A: Certification by Owner
- Appendix B: Baseline Receiver Water Quality Tables and Graphs
- Appendix C: Monthly ECA Works Performance Reports 2023
- Appendix D: Certificates of Analysis

1. Introduction

New Gold Inc. (New Gold) operates the Rainy River Mine located within Chapple Township, approximately 65 kilometers northwest of Fort Frances in northwestern Ontario. In October 2017, the Rainy River Project transitioned from its construction phase to an operational phase known as Rainy River Mine (RRM). To date, RRM is an operational open pit and underground mine producing approximately 250,000 ounces of gold/silver annually.

This report has been prepared to satisfy Condition 12(9) of amended Environmental Compliance Approval (ECA) #2290-CAVKGN issued on April 14, 2022, by the Ministry of Environment, Conservation and Parks (MECP). Condition 12(9) of the amended ECA requires the submission of an annual Surface Water Monitoring report, certified by the Environment Manager, or designate, by March 31 of each year. For ease of reporting, the sections of the report will be laid out in the order that the required information is listed in Condition 12(9) of the ECA:

- (a) a map of the entire site illustrating significant features (e.g., lakes, streams, ponds, seeps, ditches, waste rock piles, collection, and treatment facilities, etc.), surface water sampling locations, and hydrometric stations. Specific UTM coordinates must also be provided for surface water sampling locations and hydrometric stations,*
- (b) a summary and interpretation of all surface water monitoring data (e.g. Tables in usable format such as Microsoft Excel and shall contain current and historical data; graphs to visualize spatial and temporal trends; indicators within tables/graphs to denote when measured values exceeded applicable provincial/federal objectives/guidelines and triggers; a summary of non-compliance incidences over the reporting period, for example effluent limits or dilution ratios were exceeded, and if receiver water quality was influenced/impacted; etc.),*
- (c) other relevant information (e.g. Field sampling protocol and QA/QC measures),*
- (d) a summary of any potential effects that would necessitate investigation and abatement actions,*
- (e) any other information the District Manager may require from time to time.*

All data presented in this report will also be provided in spreadsheet format. A site plan with surface water sampling locations is provided as Figure 1. Appendix A includes a Certification by Owner (or representative) statement.

2. Surface Water Monitoring Program Overview

The New Gold RRM Surface Water Monitoring Program commenced in 2015 and includes 16 surface water monitoring locations with monthly sampling frequency per Tables 9 and 10 of the ECA, located both upstream and downstream of the mine, to assist with assessment of aquatic effects associated with the operation of RRM. The program has been aligned with the Effluent and Water Quality Monitoring sampling required by Schedule 5 of the *Metal and Diamond Mining Effluent Regulation* (MDMER). As such, at times during active discharge additional samples may be collected at selected surface water monitoring locations to ensure compliance with the MDMER. The program data also supports the reporting requirements of Condition 12(6) of the ECA for Environmental Effects Monitoring Reports for Effluent Discharges every 3 years and the Environmental Effects Monitoring (EEM) Biological Monitoring studies required by Schedule 5 of the MDMER.

Quality assurance and quality control measures undertaken for the RRM Surface Water Monitoring Program include the collection of one field duplicate and preparation of one field blank each month. One travel blank is shipped with the samples to the external laboratory each month. Field water quality meters used for field data collection for the Surface Water Monitoring Program are calibrated externally on an annual basis, and are calibration checked by RRM Environmental Technicians at minimum once weekly.

A site plan with surface water sampling and hydrometric monitoring locations is presented in Figure 1. On four occasions, a request has been made to move the location of a surface water sample location listed in Table 7 of the ECA due to lack of safe access, and approval was received from the MECP. Table 1 of receiver surface water sampling locations with UTM coordinates reflects these approvals. The letter of discussion for approval for the change of SW29 to SW29A is available in Appendix E, outlining the reasons for the change that occurred in late 2022. The change was not reflected in the monthly reports of 2023, included in Appendix C, where it was still referred to as SW29. This has been corrected in the annual tables and graphs of this report as well as the included spreadsheet. Please note that any reference to SW29 should be considered to be SW29A for 2023 during this report. For clarity, SW29 was not removed from Table 1 in this report, showing that it was moved from Tait Creek to McCallum Creek and any past results cannot be compared to results from 2023.

For this report, the surface water monitoring sample locations are grouped by location upstream to downstream, where applicable: Pinewood River, area creeks and Rainy River. Pre-2015 baseline receiver water quality tables and graphs are not discussed in this report, however, are provided in Appendix B for reference.

3. Pinewood River

Pinewood River surface water sample location data is reported in the following order:

- SW20 – Pinewood River at Heatwole Rd
- SW10 – Pinewood River at former Highway 600
- SW21A – Pinewood River upstream of the confluence with Loslo Creek and Effluent Discharge Location #2 (EDL2)
- SW22A – Pinewood River downstream of the confluence with Loslo Creek and Effluent Discharge Location #2 (EDL2)
- SW03 – Pinewood River at realigned Highway 600
- SW23 – Pinewood River upstream of Effluent Discharge Location #1 (EDL1)
- SW24 – Pinewood River downstream of Effluent Discharge Location #1 (EDL1)
- SW15 – Pinewood River upstream of the confluence with the Rainy River

Samples were not collected at the following Pinewood River surface water locations in 2023 for the indicated reasons:

- SW20 – Unsafe conditions in April
- SW21A – No flow due to beaver dam in September and October
- SW03 – Unsafe conditions in April
- SW24 - Unsafe conditions in April,
- SW15 - Unsafe conditions in April and December

3.1. Area Creeks

Area creek surface water sample location data is reported in the following order:

- SW28A – Clark Creek culvert under Teeple road
- SW02 – West Creek upstream of the West Creek Diversion (WCD)
- SW25 – WCD upstream of Sediment Pond 1 final discharge point
- SW26 – WCD at old Highway 600 crossing near end of the diversion downstream of Sediment Pond 1 final discharge point
- SW27 – remnant Loslo Creek downstream of the WCD
- SW29 – Tait Creek upstream of the EDL1 pipeline crossing, and
- SW29A – McCallum Creek on the north side of the culverts under Highway 600

Samples were not collected at the following area creek surface water locations in 2023 for the indicated reasons:

- SW28A – Unsafe conditions in March, September
- SW02 – Unsafe conditions in April
- SW25 – Unsafe conditions in March
- SW29/29A – No flow in September and October

3.2. Rainy River

Rainy River surface water sample location data is reported in the following order:

- SW16 – Rainy River upstream (Emo) of the confluence with the Pinewood River
- SW17 – Rainy River downstream of the confluence with the Pinewood River

Samples were not collected at the following area creek surface water locations in 2023 for the indicated reasons:

- SW16 – Unsafe conditions in December

Where data is presented in tabular format, Rainy River data has been included with area creeks to reduce the total number of tables presented.

4. Surface Water Quality Data and Trends

Pursuant to Condition 12(9)(b) of the ECA, the historical and 2023 receiving surface water quality data is presented for key parameters with comparison to ECA Surface Water Trigger Values (ECA Table 11), the Ontario Provincial Water Quality Objectives (PWQO), and Canadian Environmental Quality Guidelines (CEQG) in both tables and graphs to visualize spatial and temporal trends. Overall, the data shows that water quality is good, and results are generally below the PWQO, CEQG and ECA trigger values. To date, parameter results have been generally below the standards for protection of aquatic life, with exception of aluminum and iron which commonly exceeded permitted limits, which is consistent with the baseline data.

4.1. Pinewood River

The 2023 annual average surface water quality data for the Pinewood River sample locations is in Table 2. For comparison purposes, Table 3 to Table 9 present the annual average surface water quality data for the years 2016 through 2022. The data for 2015 has not been presented as an annual average as the surface water monitoring program began mid-year. These tables provide a high-level overview of the average Pinewood River water quality by year at each sample location, from upstream of site to downstream of the Pinewood confluence with the Rainy River. The annual average surface water quality exceeded both the PWQO limit for total aluminum and the PWQO/CEQG limit for total iron consistently at each surface water monitoring sample location for the Pinewood River.

Pursuant to Condition 10(6) of the ECA, Table 10 and Table 11 present the 2023 monthly surface water quality data for comparison with the ECA Table 11 Surface Water Trigger Values at surface water monitoring sample locations SW22A and SW24. Table 12 to Table 23 present the 2016 to 2022 monthly surface water data for comparison with the ECA Surface Water Trigger Values. As a part of the Monthly Sewage Works Performance report required under Condition 12(5), surface water quality results for key parameters, including ECA Surface Water Trigger Values, are reported in tabular format. These tables are available in Appendix C which contains copies of the 2023 Monthly Performance Report tables.

Field pH

Figure 2 presents the field pH levels at all Pinewood River surface water monitoring sample locations for mid-2015 through 2023. In general, the field pH values recorded for the Pinewood River fall within the PWQO lower and upper pH limits (6.5 and 8.5). Figure 3 presents the field pH levels for 2023, which were all within the PWQO upper and lower pH limits except for the July 5, 2023, field pH recorded at SW21A (5.63) and the September 6, 2023 pH measured at SW22A (5.61). The field pH data collected at these locations did not pass RRM quality control as the laboratory reported pH was 7.71 at SW21A in July 2023 and 7.96 at SW22A in September 2023.

Total Suspended Solids

Figure 4 presents the total suspended solids (TSS) results for all Pinewood River surface water sample locations for mid-2015 through 2023. In general, the TSS results are below 30 mg/L with some elevated results recorded during the spring freshet, summer low flow season and fall rain season. Figure 5 presents the TSS results for 2023, which were mostly 20 mg/L, apart from SW15 in June and November, measured at 29.5 mg/L and 40.3 mg/L, respectively, SW23 and SW24 in June measured at 23.7mg/L and 21.9 mg/L, respectively. SW21A measured at 31.5 mg/L in August and SW10 measured at 44.5 in November.

Total Arsenic

Figure 6 presents the total arsenic results for all Pinewood River surface water monitoring sample locations for mid-2015 to 2023. In general, the total arsenic results are below the PWQO limit (0.005 mg/L) with elevated results recorded during the summer low flow season. Figure 7 presents the total arsenic results for 2023, which were below the PWQO limit, except for SW 24 measured at the PWQO limit of 0.005 mg/L in September 2023.

Total Copper

Figure 8 presents the total copper results for all Pinewood River surface water monitoring sample locations for mid-2015 to 2023. In general, the total copper results are below the PWQO limit (0.005 mg/L) with elevated results recorded during the summer low flow season. Figure 9 presents the total copper results for 2023. All results were below the PWQO limit, with four exceptions. SW03 measured at 0.006 mg/L in February and SW23 measured 0.0057 in December, exceeding the PWQO limit (0.005 mg/L). SW22A measured at 0.0084 in February (0.00086 mg/L in March) and SW24 measured at 0.0102 mg/L in February (0.00235 in March) exceeded the ECA trigger value (0.008 mg/L).

Total Lead

Figure 10 presents the total lead results for all Pinewood River surface water monitoring sample locations for mid-2015 to 2023. In general, the total lead results are below the PWQO limit (0.001-0.005 mg/L, dependent on hardness) with elevated results recorded during both the summer and winter low flow seasons. Figure 11 presents the total lead results for 2023. Three elevated results above the lower

end of the PWQO limit (0.001 mg/L, where hardness <30 mg/L CaCO₃) were recorded at SW24 in March and August, and also SW10 and SW23 in June and August respectively, however the hardness was measured at 241, 157, 178 and 243, respectively.

Total Nickel

Figure 12 presents the total nickel results for all Pinewood River surface water monitoring sample locations for mid-2015 to 2023. To date, all total nickel results are below the PWQO limit (0.025 mg/L). There are higher results, still below PWQO limit were recorded during the winter and summer low flow seasons. Figure 13 presents the total nickel results for 2023.

Total Phosphorus

Figure 14 presents the total phosphorus results for all Pinewood River surface water monitoring sample locations for 2017 to 2023. In general, the total phosphorus results are consistent through time (below 0.2 mg/L) with some peaks during wintertime. Figure 15 shows the total phosphorus results for 2023.

Total Zinc

Figure 16 presents the total zinc results for all Pinewood River surface water monitoring sample locations for mid-2015 to 2023. In general, the total zinc results are below the PWQO limit (0.02 mg/L) with elevated results recorded during the winter and summer low flow seasons. Figure 17 presents the total zinc results for 2023. Just one result at SW10 (0.024 mg/L) was above the PWQO limit (0.02 mg/L) in June 2023.

Total Mercury

Figure 18 presents the total mercury results for all Pinewood River surface water monitoring sample locations for mid-2015 to 2023. To date, all total mercury results are below the PWQO limit (0.0002 mg/L) and are often below the method detection limit. Figure 19 presents the total mercury results for 2023. All total mercury results are below the PWQO limit (0.0002 mg/L).

Un-ionized Ammonia

Figure 20 presents the calculated unionized ammonia results for all Pinewood River surface water monitoring sample locations for late 2015 to 2023. To date, all calculated unionized ammonia results are below the PWQO limit (0.02 mg/L) but one result in September 2022 at SW20 (0.028 mg/L). Figure 21 presents the calculated unionized ammonia results for 2023.

Free Cyanide

Figure 22 presents the free cyanide results for all Pinewood River surface water monitoring sample locations for early 2018 to 2023. To date, all free cyanide results are below the PWQO limit (0.005 mg/L). Figure 23 presents the free cyanide results for 2023.

4.2. Area Creeks

The 2023 annual average surface water quality data for area creek, and Rainy River, sample locations is presented in Table 24. For comparison purposes, the annual average surface water quality data for the years 2016 through 2022 are presented in Table 25 to Table 31, the data for 2015 has not been presented as an annual average as the surface water monitoring program began mid-year. These tables provide a high-level overview of the average area creek water quality by year at each sample location, from creeks and diversions upstream of site to downstream of site. The annual average surface water quality exceeded both the PWQO limit for total aluminium, and the PWQO/CEQG limit for total iron, at each surface water monitoring sample location for area creeks, with the exception of Aluminium at SW29A.

As a part of the Monthly Sewage Works Performance report required under Condition 12(5), surface water quality results for key parameters are reported in tabular format. These tables are available in Appendix C which contains copies of the 2023 Monthly Performance Report tables.

Field pH

Figure 24 presents the field pH levels at all area creek surface water monitoring sample locations for mid-2015 through 2023. In general, the field pH values recorded for area creeks fall within the PWQO lower and upper pH limits (6.5 and 8.5). Figure 25 presents the field pH levels for 2023, which were most within the PWQO upper and lower pH limits except for field pH recorded at SW25 (8.76), SW27 (8.64) and SW26 (8.59) in January as well as SW27 (5.81) in February and SW28A (8.51) in November. These results did not pass RRM quality control as the laboratory reported pH values within the limit range. The laboratory results are included in the Figure 25 for reference.

Total Suspended Solids

Figure 26 presents the total suspended solids (TSS) results for all area creek surface water sample locations for mid-2015 through 2023. In general, the TSS results are below 30 mg/L with some elevated results recorded during spring freshet, the summer low flow season and fall rain season. Figure 27 presents the TSS results for 2023, which were all at or below 20 mg/L except for the July and November samples collected at SW25 (34 mg/L and 98.5 mg/L, respectively), the July sample collected at SW29A (31.2 mg/L), the October sample collected at SW26 (47 mg/L) and the December sample collected at SW27 (and 25.2 mg/L).

Total Arsenic

Figure 28 presents the total arsenic results for all area creek surface water monitoring sample locations for mid-2015 to 2023. In general, the total arsenic results are below the PWQO limit (0.005 mg/L) with elevated results recorded during the summer low flow season. Figure 29 presents the total arsenic results for 2023, which were all below the PWQO limit.

Total Copper

Figure 30 presents the total copper results for area creek surface water monitoring sample locations for mid-2015 to 2023. In general, the total copper results are below the PWQO limit (0.005 mg/L) with elevated results recorded during the summer low flow season. Figure 31 presents the total copper results for 2023. One elevated result above the PWQO total copper limit (0.005 mg/L) was recorded at SW25 (0.0053 mg/L) in November.

Total Lead

Figure 32 presents the total lead results for all area creek surface water monitoring sample locations for mid-2015 to 2023. In general, the total lead results are below the PWQO limit (0.001-0.005 mg/L, dependent on hardness) with elevated results recorded during both the summer and winter low flow seasons. Figure 33 presents the total lead results for 2023. All 2023 results were below the PWQO lower limit (0.001 mg/L) except for sample collected at SW25 in July and November (0.0030 mg/L and 0.0023 mg/L, respectively) and SW26 in December (0.0015 mg/L) however the hardness was above 30 mg/L CaCO₃ (245, 244 and 215 mg/L respectively). On one occasion in February, SW02 (0.0084 mg/L) exceeded the PWQO upper limit of 0.005 mg/L, where the hardness was 91.8 mg/L.

Total Nickel

Figure 34 presents the total nickel results for all area creek surface water monitoring sample locations for mid-2015 to 2023. To date, all total nickel results are below the PWQO limit (0.025 mg/L). There are higher results recorded during the winter and summer low flow seasons. Figure 35 presents the total nickel results for 2023.

Total Phosphorus

Figure 36 presents the total phosphorus results for all area creek surface water monitoring sample locations for 2017 to 2023. In general, the total phosphorus results are below 0.1 mg/L with some elevated results recorded during the winter and summer low flow periods. Figure 37 presents the total phosphorus results for 2023, with three elevated results that correspond with the winter and summer low flow periods.

Total Zinc

Figure 38 presents the total zinc results for all area creek surface water monitoring sample locations for mid-2015 to 2023. In general, the total zinc results are below the PWQO limit (0.02 mg/L) with elevated results recorded during the winter and summer low flow seasons. Figure 39 presents the total zinc results for 2023. Results above the PWQO limit were recorded in the West Creek Diversion upstream at SW26 and at Loslo Creek downstream at SW27 during the winter low flow period in June through September. An exceedance of the ECA trigger value of 0.09 mg/L occurred at SW26 (0.1220 mg/L) upstream of EDL 2 in September.

Total Mercury

Figure 40 presents the total mercury results for all area creek surface water monitoring sample locations for mid-2015 to 2023. To date, all total mercury results are below the PWQO limit (0.0002 mg/L) and are often below the method detection limit. Figure 41 presents the total mercury results for 2023.

Unionized Ammonia

Figure 42 presents the calculated unionized ammonia results for all area creek surface water monitoring sample locations for late 2015 to 2023. To date, all calculated unionized ammonia results are below the PWQO limit (0.02 mg/L) except for two anomalous results, the first one (0.04 mg/L) recorded at SW29 in February 2018 and the other one recorded at SW28A (0.039 mg/L) in December 2022. No exceedances occurred in 2023. Figure 43 presents the calculated unionized ammonia results for 2023.

Free Cyanide

Figure 44 presents the free cyanide results for all area creek surface water monitoring sample locations for early 2018 to 2023. To date, all free cyanide results are below the PWQO limit (0.005 mg/L). Figure 45 presents the free cyanide results for 2023.

4.3. Rainy River

The 2023 annual average surface water quality data for the Rainy River sample locations is presented in Table 27. For comparison purposes, the annual average surface water quality data for the years 2016 through 2022 are presented in Table 25 to Table 31, the data for 2015 has not been presented as an annual average as the surface water monitoring program began mid-year. These tables provide a high-level overview of the average Rainy River water quality by year at the Rainy River upstream of RRM at Emo and downstream of the Pinewood confluence with the Rainy River. The annual average surface water quality exceeded both the PWQO limit for total aluminium, and the PWQO/CEQG limit for total iron at both Rainy River surface water monitoring sample locations.

As a part of the Monthly Sewage Works Performance report required under Condition 12(5), surface water quality results for key parameters, including ECA Surface Water Trigger Value parameters are reported in tabular format. These tables are available in Appendix C which contains copies of the 2023 Monthly Performance Report tables.

Field pH

Figure 46 presents the field pH levels at the two Rainy River surface water monitoring sample locations for mid-2015 through 2023. In general, the field pH values recorded for the two locations fall within the PWQO lower and upper pH limits (6.5 and 8.5). Figure 47 presents the field pH levels for 2023 which were mostly within the PWQO upper and lower pH limits except for SW16 (8.62) in June and SW17 (8.58) in September. Neither of these field readings pass the RRM quality control as the laboratory reported pH values within the limit range, see Figure 47.

Total Suspended Solids

Figure 48 presents the total suspended solids (TSS) results for the two Rainy River water sample locations for mid-2015 through 2023. In general, the TSS results are below 30 mg/L with some elevated results recorded during spring freshet. Figure 49 presents the TSS results for 2023, which were all at or below 20 mg/L, with the exception of SW17 (45.1 mg/L) in February.

Total Arsenic

Figure 50 presents the total arsenic results for the two Rainy River water monitoring sample locations for mid-2015 to 2023. In general, the total arsenic results are below the PWQO limit (0.005 mg/L) with some anomalous results reported in 2016 and 2017. Figure 51 presents the total arsenic results for 2023, which were all below the PWQO limit of 0.005 mg/L.

Total Copper

Figure 52 presents the total copper results for the two Rainy River surface water monitoring sample locations for mid-2015 to 2023. In general, the total copper results are below the PWQO limit (0.005 mg/L) with elevated results recorded during the winter and summer low flow season. Figure 53 presents the total copper results for 2023, all results were below the PWQO limit.

Total Lead

Figure 54 presents the total lead results for the two Rainy River surface water monitoring sample locations for mid-2015 to 2023. In general, the total lead results are below the PWQO limit (0.001-0.005 mg/L, dependent on hardness) with elevated results recorded during the winter low flow season. Figure 55 presents the total lead results for 2023, all results were below the PWQO limit.

Total Nickel

Figure 56 presents the total nickel results for the two Rainy River surface water monitoring sample locations for mid-2015 to 2023. To date, all total nickel results are below the PWQO limit (0.025 mg/L). Figure 57 presents the total nickel results for 2023.

Total Phosphorus

Figure 58 presents the total phosphorus results for the two Rainy River surface water monitoring sample locations for 2017 to 2023. In general, the total phosphorus results are below 0.1 mg/L. Figure 59 presents the total phosphorus results for 2023, which were all below 0.15 mg/L.

Total Zinc

Figure 60 presents the total zinc results for the two Rainy River monitoring sample locations for mid-2015 to 2023. In general, the total zinc results are below the PWQO limit (0.02 mg/L). Figure 61 presents the total zinc results for 2023, all results were below the PWQO limit.

Total Mercury

Figure 62 presents the total mercury results for the two Rainy River surface water monitoring sample locations for mid-2015 to 2023. To date, all total mercury results are below the PWQO limit (0.0002 mg/L) and are often below the method detection limit. Figure 63 presents the total mercury results for 2023 which are all below the method detection limit.

Unionized Ammonia

Figure 64 presents the calculated unionized ammonia results for the two Rainy River surface water monitoring sample locations for late 2015 to 2023. To date, all calculated unionized ammonia results are below the PWQO limit (0.02 mg/L). Figure 65 presents the calculated unionized ammonia results for 2023.

Free Cyanide

Figure 66 presents the free cyanide results for the two Rainy River surface water monitoring sample locations for early 2018 to 2023. To date, all free cyanide results are below the PWQO limit (0.005 mg/L) except for one sample at SW17 in February 2021 (0.0069 mg/L). Figure 67 presents the free cyanide results for 2023, which are all below the limit.

5. Discharge Water Quality Data and Trends

Three final discharge points were active in 2023, the final discharge point locations are marked on Figure 1. The discharge locations and dates are summarized below:

- Sediment Pond #2 active for 68 days with a total discharge of 790,915 m³.
 - April 14, 2023 through May 2, 2023
 - May 6, 2023 through May 8, 2023
 - May 12, 2023 through May 19, 2023
 - June 4, 2023 through June 6, 2023
 - October 20, 2023 through November 23, 2023

- Effluent Discharge Location #1 (EDL1) active for 93 days with a total discharge of 2,215,846 m³.
 - April 14, 2023 through June 21, 2023
 - November 1, 2023 through November 24, 2023

- Effluent Discharge Location #2 (EDL2) active for 84 days with a total discharge of 1,687,811 m³.
 - April 14, 2023 through May 23, 2023
 - May 25, 2023 through May 26, 2023
 - May 28, 2023 through June 14, 2023
 - November 1, 2023 through November 24, 2023

As a part of the Monthly Sewage Works Performance report required under Condition 12(5), effluent discharge quality results for key parameters, including PWQO and ECA limits and objective parameters are reported in tabular format. These tables are available in Appendix C which contains copies of the 2023 Monthly Performance Report tables.

5.1. Sediment Pond 2

In 2023, Sediment Pond 2 effluent discharge quality was compliant with all ECA limits and objectives. From October 20 to October 30, Sediment Pond 2 discharge dilution ratio was set at a 1:1 with the Pinewood River as it met Provincial Water Quality Objectives and Canadian Water Quality Guidelines for the Protection of Aquatic Life. The dilution ratio was returned to the 1:10 ratio on October 31, when the Zinc and Copper no longer met CCME limits, but remained within the limits as described in Table 4 of ECA #2290-CAVKGN outlining Sediment Pond 2 Effluent limits.

5.2. EDL1

In 2023, EDL 1 effluent discharge quality was compliant with all ECA limits and objectives.

5.3. EDL2

In 2023, EDL2 effluent discharge quality was compliant with all ECA limits and objectives.

6. Effluent Discharge Rates and Mixing Ratios

Pursuant to Condition 4(8) and 4(9) of the ECA, no effluent was discharged to the Pinewood River via EDL1 and/or EDL2 before the spring melt when the Pinewood River was largely ice free and the minimum flow threshold was met at H1 hydrometric station (10,000 m³/day). In 2023, the planned effluent discharges at RRM met or were below the mixing/dilution ratio limits prescribed in Conditions 4(10), 6(6) and 6(7), with the exception of one occurrence, described in sections 6.2 and 6.3.

As a part of the Monthly Sewage Works Performance report required under Condition 12(5), Pinewood River flow, effluent discharge rates and dilution/mixing ratios are reported in tabular format. These tables are available in Appendix C which contains copies of the 2023 Monthly Performance Report tables.

6.1. Sediment Pond 2

In 2023, from April 14 to June 6 and October 31 to November 23, the 1:10 dilution ratio required by ECA Condition 6(7) for discharge to the Pinewood at the Sediment Pond 2 final discharge point was always met during active discharge, within 1%. From October 20 to October 30, Sediment Pond 2 discharge dilution ratio was set at a 1:1 with the Pinewood River as it met Provincial Water Quality Objectives and Canadian Water Quality Guidelines for the Protection of Aquatic Life. The dilution ratio was returned to the 1:10 ratio on October 31, when the Copper and Zinc no longer met CCME guidelines. The estimated amount of non-compliant (for CCME copper and Zinc) was 77,304m³. The cause of the discrepancy is assumed to be due to the compliant samples being collected at the surface and the higher concentration samples being collected from the pump, pulling from the bottom of the pond. This event was reported to MECP per ECA 2290-CAVKGN condition 12(3). RRM intends to make the discharge at 1:1 decision based on samples collected from depth in the future.

6.2. EDL1

Condition 4(10) of the ECA, which requires that the combined discharge dilution ratio for both EDL1 and EDL2 combined not exceed 1:1 with the flow in the Pinewood River recorded at H1 hydrometric station, was always met during 2023 active discharge, except for May 31, 2023 (1:102), which was within the +/-15% acceptable error.

6.3. EDL2

Condition 4(10) of the ECA, which requires that the combined discharge dilution ratio for both EDL1 and EDL2 combined not exceed 1:1 with the flow in the Pinewood River recorded at H1 hydrometric station, was always met during 2023 active discharge, except for May 31, 2023 (1:1.02), which was within the +/-15% acceptable error.

7. Incidents of Non-Compliance

At 14:00 on April 11th New Gold noticed sediment laden water entering the west creek diversion (WCD) from the Marr ditch (MD) culverts under Roen road. Total suspended solids (TSS) samples were collected along with field NTU samples at MD and at surface water sample site #25. At the time the MD was found to be at an NTU of 5005.7 and a TSS of 710 mg/L, WCD at SW25 was at an NTU of 74.1 and a TSS of 104 mg/L. The variability of the NTU and TSS data is caused by periods of improvement work to MD area and times when pumps are not running (i.e. pumps are turned off when work is occurring. When turned on, water may contain sediment for a time when encountering newly worked area then stabilize). Monitoring continued daily until a steady state was observed.

On April 14, 2023, Sediment Pond #3 exceeded the Normal Operating Water Level (NOWL). MECP was notified in accordance with ECA #CAVKGN-2290 condition 4(12) and pumping was increased. As of April 17, Sediment Pond #3 water level was 0.76m below the NOWL.

Pursuant to the ECA #2290-CAVKGN, when Sediment Pond #2 water quality met CCME and PQWO guidelines, discharge ratio was increased from 10:1 to 1:1 in October 2023. On October 30, 2023 it was found that the water quality no longer met the CCME and PWQO guidelines and discharge flow was cut back to 10:1 ratio with the Pinewood River.

8. Closing

This environmental compliance report was prepared by the New Gold Rainy River Mine Environment Department in accordance with generally accepted industry-standards. If you require further information, please contact Garnet Cornell at Garnet.Cornell@newgold.com or (807) 234-8170.

Table 1: Updated Receiving Surface Water Sampling Location

Sampling Location	Description	UTM Coordinates (NAD 83) (Zone, Easting Northing)
SW20	Pinewood River - at Heatwole Rd	15, 4351015, 5407720
SW10	Pinewood River - at former Hwy 600	15, 427720, 5407085
SW21A	Pinewood River - upstream of the confluence with Loslo Creek EDL2	15, 422189, 5409251
SW22A	Pinewood River - downstream of the confluence with Loslo Creek EDL2	15, 421846, 5409039
SW03	Pinewood River – upstream of realigned Hwy 600	15, 419490, 5408130
SW23	Pinewood River – upstream of EDL1	15, 415490, 5407225
SW24	Pinewood River – downstream of EDL1	15, 415455, 5407110
SW15	Pinewood River - upstream of the confluence with Rainy River	15, 404750, 5397655
SW28A	Clark Creek - downstream of the Clark Creek Diversion	15, 430039, 5408478
SW02	West Creek - within West Creek, near Roen Pit	15, 426295, 5411780
SW25	West Creek within the West Creek Diversion, near Sediment Pond #1	15, 424080, 5411560 15, 422560, 5410225
SW26	West Creek - within the West Creek Diversion, near Sediment Pond #2	15, 422560, 5410225
SW27	Loslo Creek - downstream of West Creek Diversion confluence and upstream of EDL2	15, 421785, 5409515
SW29	Tait Creek - upstream of the EDL1 pipeline creek crossing	15, 418294, 5407017
SW29A	McCallum Creek - on the North side of the culverts under highway 600	15, 418866, 5413486
SW16	Rainy River - upstream of the Pinewood River confluence	15, 438855, 5385790
SW17	Rainy River - downstream of the Pinewood River confluence	15, 393195, 5394425

Table 2: Average 2023 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	Water Quality Target/Limit
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River Confluence	
Ammonia, Total (mg/L)	0.0420	0.0581	0.0781	0.1368	0.1119	0.1320	0.1700	0.0553	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0043	0.0048	0.0055	0.0033	0.0077	0.0040	0.0039	0.0049	0.02* ¹
Cyanide, Free (mg/L)	0.0015	0.0015	0.0014	0.0016	0.0015	0.0015	0.0015	0.0015	0.005 ¹
Cyanide, Total (mg/L)	0.0017	0.0016	0.0014	0.0016	0.0016	0.0016	0.0016	0.0015	0.005* ¹
Field pH (mg/L)	7.49	7.56	7.30	7.34	7.43	7.50	7.54	7.68	6.5-8.5 ¹
Total Suspended Solids (mg/L)	5.66	9.9	10.4	6.9	9.8	14.5	13.9	14.1	30 ¹
Aluminium, Total (mg/L)	0.166	0.311	0.132	0.165	0.210	0.5	0.6	0.5	0.075 ¹
Arsenic, Total (mg/L)	0.0012	0.0014	0.0016	0.0017	0.0019	0.0022	0.0023	0.0017	0.01 ¹
Cadmium, Total (mg/L)	0.000011	0.000015	0.000011	0.000012	0.000013	0.00002	0.00002	0.00002	0.0001-0.0005 ¹
Chromium, Total (mg/L)	0.0006	0.0010	0.0015	0.0006	0.0007	0.0014	0.0014	0.0012	0.001* ¹
Cobalt, Total (mg/L)	0.0005	0.0004	0.0010	0.0009	0.0010	0.0010	0.0011	0.0005	0.0009 ¹
Copper, Total (mg/L)	0.00105	0.00155	0.00081	0.00193	0.00184	0.0022	0.0026	0.0022	0.005 ¹ , 0.008 ¹
Iron, Total (mg/L)	0.824	0.779	1.566	0.948	1.038	1.4918	1.3668	1.0351	0.3* ¹
Lead, Total (mg/L)	0.000212	0.000399	0.000181	0.000221	0.000182	0.0005	0.0005	0.0005	0.008 ¹
Mercury, Total (mg/L)	0.000005	0.000005	0.000005	0.000005	0.000005	0.00001	0.00001	0.00001	0.0002 ¹
Nickel, Total (mg/L)	0.00155	0.00189	0.00169	0.00187	0.00229	0.0027	0.0029	0.0022	0.025 ¹
Phosphorus, Total (mg/L)	0.058	0.075	0.156	0.121	0.135	0.100	0.089	0.066	0.1 ¹
Zinc, Total (mg/L)	0.00468	0.00559	0.00417	0.00533	0.00441	0.0056	0.0050	0.0052	0.02 ¹

* CEQG

¹ PWQO

¹ ECA SW Trigger Value

Exceedances in bold

Table 3: Average 2022 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River Confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.0372	0.0618	0.0302	0.0331	0.0411	0.0472	0.0780	0.0515	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0123	0.0100	0.0084	0.0084	0.0100	0.0093	0.0100	0.0100	0.02**^1
Cyanide, Free (mg/L)	0.0012	0.0008	0.0011	0.0009	0.0010	0.0010	0.0010	0.0008	0.005 ¹
Cyanide, Total (mg/L)	0.0008	0.0010	0.0010	0.0011	0.0009	0.0012	0.0010	0.0009	0.005*^
Field pH (mg/L)	6.74	6.97	7.33	7.31	7.06	7.00	6.93	7.03	6.5-8.5^
Total Suspended Solids (mg/L)	6.70	6.3	4.6	4.3	5.8	11.3	8.0	8.7	30 ¹
Aluminium, Total (mg/L)	0.209	0.226	0.117	0.172	0.232	0.4	0.3	0.4	0.075^
Arsenic, Total (mg/L)	0.0011	0.0012	0.0014	0.0013	0.0015	0.0017	0.0015	0.0014	0.01 ¹
Cadmium, Total (mg/L)	0.000010	0.000010	0.000010	0.000011	0.000012	0.00001	0.00001	0.00002	0.0001-0.0005^
Chromium, Total (mg/L)	0.0008	0.0007	0.0005	0.0006	0.0007	0.0009	0.0008	0.0010	0.001*^
Cobalt, Total (mg/L)	0.0003	0.0003	0.0006	0.0005	0.0004	0.0006	0.0006	0.0005	0.0009^
Copper, Total (mg/L)	0.00081	0.00104	0.00062	0.00091	0.00163	0.0015	0.0015	0.0017	0.005^,0.008 ¹
Iron, Total (mg/L)	0.635	0.672	0.801	0.747	0.682	1.1087	1.0458	0.9835	0.3*^
Lead, Total (mg/L)	0.000178	0.000207	0.000098	0.000131	0.000443	0.0003	0.0003	0.0007	0.008 ¹
Mercury, Total (mg/L)	0.000013	0.000013	0.000012	0.000012	0.000011	0.00001	0.00001	0.00001	0.0002^
Nickel, Total (mg/L)	0.00148	0.00170	0.00153	0.00160	0.00209	0.0023	0.0022	0.0020	0.025 ¹
Phosphorus, Total (mg/L)	0.036	0.046	0.077	0.070	0.066	0.072	0.063	0.055	0.1 ¹
Zinc, Total (mg/L)	0.00418	0.00970	0.00246	0.00501	0.00412	0.0036	0.0047	0.0043	0.02^

Exceedances in bold

* CEQG

^ PWQO

¹ ECA SW Trigger Value

Table 4: Average 2021 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River Confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.0247	0.0197	0.0303	0.0304	0.0347	0.0232	0.0528	0.0397	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0061	0.0061	0.0052	0.0056	0.0052	0.0048	0.0047	0.0048	0.02**^1
Cyanide, Free (mg/L)	0.0009	0.0008	0.0012	0.0006	0.0009	0.0008	0.0008	0.0008	0.005 ¹
Cyanide, Total (mg/L)	0.0011	0.0011	0.0011	0.0010	0.0011	0.0011	0.0012	0.0011	0.005**^A
Field pH (mg/L)	7.14	7.47	7.13	7.10	7.40	7.45	7.35	7.61	6.5-8.5 ^A
Total Suspended Solids (mg/L)	5.40	5.9	9.4	7.8	8.8	9.8	8.3	11.2	30 ¹
Aluminium, Total (mg/L)	0.150	0.200	0.123	0.148	0.286	0.4	0.4	0.4	0.075 ^A
Arsenic, Total (mg/L)	0.0012	0.0014	0.0018	0.0016	0.0017	0.0021	0.0022	0.0200	0.01 ¹
Cadmium, Total (mg/L)	0.000010	0.000011	0.000007	0.000009	0.000014	0.00002	0.00002	0.00002	0.0001-0.0005 ^A
Chromium, Total (mg/L)	0.0004	0.0005	0.0004	0.0004	0.0006	0.0009	0.0008	0.0009	0.001**^A
Cobalt, Total (mg/L)	0.0005	0.0005	0.0007	0.0009	0.0007	0.0008	0.0008	0.0004	0.0009 ^A
Copper, Total (mg/L)	0.00085	0.00097	0.00097	0.00100	0.00242	0.0017	0.0018	0.0020	0.005 ^A ,0.008 ¹
Iron, Total (mg/L)	0.974	0.738	0.987	1.354	0.811	1.1023	1.0297	0.6844	0.3**^A
Lead, Total (mg/L)	0.000131	0.000165	0.000099	0.000129	0.000220	0.0004	0.0004	0.0007	0.008 ¹
Mercury, Total (mg/L)	0.000026	0.000025	0.000028	0.000022	0.000018	0.00002	0.00002	0.00002	0.0002 ^A
Nickel, Total (mg/L)	0.00146	0.00163	0.00140	0.00166	0.00236	0.0024	0.0024	0.0018	0.025 ¹
Phosphorus, Total (mg/L)	0.048	0.049	0.139	0.104	0.069	0.063	0.062	0.086	0.1 ¹
Zinc, Total (mg/L)	0.00347	0.00260	0.00304	0.00328	0.00470	0.0033	0.0045	0.0052	0.02 ^A

* CEQG

^ PWQO

¹ ECA SW Trigger Value

Exceedances in bold

Table 5: Average 2020 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwale Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River Confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.0331	0.040	0.042	0.044	0.068	0.041	0.072	0.049	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0008	0.0008	0.0009	0.0009	0.0016	0.0009	0.0012	0.0010	0.02**^1
Cyanide, Free (mg/L)	0.0009	0.0008	0.0007	0.0007	0.0007	0.0010	0.0007	0.0008	0.005 ¹
Cyanide, Total (mg/L)	0.0006	0.0008	0.0006	0.0006	0.0008	0.0011	0.0010	0.0007	0.005*^
Field pH (mg/L)	7.21	7.29	7.31	7.37	7.26	7.26	7.26	7.32	6.5-8.5^
Total Suspended Solids (mg/L)	4.5	5.0	7.4	6.4	11.6	13.5	10.1	12.0	30 ¹
Aluminium, Total (mg/L)	0.185	0.194	0.233	0.202	0.401	0.568	0.406	0.610	0.075^
Arsenic, Total (mg/L)	0.0011	0.0013	0.0014	0.0016	0.0014	0.0019	0.0017	0.0017	0.01 ¹
Cadmium, Total (mg/L)	0.000010	0.000012	0.000011	0.000011	0.000017	0.000020	0.000018	0.000021	0.0001-0.0005^
Chromium, Total (mg/L)	0.0005	0.0005	0.0006	0.0005	0.0009	0.0014	0.0012	0.0013	0.001*^
Cobalt, Total (mg/L)	0.0004	0.0004	0.0005	0.0005	0.0005	0.0007	0.0007	0.0006	0.0009^
Copper, Total (mg/L)	0.00082	0.00094	0.00111	0.00147	0.00325	0.00191	0.00292	0.00239	0.005^,0.008 ¹
Iron, Total (mg/L)	0.767	0.664	0.804	0.617	0.853	1.161	1.017	1.198	0.3*^
Lead, Total (mg/L)	0.000143	0.000159	0.000176	0.000187	0.000293	0.000523	0.000365	0.000615	0.008 ¹
Mercury, Total (mg/L)	0.000005	0.000005	0.000005	0.000005	0.000005	0.000004	0.000005	0.000005	0.0002^
Nickel, Total (mg/L)	0.00152	0.00179	0.00183	0.00177	0.00274	0.00262	0.00233	0.00249	0.025 ¹
Phosphorus, Total (mg/L)	0.002	0.050	0.069	0.062	0.054	0.059	0.057	0.055	0.1 ¹
Zinc, Total (mg/L)	0.00383	0.00305	0.00488	0.00524	0.00523	0.00401	0.00430	0.00533	0.02^

* CEQG

Exceedances in bold

^ PWQO

¹ ECA SW Trigger Value

Table 6: Average 2019 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River Confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.1292	0.062	0.106	0.090	0.116	0.041	0.075	0.029	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0013	0.0011	0.0010	0.0009	0.0011	0.0009	0.0010	0.0010	0.02* ¹
Cyanide, Free (mg/L)	0.0008	0.0008	0.0008	0.0008	0.0008	0.0010	0.0011	0.0006	0.005 ¹
Cyanide, Total (mg/L)	0.0008	0.0010	0.0009	0.0009	0.0011	0.0011	0.0011	0.0008	0.005* ¹
Field pH (mg/L)	7.38	7.59	7.33	7.44	7.35	7.26	7.29	7.44	6.5-8.5 ¹
Total Suspended Solids (mg/L)	7.6	5.6	9.9	17.7	15.7	13.5	12.8	12.9	30 ¹
Aluminium, Total (mg/L)	0.212	0.190	0.229	0.441	0.473	0.568	0.498	0.483	0.075 ¹
Arsenic, Total (mg/L)	0.0013	0.0015	0.0015	0.0015	0.0017	0.0019	0.0019	0.0013	0.01 ¹
Cadmium, Total (mg/L)	0.000013	0.000014	0.000015	0.000016	0.000024	0.000020	0.000021	0.000016	0.0001-0.0005 ¹
Chromium, Total (mg/L)	0.0010	0.0008	0.0007	0.0011	0.0013	0.0014	0.0013	0.0011	0.001* ¹
Cobalt, Total (mg/L)	0.0007	0.0008	0.0007	0.0007	0.0011	0.0007	0.0008	0.0004	0.0009 ¹
Copper, Total (mg/L)	0.00103	0.00094	0.00104	0.00182	0.00366	0.00191	0.00200	0.00166	0.005 ¹ ,0.008 ¹
Iron, Total (mg/L)	1.273	1.022	1.145	1.329	1.454	1.161	1.354	0.781	0.3* ¹
Lead, Total (mg/L)	0.000189	0.000184	0.000258	0.000316	0.000392	0.000523	0.000506	0.000377	0.008 ¹
Mercury, Total (mg/L)	0.000004	0.000004	0.000005	0.000004	0.000004	0.000004	0.000004	0.000004	0.0002 ¹
Nickel, Total (mg/L)	0.00171	0.00191	0.00193	0.00216	0.00318	0.00262	0.00273	0.00176	0.025 ¹
Phosphorus, Total (mg/L)	0.002	0.090	0.137	0.125	0.111	0.059	0.069	0.036	0.1 ¹
Zinc, Total (mg/L)	0.00483	0.00301	0.00295	0.00789	0.00642	0.00401	0.00480	0.00410	0.02 ¹

* CEQG

Exceedances in bold

¹ PWQO

¹ ECA SW Trigger Value

Table 7: Average 2018 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.1100	0.0976	0.210	0.144	0.099	0.130	0.115	0.033	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0010	0.0010	0.0025	0.0020	0.0011	0.0011	0.001	0.0012	0.02* ¹
Cyanide, Free (mg/L)	0.0007	0.0007	0.0006	0.0007	0.0006	0.0008	0.0012	0.0005	0.005 ¹
Cyanide, Total (mg/L)	0.0006	0.0007	0.0008	0.0007	0.0011	0.0007	0.0007	0.0005	0.005* ¹
Field pH (mg/L)	7.40	7.57	7.79	7.70	7.65	7.70	7.74	7.92	6.5-8.5 ¹
Total Suspended Solids (mg/L)	4.4	8.0	16.4	10.6	12.2	20.0	28.8	9.7	30 ¹
Aluminium, Total (mg/L)	0.133	0.223	0.274	0.259	0.501	0.937	1.176	0.797	0.075 ¹
Arsenic, Total (mg/L)	0.0011	0.0014	0.0019	0.0018	0.0016	0.0019	0.0024	0.0012	0.01 ¹
Cadmium, Total (mg/L)	0.001090	0.000015	0.000011	0.000010	0.000020	0.000023	0.000026	0.000014	0.0001-0.0005 ¹
Chromium, Total (mg/L)	0.0005	0.0007	0.0008	0.0007	0.0011	0.0018	0.0022	0.0013	0.001* ¹
Cobalt, Total (mg/L)	0.0005	0.0006	0.0009	0.0006	0.0006	0.0009	0.0011	0.0004	0.0009 ¹
Copper, Total (mg/L)	0.00087	0.00127	0.00126	0.00134	0.00303	0.00225	0.00265	0.00183	0.005 ¹ ,0.008 ¹
Iron, Total (mg/L)	0.975	0.919	2.122	1.058	0.929	1.674	1.878	0.856	0.3* ¹
Lead, Total (mg/L)	0.000163	0.000227	0.000292	0.000232	0.000370	0.000711	0.000900	0.000406	0.008 ¹
Mercury, Total (mg/L)	0.000004	0.000003	0.000003	0.000002	0.000003	0.000005	0.000006	0.000005	0.0002 ¹
Nickel, Total (mg/L)	0.00156	0.00185	0.00207	0.00205	0.00326	0.00316	0.00359	0.00191	0.025 ¹
Phosphorus, Total (mg/L)	0.058	0.081	0.285	0.157	0.069	0.089	0.106	0.045	0.1 ¹
Zinc, Total (mg/L)	0.00617	0.00340	0.00513	0.00887	0.00631	0.00522	0.00687	0.00415	0.02 ¹

* CEQG

¹ PWQO

¹ ECA SW Trigger Value

Exceedances in bold

Table 8: Average 2017 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.0522	0.0462	0.110	0.104	0.106			0.052	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0008	0.0010	0.0009	0.0010	0.0012			0.0010	0.02* ¹
Cyanide, Free (mg/L)									0.005 ¹
Cyanide, Total (mg/L)	0.0010	0.0008	0.0010	0.0010	0.0011			0.0010	0.005* ¹
Field pH (mg/L)	7.24	7.36	7.37	7.49	7.53			7.57	6.5-8.5 ¹
Total Suspended Solids (mg/L)	2.9	7.2	4.4	3.9	12.2			16.0	30 ¹
Aluminium, Total (mg/L)	0.155	0.225	0.114	0.128	0.447			0.764	0.075 ¹
Arsenic, Total (mg/L)	0.0009	0.0011	0.0012	0.0012	0.0013			0.0013	0.01 ¹
Cadmium, Total (mg/L)	0.000008	0.000009	0.000008	0.000008	0.000015			0.000022	0.0001-0.0005 ¹
Chromium, Total (mg/L)	0.0005	0.0006	0.0004	0.0005	0.0009			0.0015	0.001* ¹
Cobalt, Total (mg/L)	0.0003	0.0004	0.0003	0.0003	0.0005			0.0006	0.0009 ¹
Copper, Total (mg/L)	0.00078	0.00088	0.00091	0.00088	0.00179			0.00192	0.005 ¹ ,0.008 ¹
Iron, Total (mg/L)	0.509	0.662	0.428	0.448	0.739			1.174	0.3* ¹
Lead, Total (mg/L)	0.000090	0.000161	0.000126	0.000090	0.000270			0.000488	0.008 ¹
Mercury, Total (mg/L)	0.000003	0.000003	0.000003	0.000002	0.000003			0.000005	0.0002 ¹
Nickel, Total (mg/L)	0.00143	0.00162	0.00145	0.00155	0.00213			0.00224	0.025 ¹
Phosphorus, Total (mg/L)	0.023	0.033	0.030	0.032	0.039			0.041	0.1 ¹
Zinc, Total (mg/L)	0.00914	0.00421	0.00513	0.00559	0.00478			0.00696	0.02 ¹

* CEQG

¹ PWQO

¹ ECA SW Trigger Value

Exceedances in bold

Table 9: Average 2016 Pinewood River Water Quality for Selected Parameters

Location	SW20	SW10	SW21A	SW22A	SW03	SW23	SW24	SW15	
Description	Pinewood at Heatwole Rd	Pinewood at former Hwy 600	Pinewood upstream of EDL2	Pinewood downstream of EDL2	Pinewood upstream of realigned Hwy 600	Pinewood upstream of EDL1	Pinewood downstream of EDL1	Pinewood upstream of Rainy River confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.0379	0.0469	0.091	0.050	0.061			0.026	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0010	0.0010	0.001	0.0010	0.0010			0.0013	0.02* ¹
Cyanide, Free (mg/L)									0.005 ¹
Cyanide, Total (mg/L)									0.005* ¹
Field pH (mg/L)	7.14	7.27	7.23	7.28	7.34			7.49	6.5-8.5 ¹
Total Suspended Solids (mg/L)	4.0	8.4	8.7	3.7	11.4			16.1	30 ¹
Aluminium, Total (mg/L)	0.207	0.284	0.152	0.137	0.343			0.717	0.075 ¹
Arsenic, Total (mg/L)	0.0010	0.0011	0.0011	0.0011	0.0012			0.0013	0.01 ¹
Cadmium, Total (mg/L)	0.000011	0.000010	0.000013	0.000010	0.000015			0.000021	0.0001-0.0005 ¹
Chromium, Total (mg/L)	0.0006	0.0008	0.0005	0.0004	0.0008			0.0014	0.001* ¹
Cobalt, Total (mg/L)	0.0004	0.0005	0.0003	0.0004	0.0005			0.0005	0.0009 ¹
Copper, Total (mg/L)	0.00086	0.00100	0.00115	0.00081	0.00166			0.00201	0.005 ¹ ,0.008 ¹
Iron, Total (mg/L)	0.766	0.816	0.517	0.585	0.837			1.064	0.3* ¹
Lead, Total (mg/L)	0.000149	0.000218	0.000153	0.000111	0.000232			0.000513	0.008 ¹
Mercury, Total (mg/L)	0.000003	0.000003	0.000002	0.000003	0.000003			0.000003	0.0002 ¹
Nickel, Total (mg/L)	0.00158	0.00170	0.00167	0.00144	0.00207			0.00222	0.025 ¹
Phosphorus, Total (mg/L)									0.1 ¹
Zinc, Total (mg/L)	0.00395	0.00621	0.00530	0.00240	0.00354			0.00642	0.02 ¹

* CEQG

¹ PWQO

¹ ECA SW Trigger Value

Exceedances in bold

Table 10: 2023 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2023-01-09	<i>0.0100</i>	0.0004	11.0	0.0015	0.0011	0.0009	0.0019	0.2320
	2023-02-10	<i>0.0100</i>	0.0007	14.5	0.0018	0.0009	0.0002	0.0019	0.3240
	2023-03-08	<i>0.0100</i>	0.0009	13.0	0.0009	0.0022	0.0008	0.0017	0.1140
	2023-04-11	<i>0.0010</i>	0.0004	8.5	0.0008	0.0015	0.0001	0.0018	0.0150
	2023-05-02	<i>0.0025</i>	0.0020	6.6	0.0023	0.0023	0.0001	0.0023	0.1260
	2023-06-06	<i>0.0010</i>	0.0020	3.8	0.0022	0.0005	0.0001	0.0017	
	2023-07-08	<i>0.0010</i>	0.0020	3.8	0.0018	0.0009	0.0001	0.0015	0.0690
	2023-08-05	<i>0.0010</i>	0.0020	5.9	0.0037	0.0009	0.0001	0.0020	0.1980
	2023-09-06	<i>0.0010</i>	0.0020	3.9	0.0024	0.0084	0.0002	0.0017	0.1350
	2023-10-04	<i>0.0010</i>	0.0020	4.0	0.0011	0.0022	0.0001	0.0022	0.0500
2023-11-12	<i>0.0010</i>	0.0020	3.4	0.0010	0.0008	0.0001	0.0017	0.0540	

Italicized results denote <DL

Table 11: 2023 ECA Surface Water Trigger Values for Surface Water Location SW24

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1
SW24 - Pinewood River downstream of EDL1	2023-01-08	<i>0.0100</i>	0.0001	7.50	0.00113	0.00084	0.00024	0.00208	0.08
	2023-02-07	<i>0.0010</i>	0.0013	12.00	0.00139	0.00118	0.00047	0.00252	0.1
	2023-03-07	<i>0.0100</i>	0.0007	39.50	0.00202	0.00235	0.00098	0.00406	0.17
	2023-05-02	<i>0.0100</i>	0.0006	14.00	0.00086	0.00162	0.00024	0.00174	0.01
	2023-06-06	<i>0.0010</i>	0.002	21.90	0.0022	0.00204	0.000443	0.00274	0.094
	2023-07-09	<i>0.0010</i>	0.0021	13.20	0.00323	0.00211	0.00084	0.00351	
	2023-08-06	<i>0.0010</i>	0.0028	10.30	0.00405	0.00294	0.00103	0.00411	0.136
	2023-09-05	<i>0.0010</i>	0.002	6	0.005	0.00249	0.000863	0.00387	0.167
	2023-10-03	<i>0.0010</i>	0.002	8	0.00448	0.00291	0.00064	0.00343	0.136
	2023-11-08	<i>0.0017</i>	0.002	11.30	0.00114	0.00153	0.000215	0.00232	0.05
	2023-11-12	<i>0.0102</i>	0.002	5.70	0.00101	0.00155	0.000132	0.00238	0.05
2023-12-08	<i>0.0010</i>	0.002	21.50	0.00109	0.00238	0.000413	0.00256	0.05	

Italicized results denote <DL

Table 12: 2022 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2022-01-11	<i>0.0100</i>	0.0002	4.0	0.0012	0.0009	0.0002	0.0020	0.1000
	2022-02-16	<i>0.0100</i>	0.0008	5.0	0.0011	0.0007	0.0001	0.0017	0.1100
	2022-03-08	<i>0.0100</i>	0.0004	3.5	0.0010	0.0008	0.0002	0.0019	0.1100
	2022-04-05	<i>0.0010</i>	0.0006	3.0	0.0006	0.0014	0.0002	0.0012	0.0300
	2022-05-04	<i>0.0100</i>	0.0011	3.5	0.0006	0.0017	0.0002	0.0012	0.0300
	2022-06-07	<i>0.0100</i>	0.0004	3.5	0.0017	0.0014	0.0001	0.0016	0.0600
	2022-07-12		0.0006	5.5	0.0021	0.0009	0.0001	0.0016	0.1100
	2022-08-10	<i>0.0100</i>	0.0007	8.0	0.0020	0.0010	0.0002	0.0021	0.0550
	2022-09-07		0.0020	6.0	0.0020	0.0007	0.0001	0.0016	0.0750
	2022-10-04	<i>0.0100</i>	0.0020	2.0	0.0011	0.0006	0.0000	0.0012	0.0300
2022-11-11	<i>0.0100</i>	0.0011	3.0	0.0010	0.0007	0.0001	0.0012	0.0280	
2022-12-11		0.0040	0.0003	3.5	0.0010	0.0006	0.0002	0.0016	0.0650

Italicized results denote <DL

Table 13: 2022 ECA Surface Water Trigger Values for Surface Water Location SW24

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1
SW24 - Pinewood River downstream of EDL1	2022-01-11	<i>0.0100</i>	0.0003	9.50	0.0013	0.0019	0.00029	0.00246	0.07
	2022-02-08	<i>0.0100</i>	0.0015	13.00	0.00129	0.00156	0.00043	0.00278	0.075
	2022-03-08	<i>0.0100</i>	0.002	7.50	0.00123	0.00132	0.00036	0.0025	0.105
	2022-04-05	<i>0.0010</i>	0.0007	3.50	0.0006	0.0013	0.00017	0.0013	0.035
	2022-05-03	<i>0.0100</i>	0.002	4.00	0.00069	0.0015	0.00022	0.00116	0.03
	2022-06-07	<i>0.0100</i>	0.0008	6.50	0.0013	0.0016	0.00021	0.00168	0.03
	2022-07-05		0.0005	6.00	0.00235	0.00134	0.00027	0.00218	0.075
	2022-08-10	<i>0.0100</i>	0.0003	9	0.00297	0.00134	0.00031	0.0026	0.085
	2022-10-04	<i>0.0100</i>	0.0007	9.50	0.00164	0.0012	0.00028	0.00204	0.046
	2022-11-12	<i>0.0100</i>	0.0005	7.00	0.00091	0.00138	0.000116	0.00256	0.05

Italicized results denote <DL

Table 14: 2021 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspended Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2021-01-12	0.0001	0.0005	13.5	0.0018	0.0007	0.0002	0.0021	0.2300	0.0050
	2021-02-17	0.0003	0.0005	26.5	0.0030	0.0016	0.0004	0.0027	0.3660	0.0120
	2021-03-24	0.0000	0.0002	4.0	0.0007	0.0010	0.0002	0.0012	0.0460	0.0026
	2021-04-21	0.0001	0.0005	2.5	0.0007	0.0012	0.0001	0.0012	0.0180	0.0014
	2021-05-12	0.0100	0.0007	3.0	0.0011	0.0011	0.0000	0.0014	0.0150	0.0010
	2021-06-08	0.0100	0.0010	8.5	0.0030	0.0005	0.0001	0.0017	0.1350	0.0015
	2021-07-09									
	2021-08-10									
	2021-09-15	0.0100	0.0002	8.5	0.0016	0.0006	0.0001	0.0018	0.0750	0.0020
	2021-10-13	0.0100	0.0006	2.5	0.0013	0.0011	0.0000	0.0016	0.0400	0.0020
	2021-11-09	0.0100	0.0013	1.0	0.0012	0.0013	0.0000	0.0012	0.0100	0.0020
2021-12-14	0.0100	0.0003	16.0	0.0010	0.0011	0.0001	0.0019	0.0250	0.0170	

Italicized results denote <DL

Table 15: 2021 ECA Surface Water Trigger Values for Surface Water Location SW24

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspended Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW24 -Pinewood River downstream of EDL1	2021-01-12	<i>0.0001</i>	0.0003	10.50	0.00147	0.0015	0.0008	0.00264	0.07	0.0045
	2021-02-17	<i>0.0004</i>	0.0007	13.00	0.0019	0.0023	0.0004	0.00348	0.102	0.015
	2021-03-23	<i>0.0000</i>	0.0004	6.50	0.00078	0.0012	0.0005	0.00134	0.044	0.0026
	2021-04-20	<i>0.0001</i>	0.0006	6.50	0.00078	0.0013	0.0006	0.00124	0.02	0.0018
	2021-05-11	<i>0.0100</i>	0.0004	8.50	0.00114	0.00192	0.0012	0.00206	0.03	0.0025
	2021-06-08	<i>0.0100</i>	0.0007	15.00	0.00384	0.00274	0.0006	0.0038	0.105	0.006
	2021-07-13	<i>0.0020</i>	0.0013	4.00	0.00707	0.00158	0.0013	0.00366	0.125	0.003
	2021-08-14									
	2021-09-15									
	2021-10-13	<i>0.0100</i>	0.001	7.50	0.00147	0.00132	0.0012	0.00182	0.05	0.004
	2021-11-09	<i>0.0100</i>	0.0014	3.00	0.00123	0.00232	0.0007	0.00134	0.01	0.0015
2021-12-10										

Italicized results denote <DL

Table 16: 2020 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2020-01-09	<i>0.0010</i>	0.0008	9.5	0.0010	0.00148	0.000240	0.0021	0.080	0.010
	2020-02-05	<i>0.0010</i>	0.0008	6.0	0.0010	0.00116	0.000215	0.0020	0.080	0.009
	2020-03-11	<i>0.0010</i>	0.0013	8.5	0.0010	0.00144	0.000240	0.0021	0.080	0.023
	2020-04-09	<i>0.0010</i>	0.0006	9.0	0.0007	0.00166	0.000310	0.0016	0.052	0.004
	2020-05-13	<i>0.0010</i>	0.0004	9.5	0.0010	0.00144	0.000230	0.0017	0.032	0.004
	2020-06-17	0.0007	0.0011	5.0	0.0016	0.00095	0.000180	0.0018	0.088	0.003
	2020-07-10	0.0010	0.0006	3.0	0.0021	0.00080	0.000090	0.0016	0.005	0.002
	2020-08-11	<i>0.0010</i>	0.0006	20.0	0.0040	0.00188	0.000430	0.0025	0.205	0.006
	2020-09-15	<i>0.0010</i>	0.0003	4.0	0.0015	0.00026	0.000030	0.0012	0.070	0.001
	2020-10-19	<i>0.0010</i>	0.0003	2.5	0.0026	0.00096	0.000080	0.0011	0.005	0.002
	2020-11-04	<i>0.0010</i>	0.0007	1.5	0.0013	0.00264	0.000150	0.0017	0.015	0.001
2020-11-10	<i>0.0010</i>	0.0008	0.5	0.0013	0.00370	0.000100	0.0016	0.020	0.002	
2020-12-16	0.0001	0.0007	4.5	0.0012	0.00080	0.000130	0.0020	0.075	0.004	

Italicized results denote <DL

Table 17: 2020 ECA Surface Water Trigger Values for Surface Water Location SW24

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW24 - Pinewood River downstream of EDL1	2020-01-09	<i>0.0010</i>	0.0004	10.5	0.0010	0.00152	0.00037	0.00234	0.065	0.0058
	2020-02-04	<i>0.0010</i>	0.0007	9.5	0.0010	0.00150	0.00035	0.00216	0.070	0.0044
	2020-03-10	<i>0.0010</i>	0.0008	22.0	0.0011	0.00160	0.00051	0.00262	0.085	0.0075
	2020-04-07	<i>0.0010</i>	0.0008	19.0	0.0007	0.00166	0.00039	0.00180	0.060	0.0040
	2020-05-12	0.0050	0.0005	11.5	0.0014	0.00318	0.00031	0.00214	0.024	0.0035
	2020-06-17	0.0006	0.0015	19.0	0.0019	0.00230	0.00052	0.00268	0.050	0.0044
	2020-07-07	0.0006	0.0013	15.0	0.0038	0.00220	0.00064	0.00286	0.132	0.0038
	2020-08-11	<i>0.0010</i>	0.0005	4.0	0.0024	0.00332	0.00041	0.00378	0.060	0.0025
	2020-09-15	<i>0.0010</i>	0.0004	3.5	0.0025	0.00186	0.00042	0.00252	0.095	0.0055
	2020-10-14	<i>0.0010</i>	<i>0.0001</i>	4.0	0.0021	0.00868	0.00024	0.00176	0.030	0.0015
	2020-11-04	<i>0.0010</i>	0.0007	3.5	0.0014	0.00508	0.00011	0.00138	0.015	0.0005
2020-11-10	<i>0.0010</i>	0.0006	6.5	0.0014	0.00370	0.00023	0.00190	0.020	0.0025	
2020-12-16	0.00004	0.0011	3.5	0.00120	0.00140	0.00024	0.00230	0.035	0.0100	

Table 18: 2019 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2019-01-16	<i>0.0010</i>	0.0018	7.0	0.00147	0.00174	0.000215	0.0022	0.145	0.022
	2019-02-13	<i>No Sample</i>								
	2019-03-12	<i>0.0010</i>	0.0007	96.0	0.00283	0.00302	0.001590	0.0055	0.730	0.018
	2019-04-09	<i>0.0010</i>	0.0004	22.5	0.00063	0.00170	0.000375	0.0013	0.065	0.005
	2019-05-15	<i>0.0010</i>	0.0006	15.5	0.00137	0.00506	0.000340	0.0022	0.060	0.015
	2019-06-12	<i>0.0010</i>	0.0006	8.0	0.00125	0.00172	0.000190	0.0019	0.045	0.004
	2019-07-08	<i>0.0010</i>	0.0008	4.0	0.00181	0.00134	0.000110	0.0016	0.050	0.002
	2019-08-13	<i>0.0010</i>	0.0012	9.0	0.0028	0.00090	0.000150	0.0018		0.002
	2019-09-19	<i>0.0010</i>	0.0007	3.5	0.00145	0.00058	0.000030	0.0017	0.055	0.001
	2019-10-08	<i>0.0010</i>	0.0001	2.5	0.00092	0.00120	0.000025	0.0015	0.020	0.003
	2019-11-14	<i>0.0005</i>	0.0004	6.5	0.00088	0.00116	0.000110	0.0016	0.025	0.004
2019-12-12	<i>0.0005</i>	0.0007	20.5	0.00098	0.00160	0.000345	0.0023	0.055	0.011	

Italicized results denote <DL

Table 19: 2019 ECA Surface Water Trigger Values for Surface Water Location SW24

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW24 - Pinewood River downstream of EDL1	2019-01-15	<i>0.0010</i>	0.0012	12.5	0.00132	0.00192	0.00050	0.00286	0.080	0.0034
	2019-02-12	<i>0.0010</i>	0.0009	14.0	0.00188	0.00262	0.00079	0.00406	0.105	0.0054
	2019-03-12	<i>0.0010</i>	0.0007	11.0	0.00178	0.00172	0.00072	0.00364	0.145	0.0042
	2019-04-09	<i>0.0010</i>	0.0006	27.5	0.00069	0.00196	0.00054	0.00178	0.090	0.0062
	2019-05-15	<i>0.0010</i>	0.0011	10.5	0.00124	0.00228	0.00032	0.00188	0.035	0.0106
	2019-06-11	<i>0.0010</i>	0.0014	10.5	0.00144	0.00168	0.00030	0.00236	0.045	0.0030
	2019-07-08	<i>0.0010</i>	0.0014	17.0	0.00412	0.00302	0.00095	0.00448	0.115	0.0048
	2019-08-13	<i>0.0010</i>	0.0019	15.5	0.00560	0.00260	0.00107	0.00430	0.000	0.0050
	2019-09-18	<i>0.0010</i>	0.0011	14.0	0.00163	0.00116	0.00033	0.00196	0.050	0.0018
	2019-10-08	<i>0.0010</i>	0.0013	7.5	0.00091	0.00112	0.00011	0.00150	0.025	0.0022
	2019-11-14	<i>0.0010</i>	0.0006	3.5	0.00115	0.00240	0.00017	0.00178	0.030	0.0046
2019-12-13	<i>0.0010</i>	0.0008	10.5	0.00096	0.00148	0.00029	0.00210	0.035	0.0064	

Italicized results denote <DL

Table 20: 2018 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2018-01-09	<i>0.0010</i>		5.0	0.0013	0.00176	0.000250	0.0022	0.074	0.031
	2018-02-20	0.0130		25.0	0.0019	0.00092	0.000520	0.0025	0.432	0.004
	2018-03-13	<i>0.0010</i>		14.5	0.0016	0.00192	0.000490	0.0026	0.230	0.026
	2018-04-10	<i>0.0010</i>	0.0001	4.5	0.0010	0.00146	0.000200	0.0018	0.082	0.009
	2018-05-08	<i>0.0010</i>	0.0006	7.5	0.0012	0.00130	0.000240	0.0017	0.068	0.004
	2018-06-12	<i>0.0010</i>	0.0006	4.5	0.0021	0.00124	0.000090	0.0017	0.116	0.003
	2018-07-17	<i>0.0010</i>	0.0009	33.5	0.0032	0.00146	0.000380	0.0028	0.202	0.006
	2018-08-09	<i>0.0010</i>	0.0009	4.5	0.0033	0.00118	0.000250	0.0022	0.225	0.005
	2018-09-11	<i>0.0010</i>	0.0014	14.5	0.0031	0.00050	0.000040	0.0016	0.335	0.001
	2018-10-16	<i>0.0010</i>	0.0001	6.0	0.0008	0.00164	0.000080	0.0016	0.055	0.005
	2018-11-14	<i>0.0010</i>	0.0008	2.5	0.0008	0.00128	0.000095	0.0017	0.010	0.005
2018-12-04	<i>0.0010</i>	0.0009	5.5	0.0012	0.00140	0.000150	0.0021	0.055	0.007	

Italicized results denote <DL

Table 21: 2018 ECA Surface Water Trigger Values for Surface Water Location SW24

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspend Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW24 -Pinewood River downstream of EDL1	2018-01-09	0.0020		19.0	0.0012	0.00238	0.00075	0.00358	0.082	0.0076
	2018-02-20	0.0020		25.0	0.0014	0.00228	0.00089	0.00354	0.128	0.0060
	2018-03-13	<i>0.0010</i>		20.0	0.0015	0.00244	0.00110	0.00404	0.156	0.0068
	2018-04-10	<i>0.0010</i>	0.0002	5.0	0.0009	0.00148	0.00030	0.00184	0.050	0.0030
	2018-05-08	<i>0.0010</i>	<i>0.0005</i>	17.5	0.0011	0.00210	0.00053	0.00238	0.050	0.0048
	2018-06-12	<i>0.0010</i>	<i>0.0001</i>	27.0	0.0022	0.00336	0.00096	0.00364	0.086	0.0082
	2018-07-17	<i>0.0010</i>	0.0010	118.0	0.0059	0.00624	0.00258	0.00854	0.222	0.0206
	2018-08-07	<i>0.0010</i>	0.0014	43.5	0.0052	0.00334	0.00149	0.00452	0.165	0.0098
	2018-09-11	<i>0.0010</i>	0.0009	48.5	0.0065	0.00342	0.00142	0.00508	0.220	0.0060
	2018-10-16	<i>0.0010</i>	0.0004	8.5	0.0008	0.00140	0.00022	0.00168	0.045	0.0024
	2018-11-13	<i>0.0010</i>	0.0008	6.5	0.0009	0.00152	0.00022	0.00180	0.015	0.0032
2018-12-04	<i>0.0010</i>	0.0007	6.5	0.0011	0.00188	0.00034	0.00248	0.050	0.0040	

Italicized results denote <DL

Table 22: 2017 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspended Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Surface Water Trigger Value		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2017-01-25	<i>0.0005</i>		5.0	0.0010	0.00090	0.000200	0.0016		0.008
	2017-02-15	<i>0.0010</i>		6.0	0.0011	0.00090	0.000100	0.0024		0.010
	2017-03-29	<i>0.0010</i>		9.0	0.0005	0.00130	0.000200	0.0011		0.004
	2017-04-26	<i>0.0010</i>		3.5	0.0007	0.00090	0.000060	0.0012		0.002
	2017-05-25	<i>0.0010</i>		2.5	0.0009	0.00085	0.000040	0.0016		0.002
	2017-06-21	<i>0.0010</i>		5.0	0.0014	0.00070	0.000080	0.0015		0.004
	2017-07-18			1.5	0.0020	0.00030	0.000070	0.0014		0.003
	2017-08-18			5.5	0.0030	0.00050	0.000110	0.0021		0.004
	2017-09-26	<i>0.0010</i>		2.0	0.0011	0.00100	0.000005	0.0013		0.003
	2017-10-30	<i>0.0010</i>		2.0	0.0008	0.00100	0.000040	0.0012		0.003
	2017-11-20	<i>0.0010</i>		2.5	0.0008	0.00100	0.000080	0.0015		0.015
2017-12-14	<i>0.0010</i>		2.5	0.0008	0.00120	0.000100	0.0017		0.012	

Italicized results denote <DL

Table 23: 2016 ECA Surface Water Trigger Values for Surface Water Location SW22A

Location	Sample Date	Ammonia, Unionized (mg/L)	Cyanide, Free (mg/L)	Total Suspended Solids (mg/L)	Arsenic, Total (mg/L)	Copper, Total (mg/L)	Lead, Total (mg/L)	Nickel, Total (mg/L)	Phosphorous, Total (mg/L)	Zinc, Total (mg/L)
ECA Benchmark		0.020	0.005	30	0.01	0.008	0.008	0.025	0.1	0.09
SW22A - Pinewood River downstream of the confluence with Loslo Creek/EDL2	2016-01-27	<i>0.0010</i>		3.5	0.001	0.00090	0.00020	0.00160		0.00500
	2016-02-29	<i>0.0010</i>		3.5	0.0011	0.00090	0.00021	0.00180		0.00500
	2016-03-23	<i>0.0005</i>		7.5	0.0006	0.00150	0.00026	0.00140		0.00350
	2016-04-18	<i>0.0010</i>		4.5	0.0006	0.00110	0.00011	0.00120		0.00150
	2016-05-18	<i>0.0010</i>		3.5	0.001	0.00090	0.00003	0.00150		0.00100
	2016-06-22	<i>0.0010</i>		1.0						
	2016-07-15	<i>0.0010</i>		0.5	0.0017	0.00070	0.00005	0.00160		0.00150
	2016-08-16	<i>0.0010</i>		3.0	0.0021	0.00040	0.00001	0.00150		0.00050
	2016-09-21	<i>0.0010</i>		4.0	0.0011	0.00040	0.00006	0.00140		0.00050
	2016-10-22	<i>0.0010</i>		3.5	0.0007	0.00070	0.00006	0.00110		0.00200
	2016-11-16	<i>0.0010</i>		6.0	0.0008	0.00060	0.00012	0.00130		0.00350
2016-12-21	No Sample									

Italicized results denote <DL

Table 24: Average 2023 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29A	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teepale Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.055	0.085	0.037	0.028	0.033	0.017	0.020	0.014	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0031	0.0093	0.0038	0.0041	0.0042	0.0011	0.0051	0.0048	0.02*^
Cyanide, Free (mg/L)	0.0015	0.0015	0.0016	0.0014	0.0014	0.0021	0.0015	0.0015	
Cyanide, Total (mg/L)	0.0016	0.0016	0.0017	0.0016	0.0015	0.0020	0.0013	0.0015	0.005*^
Field pH (mg/L)	7.69	7.26	7.58	7.77	7.44	7.29	7.59	7.81	6.5-8.5^
Total Suspended Solids (mg/L)	5.1	5.2	19.2	9.4	6.6	3.0	11.0	10.3	
Aluminium, Total (mg/L)	0.081	0.090	0.450	0.330	0.239	0.072	0.226	0.267	0.075^
Arsenic, Total (mg/L)	0.0012	0.0011	0.0012	0.0014	0.0014	0.0006	0.0005	0.0006	0.05*
Cadmium, Total (mg/L)	0.000010	0.000011	0.000014	0.000012	0.000011	0.000006	0.000014	0.000011	0.0001-0.0005^
Chromium, Total (mg/L)	0.0005	0.0005	0.0011	0.0010	0.0008	0.0005	0.0007	0.0008	0.001*^
Cobalt, Total (mg/L)	0.0004	0.0004	0.0004	0.0003	0.0003	0.0002	0.0002	0.0002	0.0009^
Copper, Total (mg/L)	0.00083	0.00058	0.00200	0.00186	0.00156	0.00112	0.00172	0.00125	0.002-0.004*
Iron, Total (mg/L)	0.533	0.673	0.867	0.633	0.586	0.311	0.322	0.408	0.3*^
Lead, Total (mg/L)	0.000143	0.000900	0.000652	0.000336	0.000237	0.000050	0.000226	0.000230	0.001-0.005*^
Mercury, Total (mg/L)	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.0002^
Nickel, Total (mg/L)	0.00124	0.00071	0.00170	0.00156	0.00144	0.00097	0.00104	0.00103	0.025*^
Phosphorus, Total (mg/L)	0.039	0.038	0.051	0.044	0.062	0.050	0.032	0.037	
Zinc, Total (mg/L)	0.00299	0.00462	0.00941	0.02307	0.01338	0.00300	0.00403	0.00349	0.02^

* CEQG

^ PWQO

Table 25: Average 2022 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teeple Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.039	0.106	0.054	0.039	0.022	0.005	0.012	0.013	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0133	0.0091	0.0085	0.0078	0.0077	0.0100	0.0091	0.0102	0.02*^
Cyanide, Free (mg/L)	0.0008	0.0008	0.0012	0.0010	0.0009	0.0020	0.0013	0.0015	
Cyanide, Total (mg/L)	0.0007	0.0010	0.0009	0.0009	0.0008	0.0008	0.0013	0.0010	0.005*^
Field pH (mg/L)	7.61	6.90	7.32	7.31	7.47	7.10	6.95	6.79	6.5-8.5^
Total Suspended Solids (mg/L)	7.9	5.3	15.5	3.5	5.1	1.0	4.7	4.9	
Aluminium, Total (mg/L)	0.186	0.101	0.443	0.226	0.228	0.100	0.118	0.166	0.075^
Arsenic, Total (mg/L)	0.0012	0.0010	0.0011	0.0013	0.0011	0.0009	0.0005	0.0006	0.05*
Cadmium, Total (mg/L)	0.000007	0.000016	0.000017	0.000012	0.000010	0.000016	0.000007	0.000010	0.0001-0.0005^
Chromium, Total (mg/L)	0.0006	0.0011	0.0015	0.0007	0.0006	0.0001	0.0005	0.0006	0.001*^
Cobalt, Total (mg/L)	0.0002	0.0004	0.0004	0.0002	0.0002	0.0002	0.0010	0.0002	0.0009^
Copper, Total (mg/L)	0.00081	0.00129	0.00238	0.00210	0.00152	0.01820	0.00120	0.00115	0.002-0.004*
Iron, Total (mg/L)	0.435	0.652	0.784	0.485	0.426	0.224	0.186	0.291	0.3*^
Lead, Total (mg/L)	0.000157	0.000240	0.000399	0.000163	0.000162	0.000040	0.000107	0.000138	0.001-0.005*^
Mercury, Total (mg/L)	0.000005	0.000010	0.000010	0.000011	0.000008	0.000005	0.000013	0.000012	0.0002^
Nickel, Total (mg/L)	0.00126	0.00086	0.00197	0.00157	0.00147	0.00340	0.00072	0.00091	0.025*^
Phosphorus, Total (mg/L)	0.017	0.021	0.036	0.019	0.024	0.016	0.025	0.040	
Zinc, Total (mg/L)	0.00214	0.00629	0.01489	0.02314	0.00778	0.00220	0.00199	0.00233	0.02^

* CEQG

^ PWQO

Exceedances in bold

Table 26: Average 2021 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teepie Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.031	0.035	0.015	0.073	0.015	0.016	0.016	0.011	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0041	0.0057	0.0053	0.0061	0.0063	0.0068	0.0064	0.0073	0.02*^
Cyanide, Free (mg/L)	0.0006	0.0006	0.0007	0.0006	0.0009	0.0011	0.0008	0.0016	
Cyanide, Total (mg/L)	0.0007	0.0010	0.0019	0.0020	0.0010	0.0008	0.0007	0.0007	0.005*^
Field pH (mg/L)	7.52	6.87	7.41	7.38	7.20	6.79	7.36	7.63	6.5-8.5^
Total Suspended Solids (mg/L)	10.8	3.9	6.3	3.5	3.6	5.5	6.1	15.1	
Aluminium, Total (mg/L)	0.137	0.065	0.255	0.111	0.102	0.147	0.211	0.280	0.075^
Arsenic, Total (mg/L)	0.0010	0.0007	0.0011	0.0013	0.0012	0.0011	0.0005	0.0005	0.05*
Cadmium, Total (mg/L)	0.000002	0.000005	0.000009	0.000007	0.000008	0.000007	0.000204	0.000007	0.0001-0.0005^
Chromium, Total (mg/L)	0.0002	0.0002	0.0006	0.0001	0.0003	0.0004	0.0005	0.0007	0.001*^
Cobalt, Total (mg/L)	0.0001	0.0003	0.0004	0.0004	0.0004	0.0008	0.0002	0.0002	0.0009^
Copper, Total (mg/L)	0.00066	0.00045	0.00253	0.00125	0.00134	0.00047	0.00120	0.00125	0.002-0.004*
Iron, Total (mg/L)	0.246	0.543	0.486	0.425	0.549	1.539	0.307	0.436	0.3*^
Lead, Total (mg/L)	0.000107	0.000101	0.000371	0.000085	0.000080	0.000133	0.000168	0.000238	0.001-0.005*^
Mercury, Total (mg/L)	0.000030	0.000022	0.000024	0.000025	0.000027	0.000019	0.000028	0.000023	0.0002^
Nickel, Total (mg/L)	0.00095	0.00074	0.00157	0.00147	0.00139	0.00108	0.00094	0.00098	0.025*^
Phosphorus, Total (mg/L)	0.032	0.036	0.054	0.033	0.059	0.096	0.022	0.026	
Zinc, Total (mg/L)	0.00138	0.00258	0.01601	0.01184	0.00031	0.00263	0.00345	0.00380	0.02^

* CEQG

^ PWQO

Exceedances in bold

Table 27: Average 2020 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teeple Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.042	0.101	0.029	0.033	0.039	0.203	0.020	0.016	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0009	0.0009	0.0008	0.0009	0.0009	0.0008	0.0009	0.0015	0.02*^
Cyanide, Free (mg/L)	0.0008	0.0009	0.0006	0.0006	0.0008	0.0008	0.0006	0.0004	
Cyanide, Total (mg/L)	0.0007	0.0006	0.0009	0.0007	0.0006	0.0011	0.0003	0.0004	0.005*^
Field pH (mg/L)	7.67	6.95	7.55	7.66	7.51	6.66	7.33	7.44	6.5-8.5^
Total Suspended Solids (mg/L)	7.8	1.3	5.0	5.3	7.0	4.2	9.3	5.6	
Aluminium, Total (mg/L)	0.221	0.073	0.230	0.205	0.261	0.168	0.304	0.168	0.075^
Arsenic, Total (mg/L)	0.0011	0.0006	0.0009	0.0012	0.0012	0.0012	0.0006	0.0006	0.05*
Cadmium, Total (mg/L)	0.000013	0.000007	0.000009	0.000007	0.000013	0.000010	0.000018	0.000013	0.0001-0.0005^
Chromium, Total (mg/L)	0.0005	0.0003	0.0005	0.0005	0.0006	0.0005	0.0008	0.0006	0.001*^
Cobalt, Total (mg/L)	0.0004	0.0002	0.0002	0.0003	0.0004	0.0011	0.0002	0.0001	0.0009^
Copper, Total (mg/L)	0.00107	0.00038	0.00235	0.00192	0.00174	0.00058	0.00150	0.00114	0.002-0.004*
Iron, Total (mg/L)	0.589	0.378	0.469	0.446	0.485	1.246	0.437	0.318	0.3*^
Lead, Total (mg/L)	0.000155	0.000091	0.000165	0.000155	0.000175	0.000220	0.000251	0.000163	0.001-0.005*^
Mercury, Total (mg/L)	0.000005	0.000005	0.000005	0.000005	0.000005	0.000006	0.000005	0.000005	0.0002^
Nickel, Total (mg/L)	0.00128	0.00050	0.00152	0.00149	0.00156	0.00153	0.00114	0.00094	0.025*^
Phosphorus, Total (mg/L)	0.017	0.007	0.030	0.023	0.036	0.055	0.018	0.014	
Zinc, Total (mg/L)	0.00212	0.00178	0.01141	0.01533	0.01167	0.00588	0.00429	0.00237	0.02^

* CEQG

^ PWQO

Exceedances in bold

Table 28: Average 2019 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teeples Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.027	0.089	0.165	0.097	0.024	0.193	0.015	0.025	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0009	0.0009	0.0011	0.0013	0.0009	0.0016	0.0010	0.0009	0.02*^
Cyanide, Free (mg/L)	0.0006	0.0008	0.0008	0.0008	0.0009	0.0011	0.0004	0.0005	
Cyanide, Total (mg/L)	0.0006	0.0009	0.0008	0.0009	0.0009	0.0012	0.0004	0.0005	0.005*^
Field pH (mg/L)	7.57	7.20	7.34	7.77	7.45	7.14	7.79	7.55	6.5-8.5^
Total Suspended Solids (mg/L)	10.8	1.7	8.0	15.6	4.8	6.4	17.7	5.9	
Aluminium, Total (mg/L)	0.238	0.145	0.240	0.307	0.207	0.199	0.349	0.152	0.075^
Arsenic, Total (mg/L)	0.0010	0.0007	0.0014	0.0015	0.0011	0.0015	0.0006	0.0005	0.05*
Cadmium, Total (mg/L)	0.000011	0.000006	0.000014	0.000013	0.000009	0.000011	0.000014	0.000007	0.0001-0.0005^
Chromium, Total (mg/L)	0.0008	0.0007	0.0009	0.0009	0.0008	0.0007	0.0011	0.0006	0.001*^
Cobalt, Total (mg/L)	0.0003	0.0003	0.0008	0.0005	0.0003	0.0009	0.0003	0.0001	0.0009^
Copper, Total (mg/L)	0.00126	0.00096	0.00161	0.00186	0.00153	0.00088	0.00146	0.00107	0.002-0.004*
Iron, Total (mg/L)	0.494	0.499	0.736	0.602	0.467	1.753	0.562	0.290	0.3*^
Lead, Total (mg/L)	0.000195	0.000124	0.000208	0.000217	0.000148	0.000209	0.000335	0.000138	0.001-0.005*^
Mercury, Total (mg/L)	0.000004	0.000004	0.000004	0.000003	0.000004	0.000006	0.000004	0.000004	0.0002^
Nickel, Total (mg/L)	0.00141	0.00068	0.00188	0.00183	0.00157	0.00161	0.00125	0.00085	0.025*^
Phosphorus, Total (mg/L)	0.023	0.009	0.035	0.025	0.021	0.102	0.029	0.015	
Zinc, Total (mg/L)	0.00280	0.00401	0.00853	0.02273	0.01337	0.00361	0.00656	0.00360	0.02^

* CEQG

^ PWQO

Exceedances in bold

Table 29: Average 2018 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teeple Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.064	0.209	0.049	0.065	0.075	1.658	0.050	0.041	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0010	0.0010	0.0010	0.0021	0.0015	0.0115	0.0010	0.0013	0.02*^
Cyanide, Free (mg/L)	0.0004	0.0006	0.0006	0.0005	0.0006	0.0007	0.0002	0.0004	
Cyanide, Total (mg/L)	0.0006	0.0008	0.0007	0.0010	0.0007	0.0006	0.0003	0.0003	0.005*^
Field pH (mg/L)	7.84	7.60	7.70	7.88	7.99	7.55	8.03	7.90	6.5-8.5^
Total Suspended Solids (mg/L)	6.7	6.5	5.3	8.9	7.1	24.0	6.6	9.8	
Aluminium, Total (mg/L)	0.158	0.106	0.161	0.464	0.349	0.477	0.183	0.310	0.075^
Arsenic, Total (mg/L)	0.0011	0.0008	0.0014	0.0017	0.0012	0.0017	0.0005	0.0008	0.05*
Cadmium, Total (mg/L)	0.000008	0.000013	0.000008	0.000014	0.000014	0.000020	0.000009	0.000010	0.0001-0.0005^
Chromium, Total (mg/L)	0.0004	0.0004	0.0005	0.0012	0.0008	0.0010	0.0006	0.0008	0.001*^
Cobalt, Total (mg/L)	0.0002	0.0005	0.0003	0.0006	0.0005	0.0024	0.0001	0.0002	0.0009^
Copper, Total (mg/L)	0.00107	0.00135	0.00157	0.00365	0.00206	0.00088	0.00129	0.00145	0.002-0.004*
Iron, Total (mg/L)	0.320	0.755	0.403	0.694	0.631	5.335	0.297	0.492	0.3*^
Lead, Total (mg/L)	0.000110	0.000607	0.000182	0.000472	0.000234	0.000530	0.000165	0.000262	0.001-0.005*^
Mercury, Total (mg/L)	0.000004	0.000004	0.000002	0.000004	0.000004	0.000007	0.000003	0.000005	0.0002^
Nickel, Total (mg/L)	0.00134	0.00093	0.00177	0.00221	0.00185	0.00225	0.00093	0.00126	0.025*^
Phosphorus, Total (mg/L)	0.019	0.021	0.039	0.040	0.043	0.394	0.013	0.027	
Zinc, Total (mg/L)	0.00217	0.06723	0.00618	0.06411	0.02486	0.00525	0.00228	0.00288	0.02^

* CEQG

^ PWQO

Exceedances in bold

Table 30: Average 2017 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teepie Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.036	0.042	0.022	0.039	0.097		0.030	0.023	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0011	0.0010	0.0014	0.0012	0.001		0.0010	0.0009	0.02*^
Cyanide, Free (mg/L)									
Cyanide, Total (mg/L)	0.0009	0.0009	0.0008	0.0007	0.0019		0.0008	0.0008	0.005*^
Field pH (mg/L)	7.72	7.30	7.62	7.46	7.55		7.74	7.71	6.5-8.5^
Total Suspended Solids (mg/L)	6.4	2.2	5.6	11.4	6.6		6.0	6.0	
Aluminium, Total (mg/L)	0.227	0.078	0.429	0.373	0.183		0.172	0.185	0.075^
Arsenic, Total (mg/L)	0.0012	0.0006	0.0012	0.0016	0.0010		0.0035	0.0013	0.05*
Cadmium, Total (mg/L)	0.000012	0.000005	0.000011	0.000017	0.000010		0.000012	0.000008	0.0001-0.0005^
Chromium, Total (mg/L)	0.0005	0.0003	0.0010	0.0010	0.0006		0.0009	0.0005	0.001*^
Cobalt, Total (mg/L)	0.0002	0.0001	0.0003	0.0005	0.0005		0.0001	0.0001	0.0009^
Copper, Total (mg/L)	0.00134	0.00045	0.00250	0.00324	0.00150		0.00320	0.00156	0.002-0.004*
Iron, Total (mg/L)	0.310	0.247	0.498	0.648	0.614		0.253	0.298	0.3*^
Lead, Total (mg/L)	0.000125	0.000058	0.000216	0.000194	0.000123		0.000178	0.000163	0.001-0.005*^
Mercury, Total (mg/L)	0.000005	0.000003	0.000002	0.000003	0.000003		0.000003	0.000003	0.0002^
Nickel, Total (mg/L)	0.00131	0.00056	0.00182	0.00244	0.00146		0.00090	0.00093	0.025*^
Phosphorus, Total (mg/L)	0.031	0.008			0.021		0.010	0.019	
Zinc, Total (mg/L)	0.00394	0.00292	0.01620	0.27740	0.00929		0.00467	0.00278	0.02^

* CEQG

^ PWQO

Exceedances in bold

Table 31: Average 2016 Area Creek and Rainy River Water Quality for Selected Parameters

Location	SW28A	SW02	SW25	SW26	SW27	SW29	SW16	SW17	
Description	Clark Creek downstream of Clark Creek/Teeple Diversion	West Creek near Roen Pit	West Creek Diversion near Sediment Pond #1	West Creek Diversion near Sediment Pond #2	Loslo Creek downstream of West Creek Diversion confluence	Tait Creek upstream of EDL1 pipe crossing	Rainy River upstream of Pinewood confluence	Rainy River downstream of Pinewood confluence	Water Quality Target/Limit
Ammonia, Total (mg/L)	0.040	0.049			0.066		0.015	0.018	0.35-0.73*
Ammonia, Unionized (mg/L)	0.0010	0.0010			0.0010		0.0010	0.0010	0.02*^
Cyanide, Free (mg/L)									
Cyanide, Total (mg/L)									0.005*^
Field pH (mg/L)	7.58	6.89			7.21		7.50	7.52	6.5-8.5^
Total Suspended Solids (mg/L)	4.4	3.2			3.9		6.6	6.0	
Aluminium, Total (mg/L)	0.117	0.093			0.090		0.200	0.233	0.075^
Arsenic, Total (mg/L)	0.0013	0.0006			0.0011		0.0005	0.0006	0.05*
Cadmium, Total (mg/L)	0.000008	0.000006			0.000008		0.000008	0.000010	0.0001-0.0005^
Chromium, Total (mg/L)	0.0004	0.0003			0.0003		0.0006	0.0006	0.001*^
Cobalt, Total (mg/L)	0.0002	0.0002			0.0004		0.0001	0.0002	0.0009^
Copper, Total (mg/L)	0.00084	0.00048			0.00065		0.00120	0.00122	0.002-0.004*
Iron, Total (mg/L)	0.370	0.412			0.620		0.313	0.400	0.3*^
Lead, Total (mg/L)	0.000092	0.000095			0.000077		0.000160	0.000173	0.001-0.005*^
Mercury, Total (mg/L)	0.000003	0.000002			0.000003		0.000002	0.000003	0.0002^
Nickel, Total (mg/L)	0.00142	0.00059			0.00139		0.00094	0.00106	0.025*^
Phosphorus, Total (mg/L)									
Zinc, Total (mg/L)	0.00180	0.00245			0.00345		0.00346	0.00286	0.02^

* CEQG

Exceedances in bold

^ PWQO

Figure 1: RRM Site Plan with Discharge and Surface Water Monitoring Locations 2023

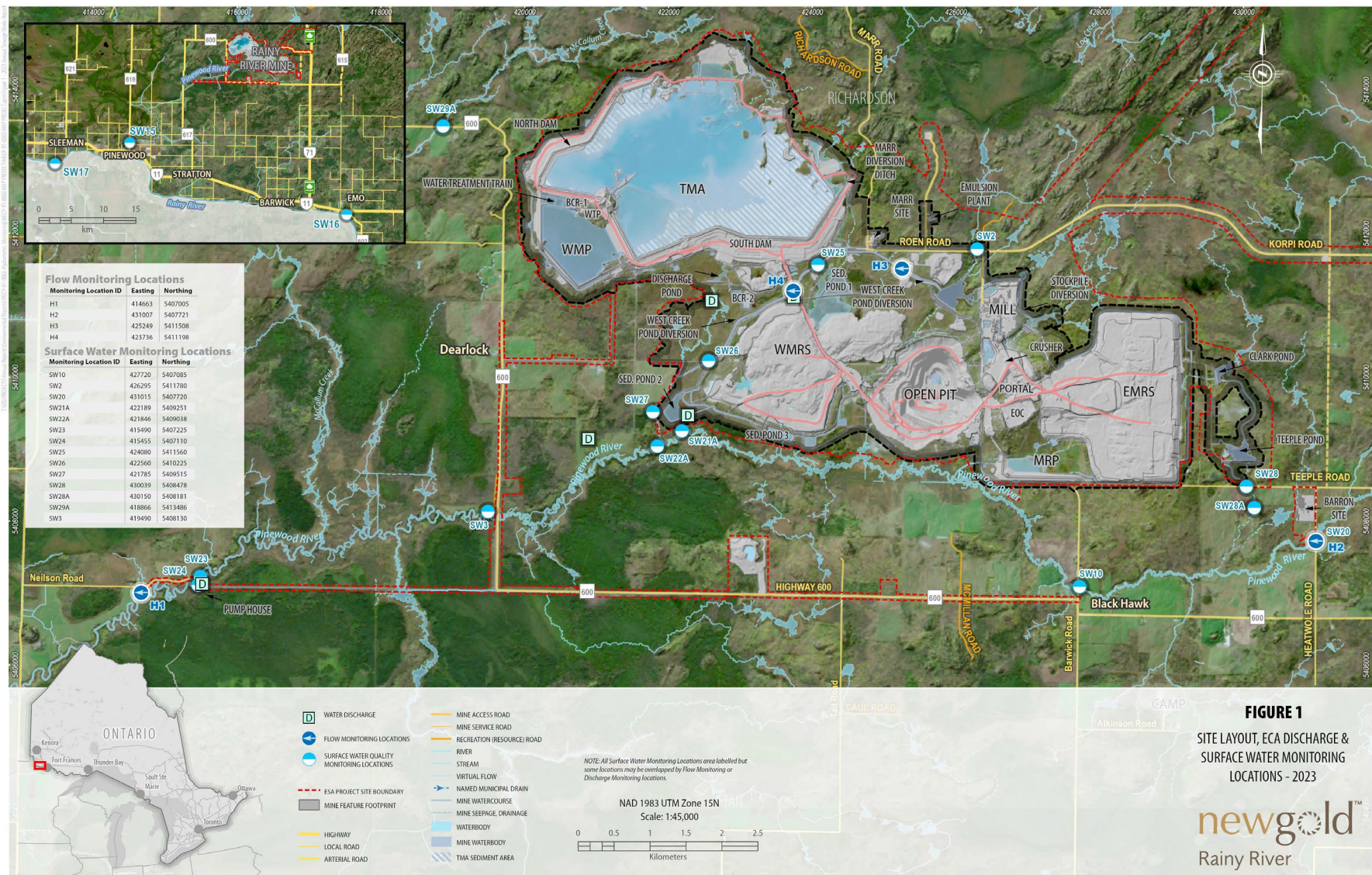


Figure 2: Rainy River Mine, Field pH Levels in Pinewood River 2015-2023

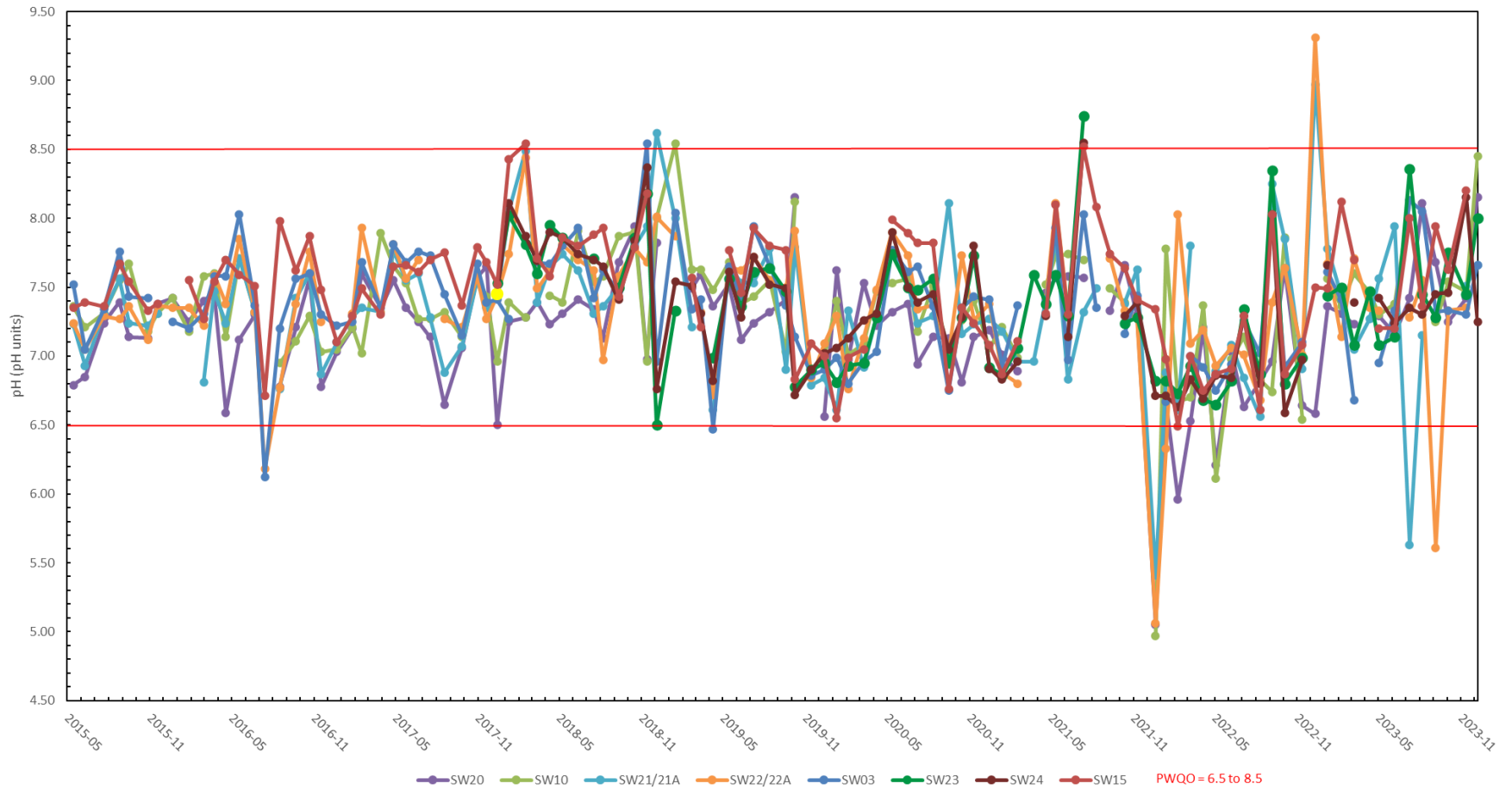


Figure 3: Rainy River Mine, Field pH Levels in Pinewood River 2023

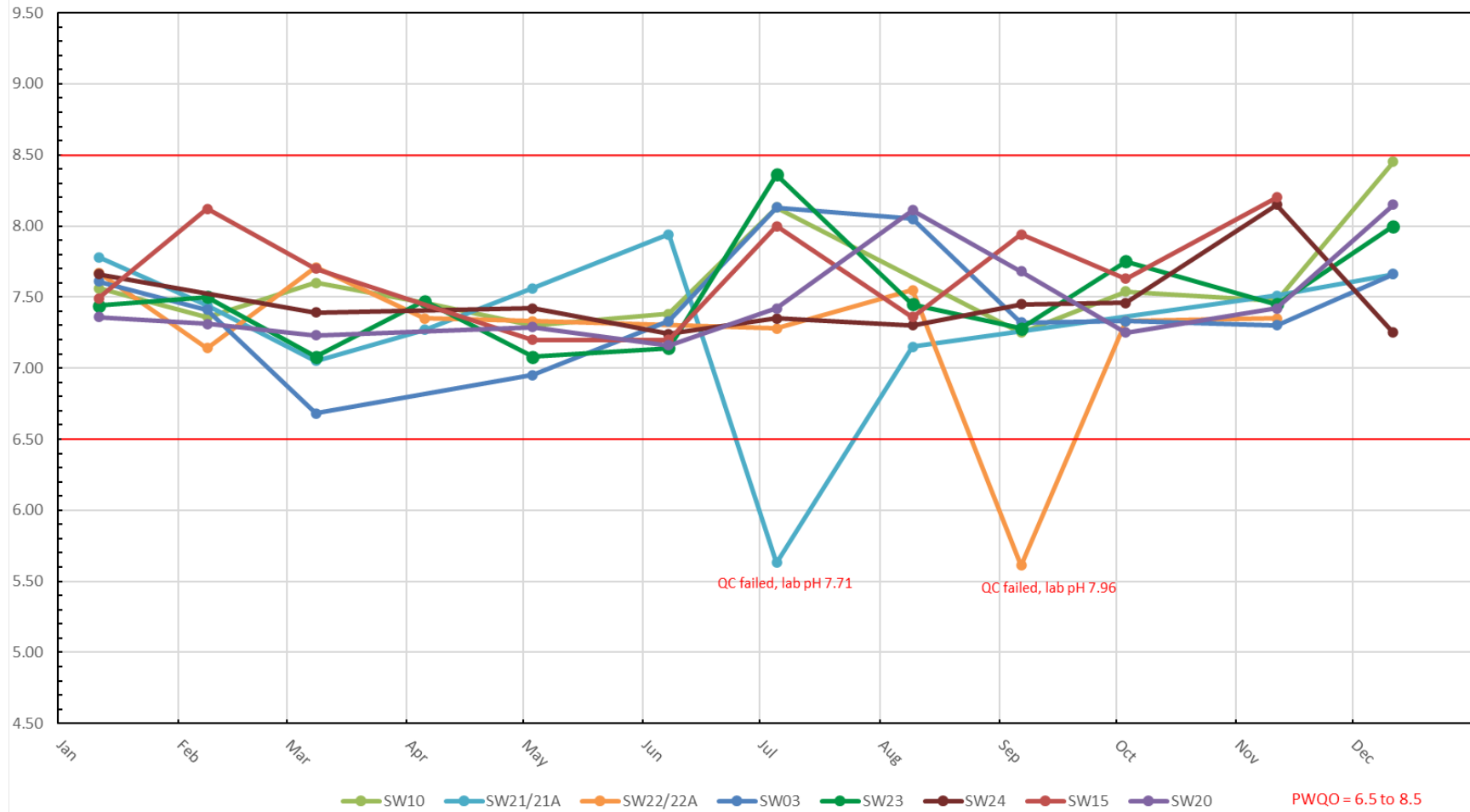


Figure 4: Rainy River Mine, Total Suspended Solids Concentration in Pinewood River 2015-2023

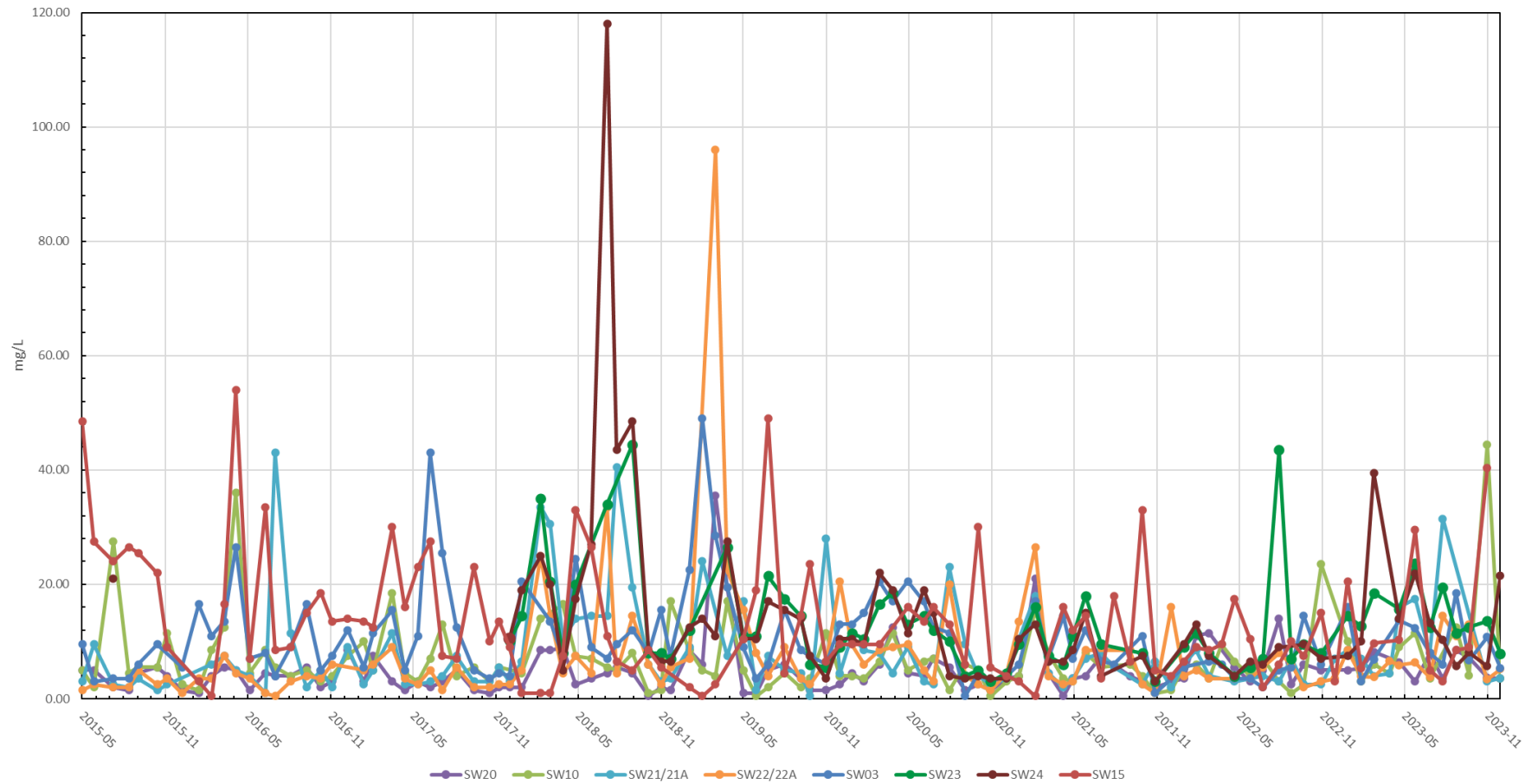


Figure 5: Rainy River Mine, Total Suspended Solids Concentration in Pinewood River 2023

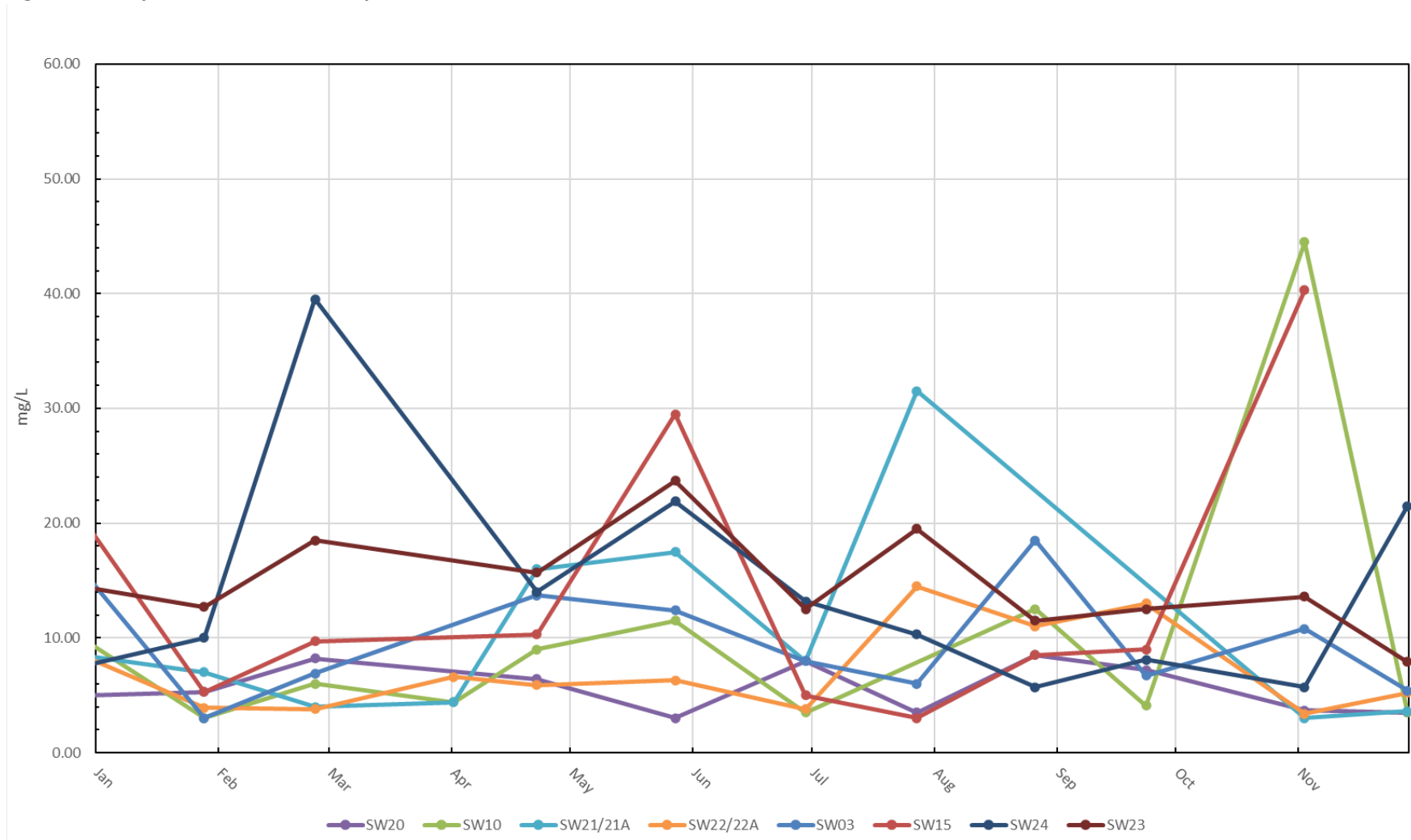


Figure 6: Rainy River Mine, Total Arsenic in Pinewood River 2015-2023

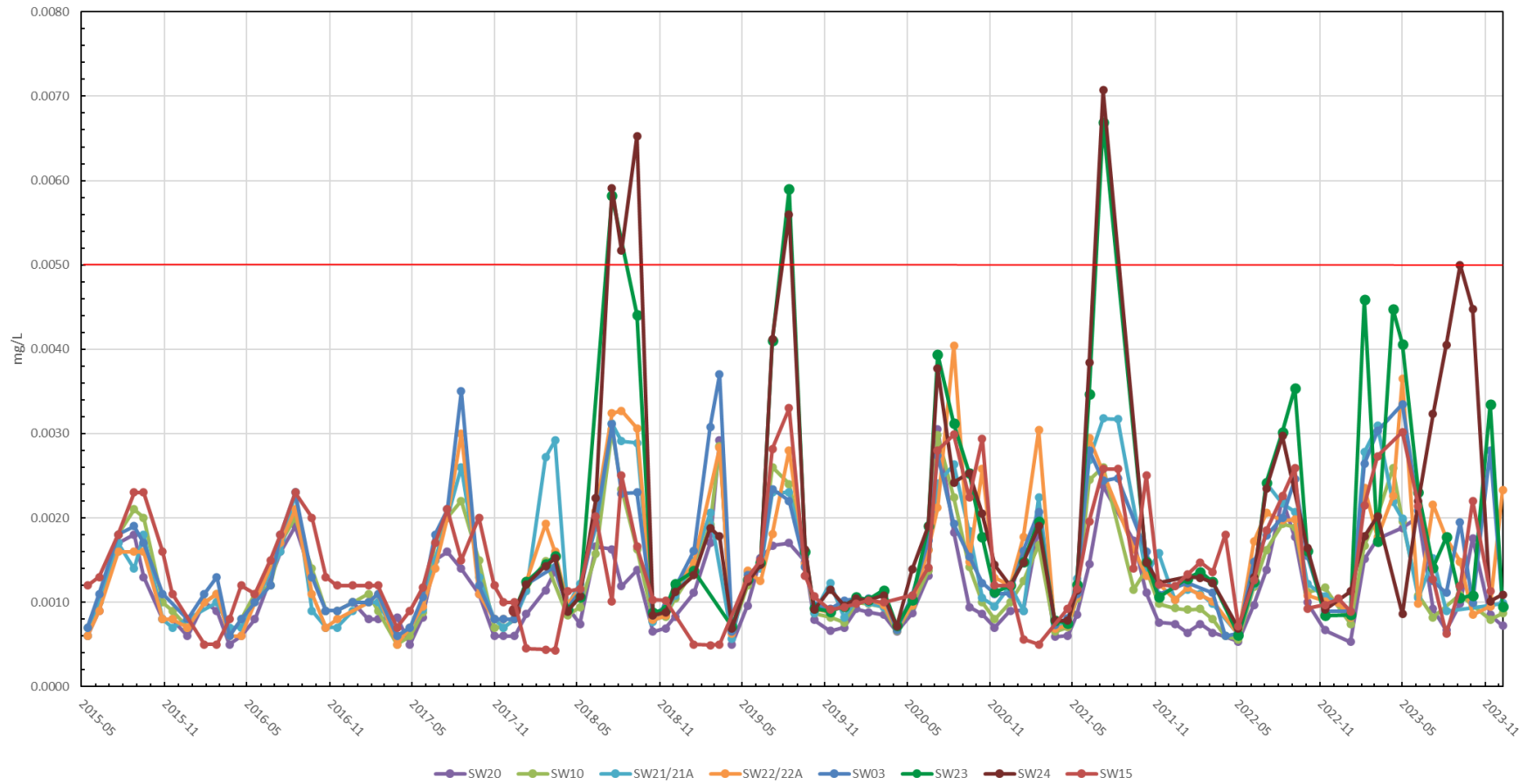


Figure 7: Rainy River Mine, Total Arsenic in Pinewood River 2023

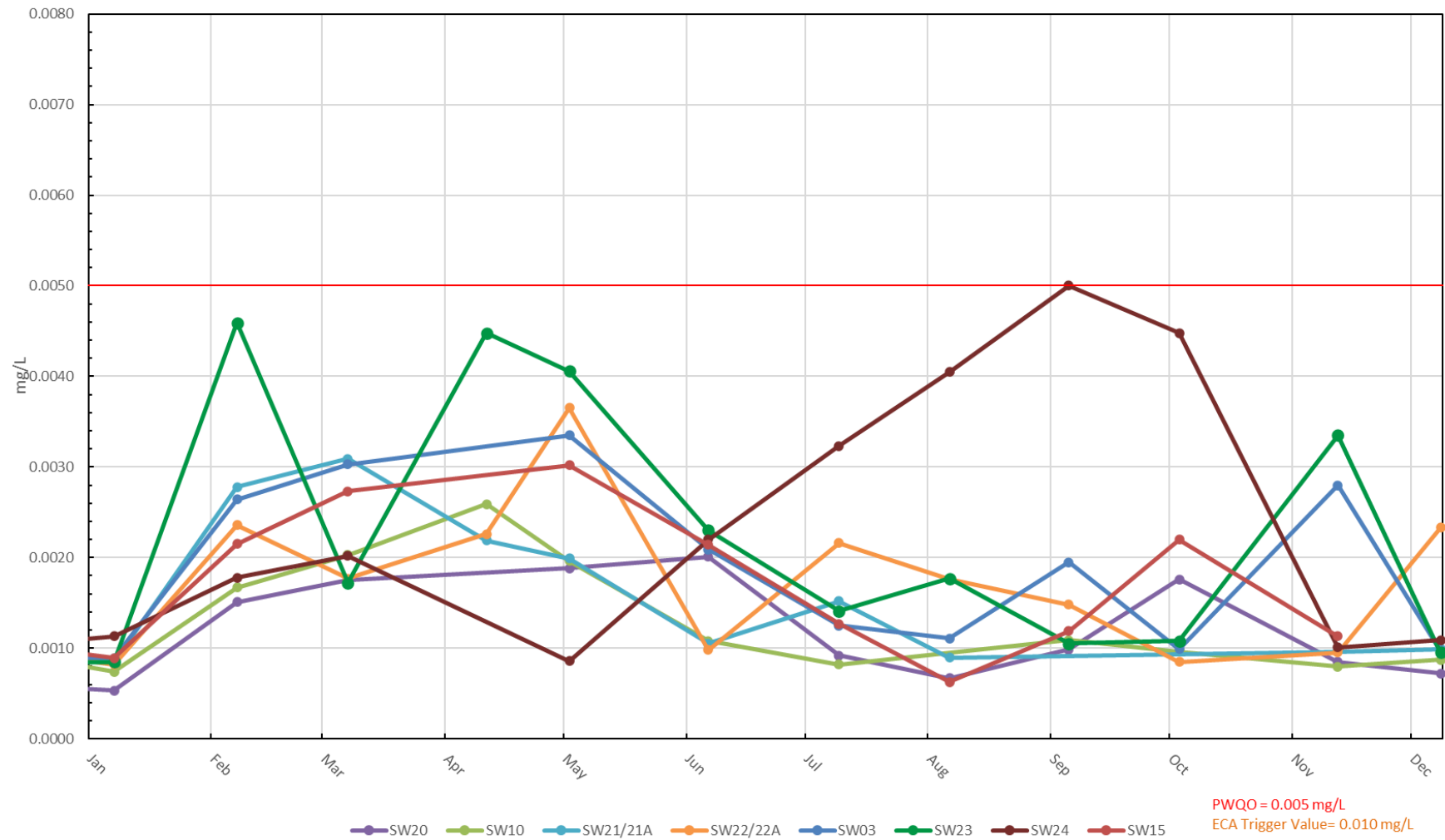


Figure 8: Rainy River Mine, Total Copper in Pinewood River 2015-2023

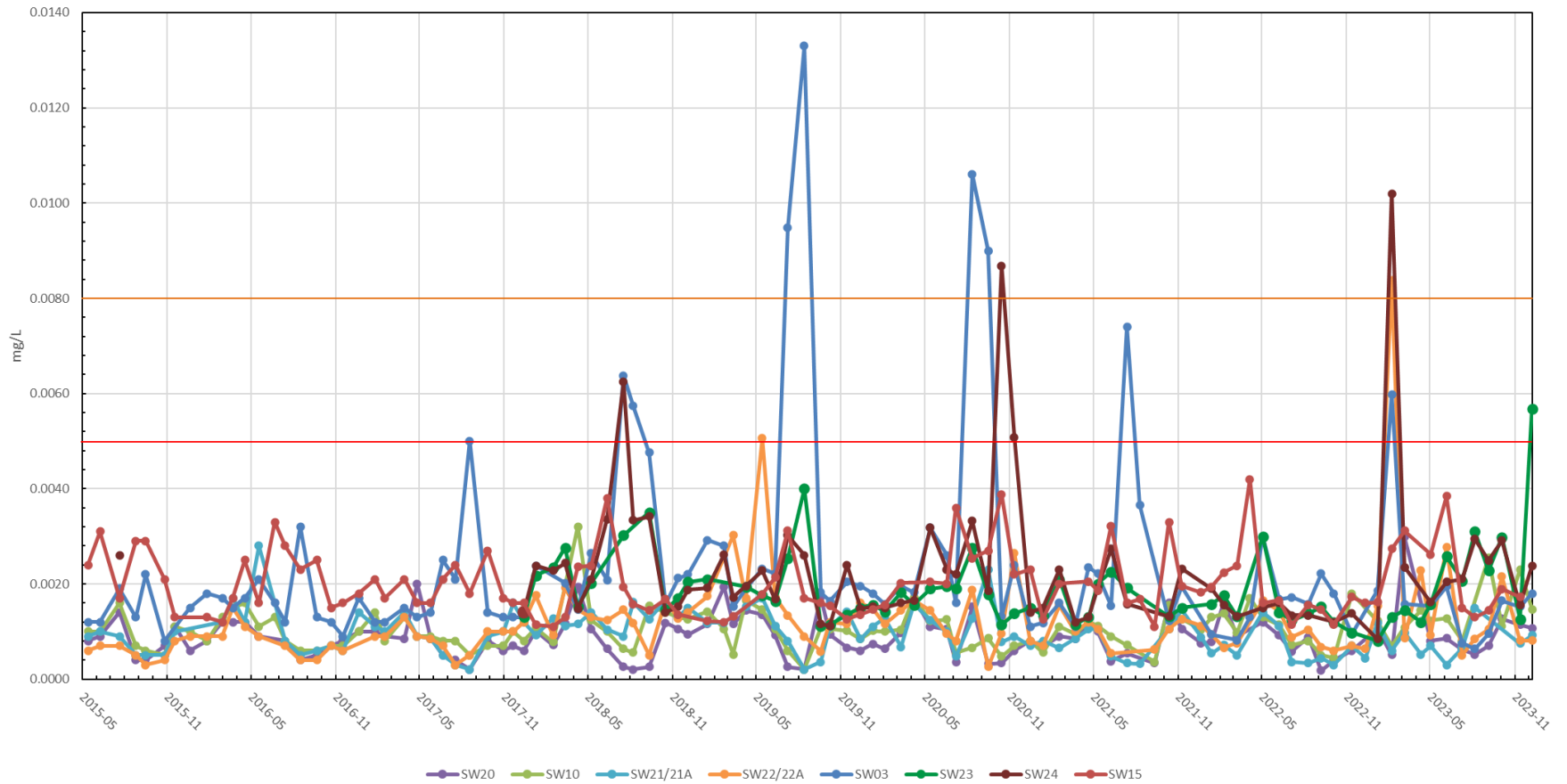


Figure 9: Rainy River Mine, Total Copper in Pinewood River 2023

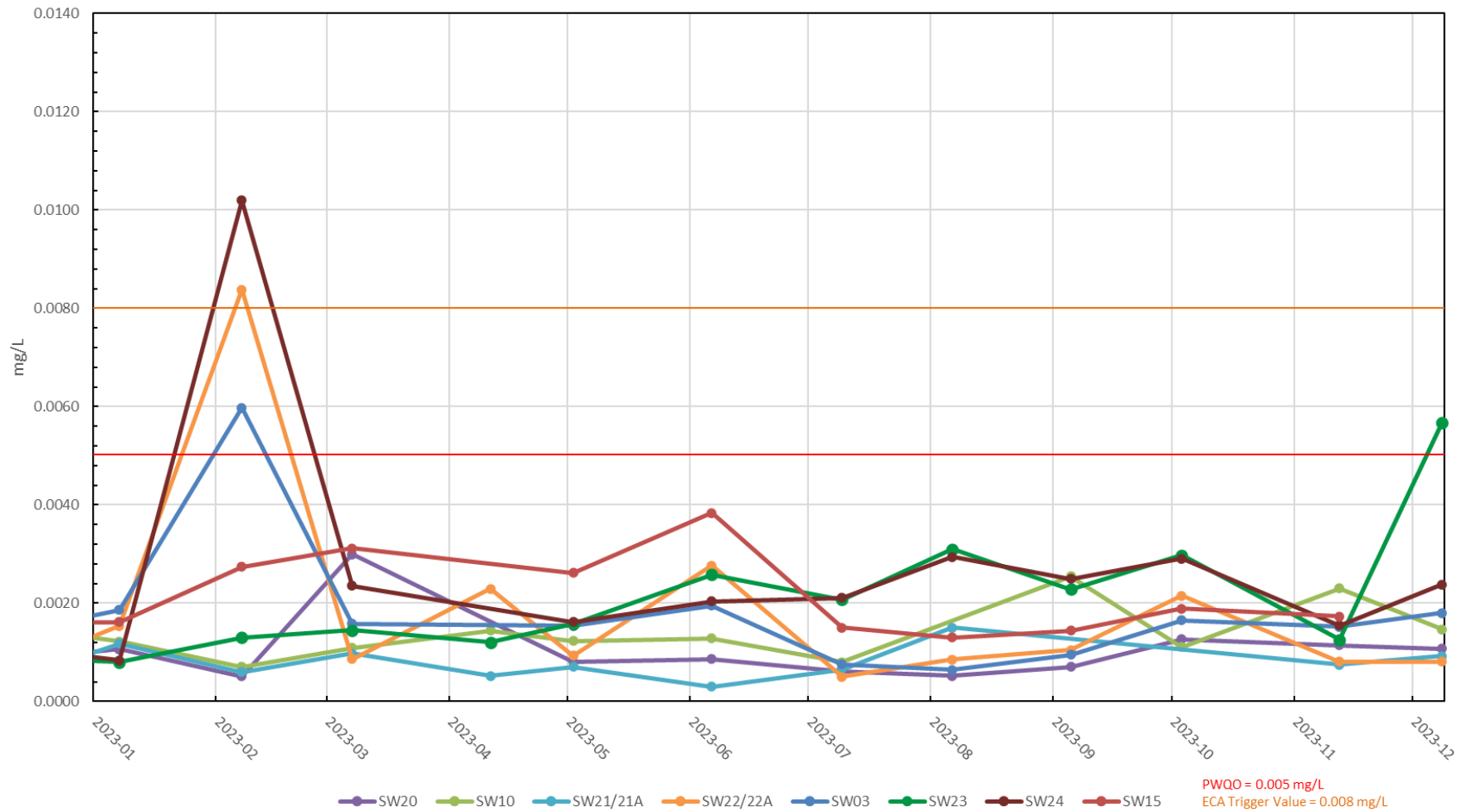


Figure 10: Rainy River Mine, Total Lead in Pinewood River 2015-2023

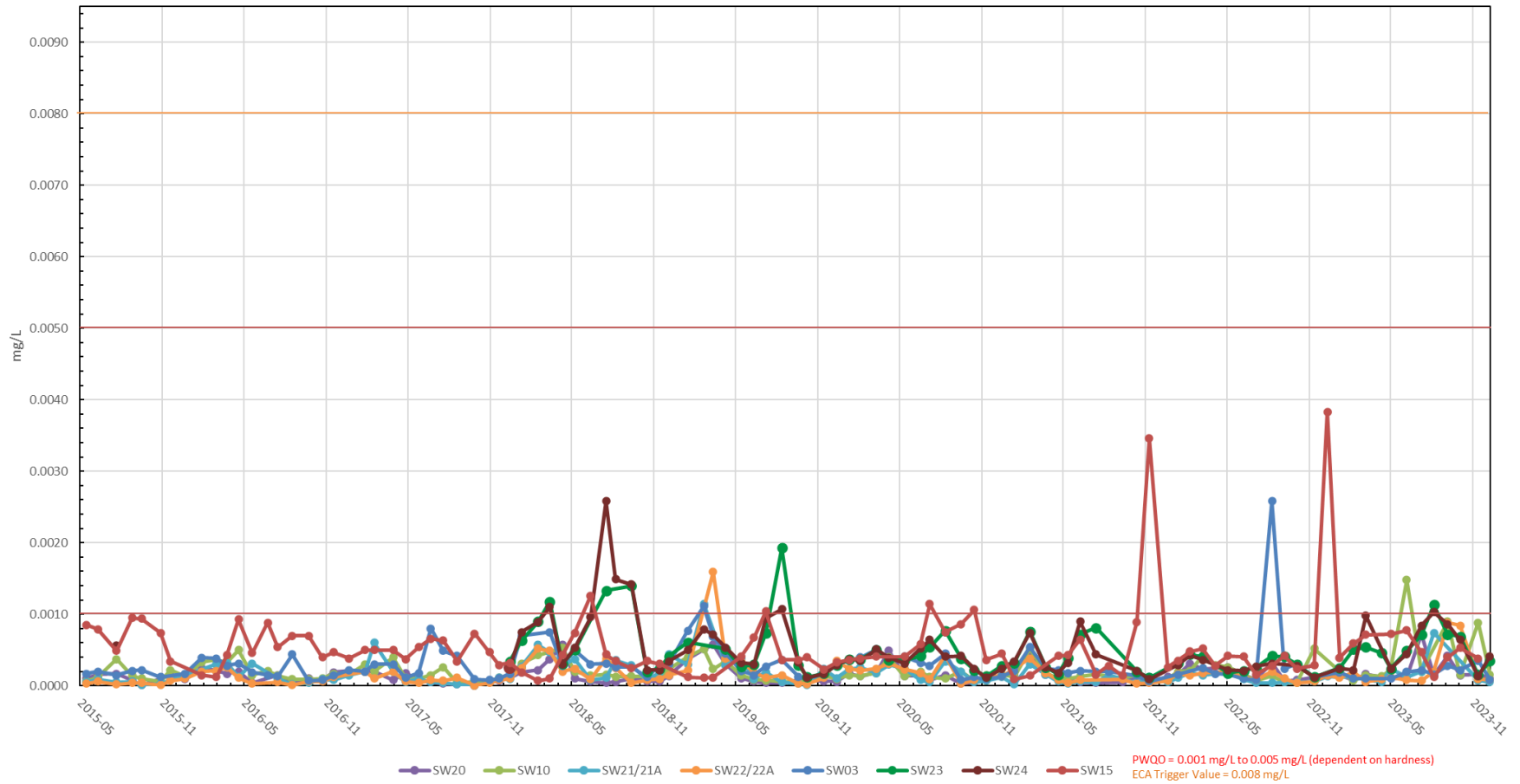


Figure 11: Rainy River Mine, Total Lead in Pinewood River 2023

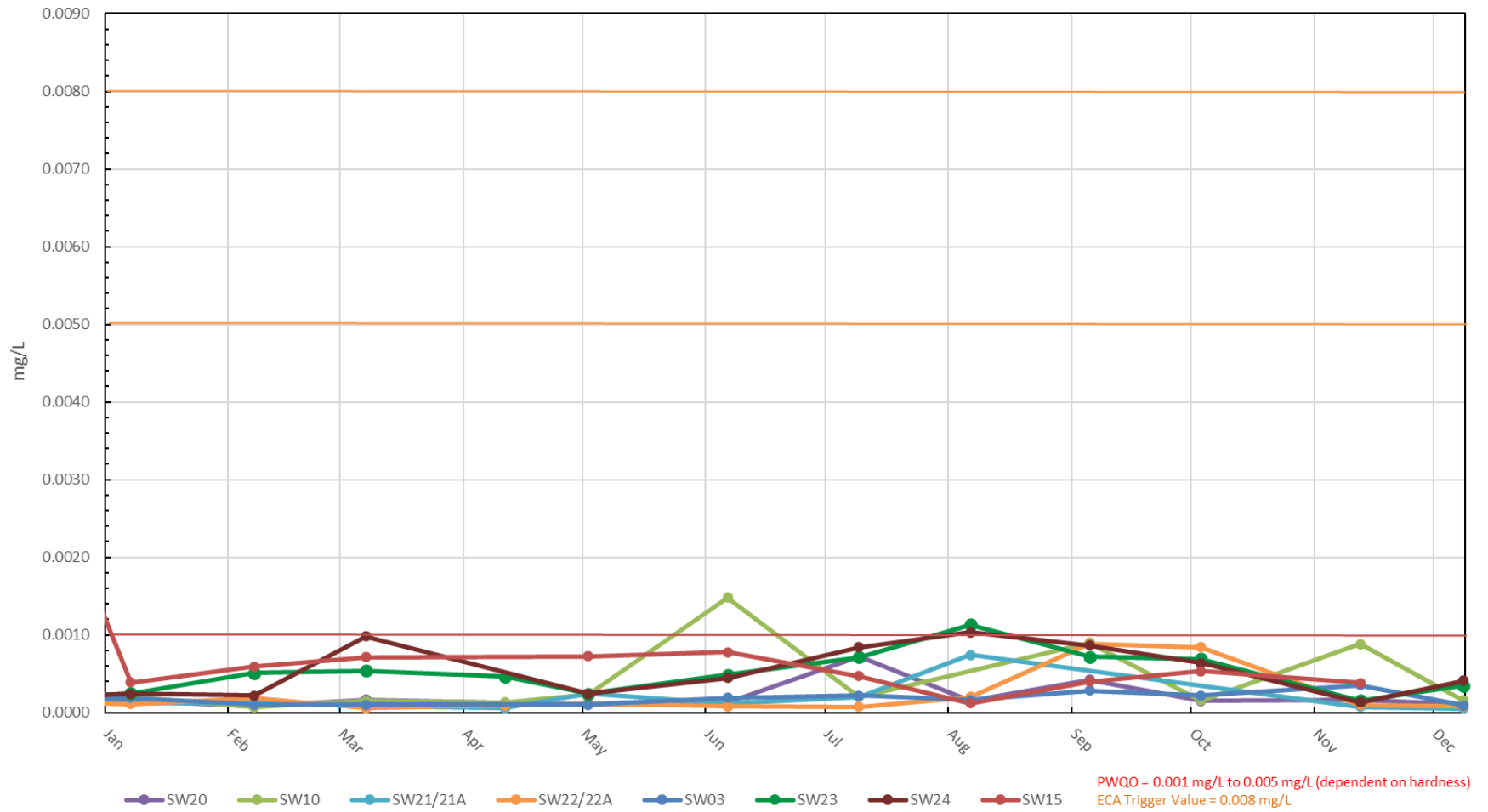


Figure 12: Rainy River Mine, Total Nickel in Pinewood River 2015-2023

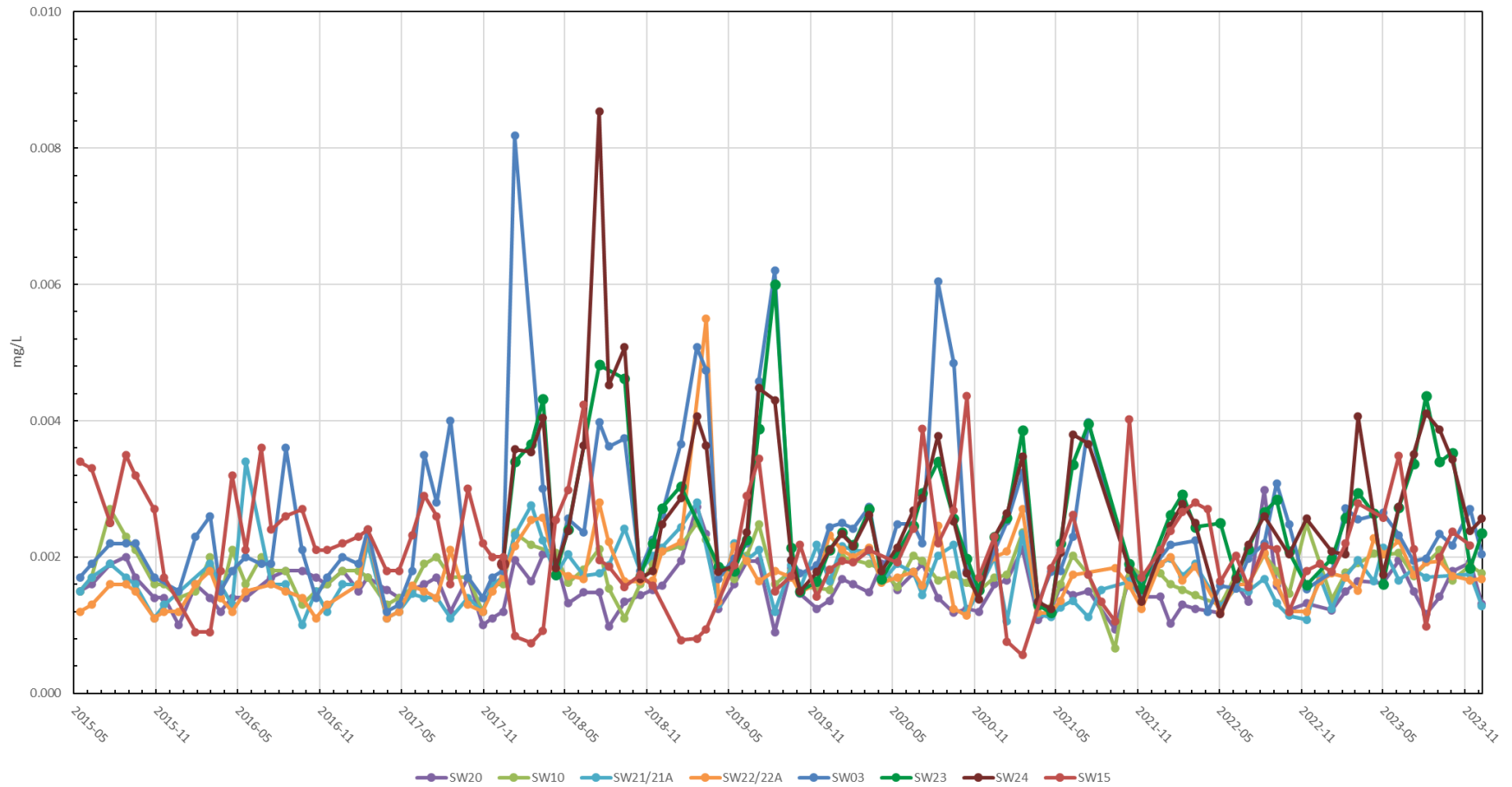


Figure 13: Rainy River Mine, Total Nickel in Pinewood River 2023

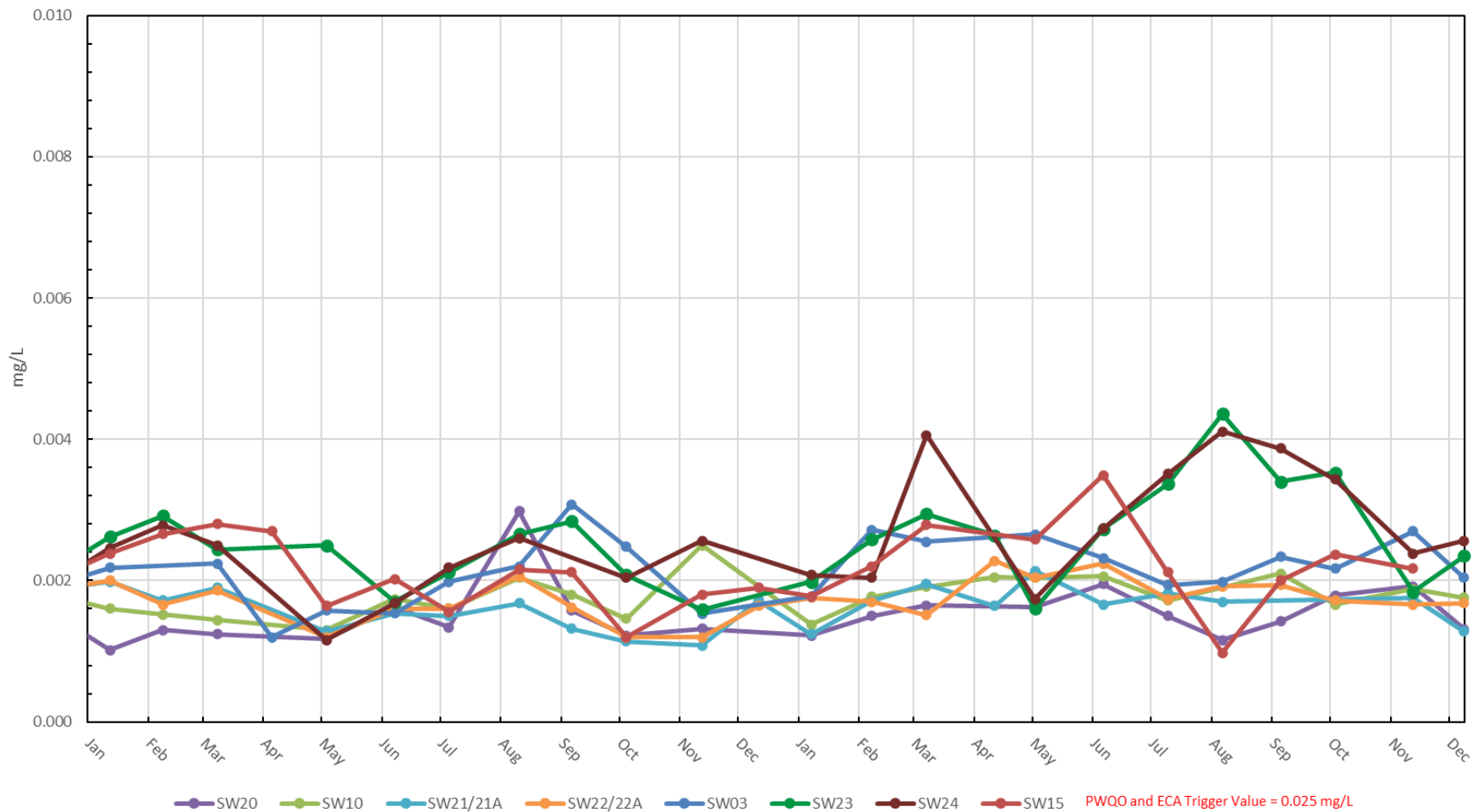


Figure 14: Rainy River Mine, Total Phosphorus in Pinewood River 2017-2023

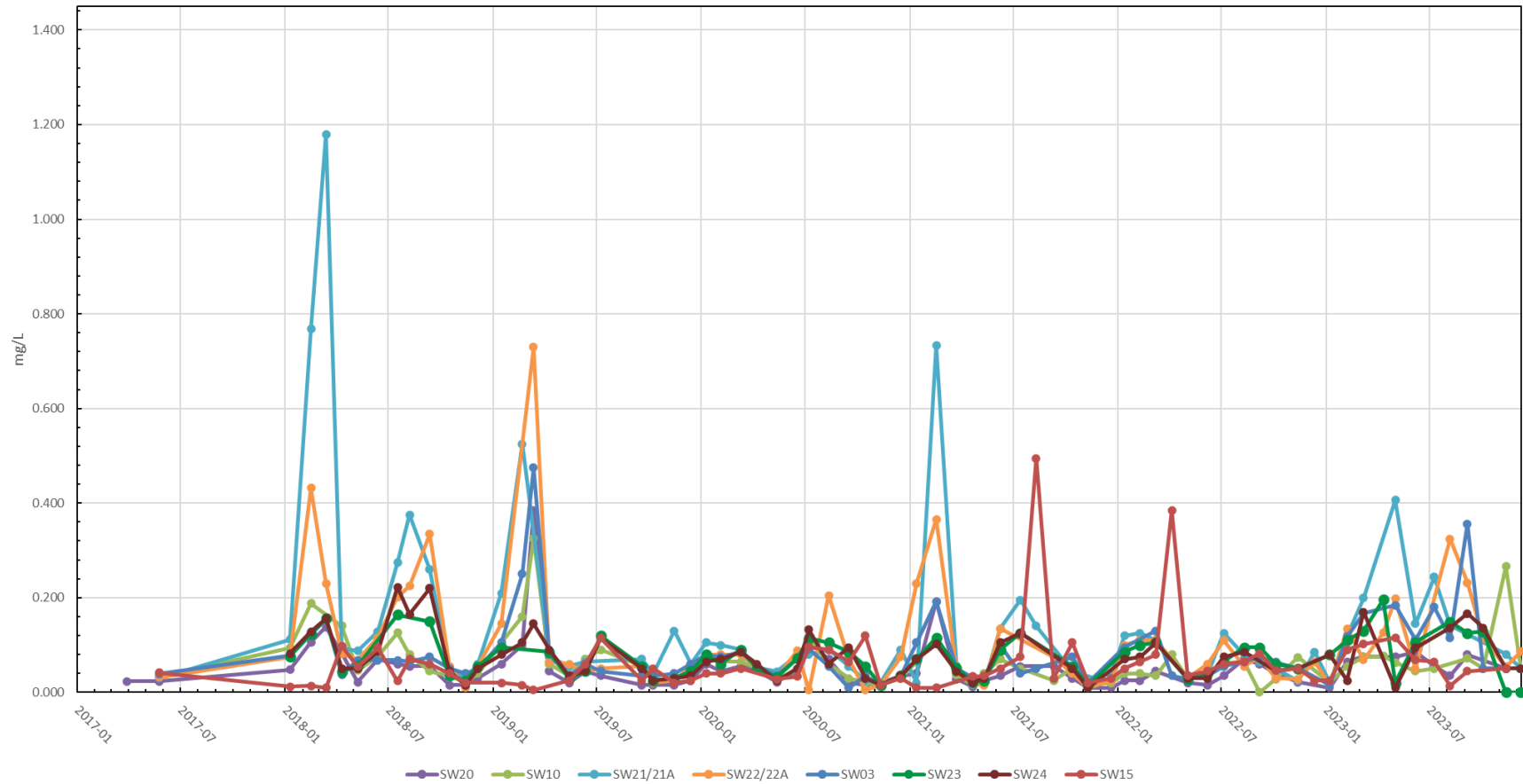


Figure 15: Rainy River Mine, Total Phosphorus in Pinewood River 2023

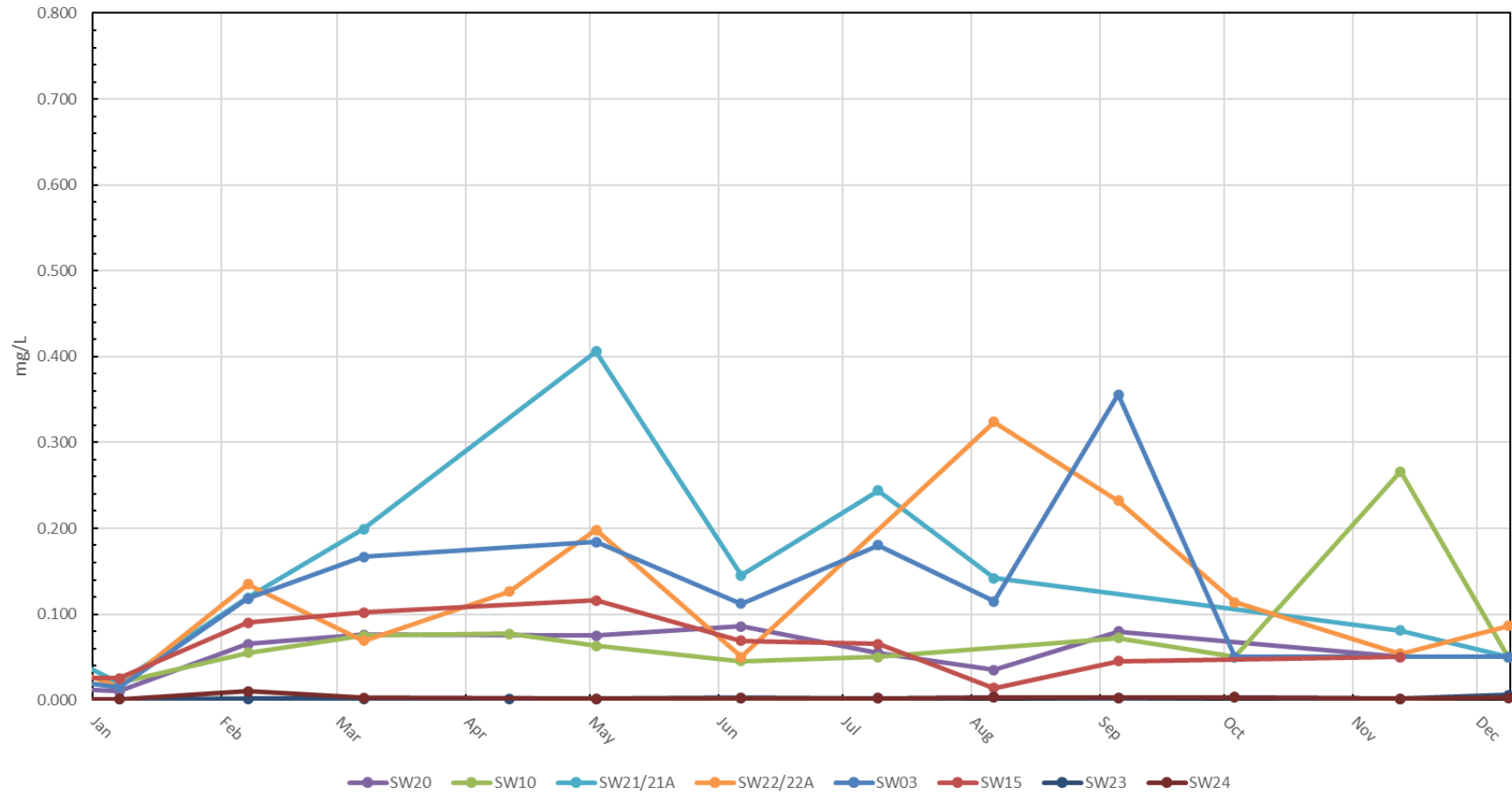


Figure 16: Rainy River Mine, Total Zinc in Pinewood River 2015-2023

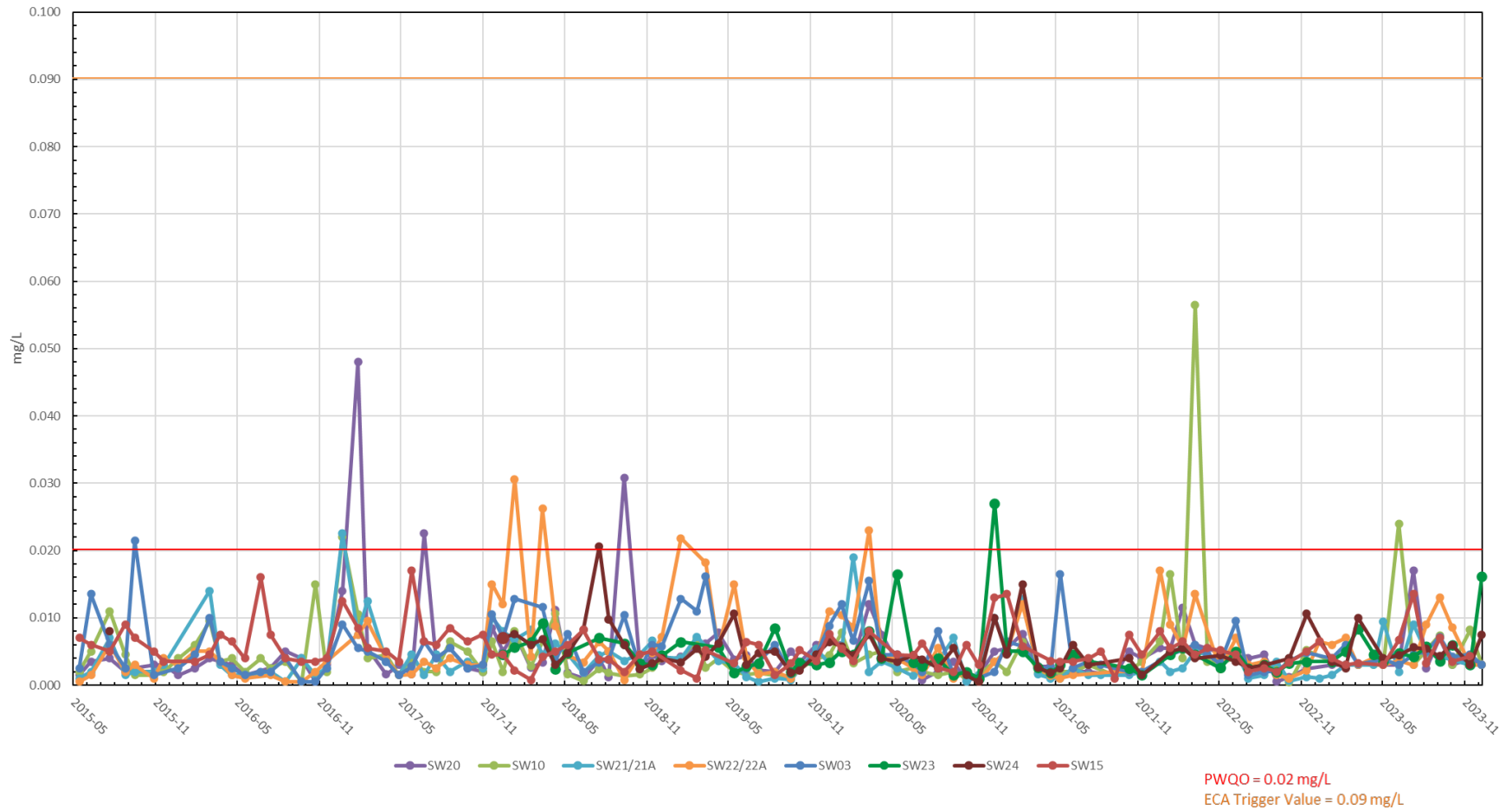


Figure 17: Rainy River Mine, Total Zinc in Pinewood River 2023

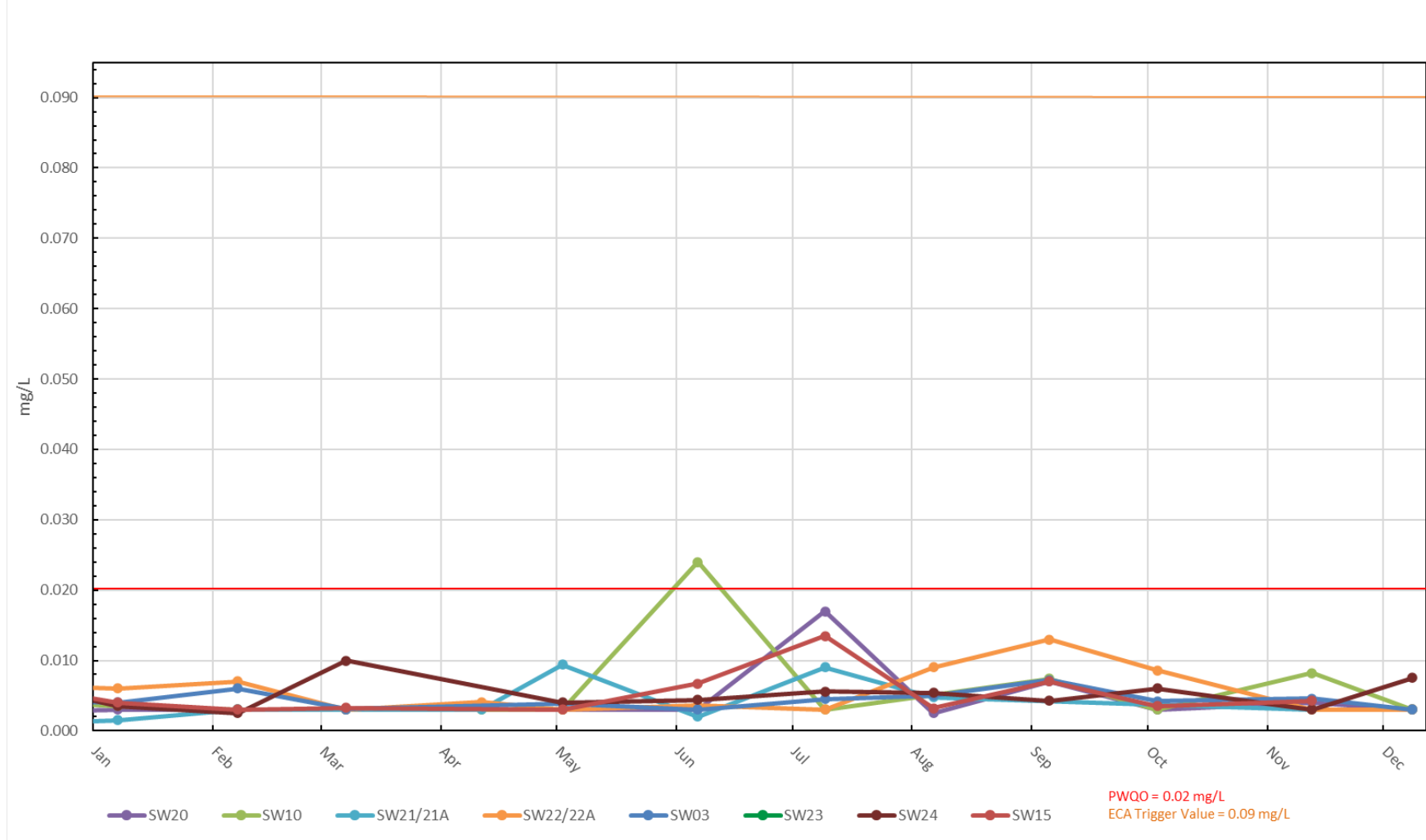


Figure 18: Rainy River Mine, Total Mercury in Pinewood River 2015-2023

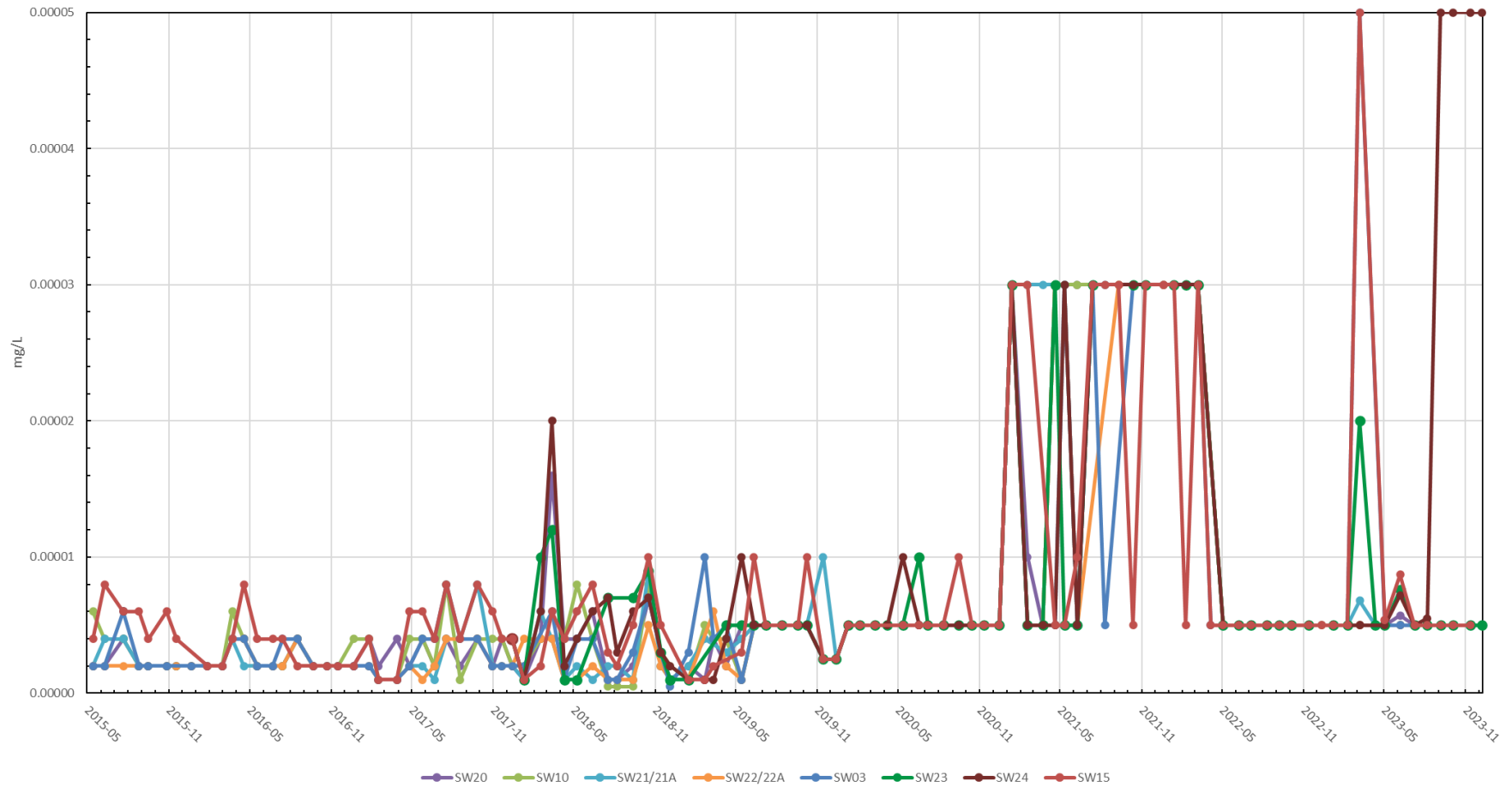


Figure 19: Rainy River Mine, Total Mercury in Pinewood River 2023

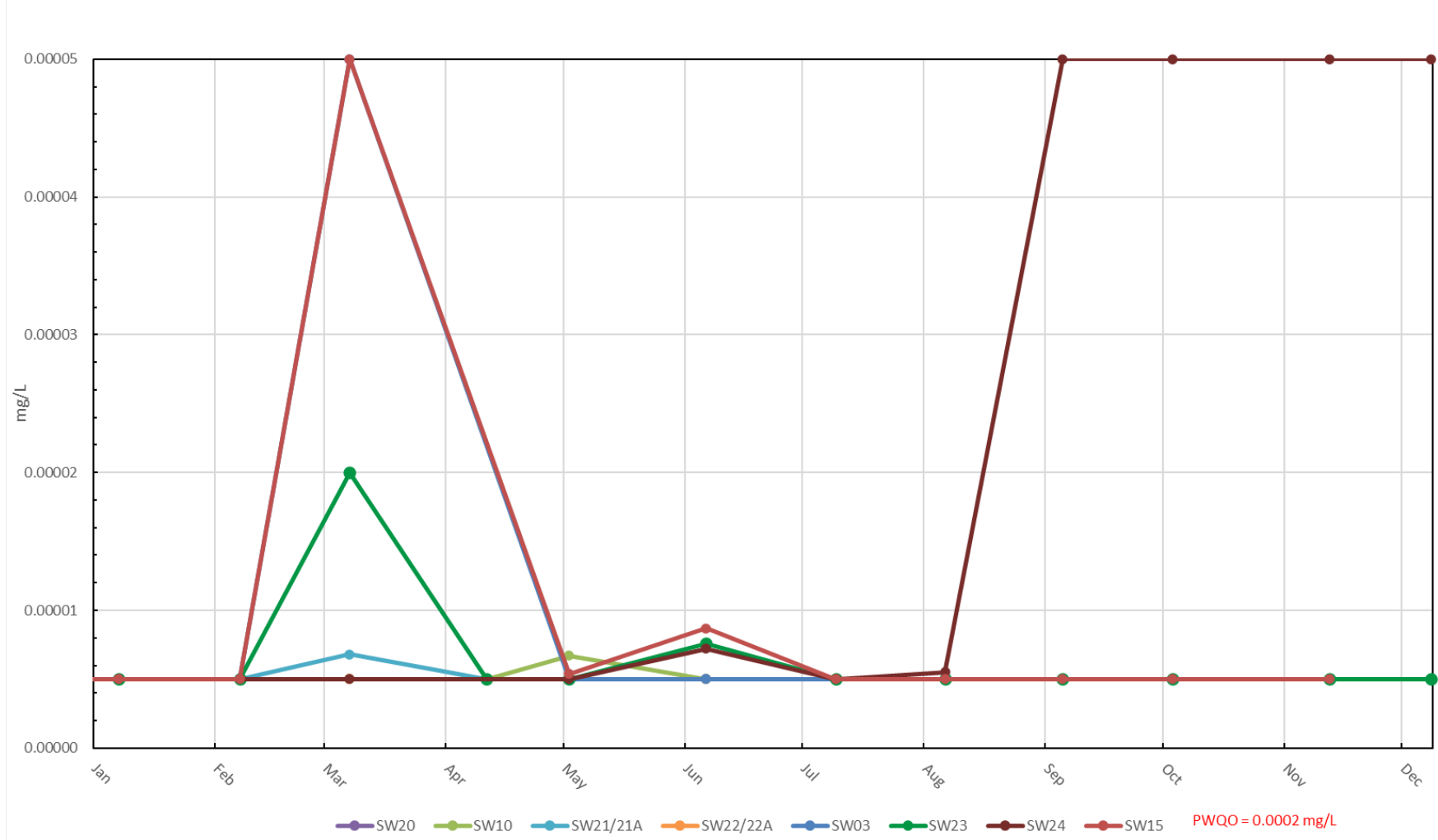


Figure 20: Rainy River Mine, Un-ionized Ammonia in Pinewood River 2015-2023

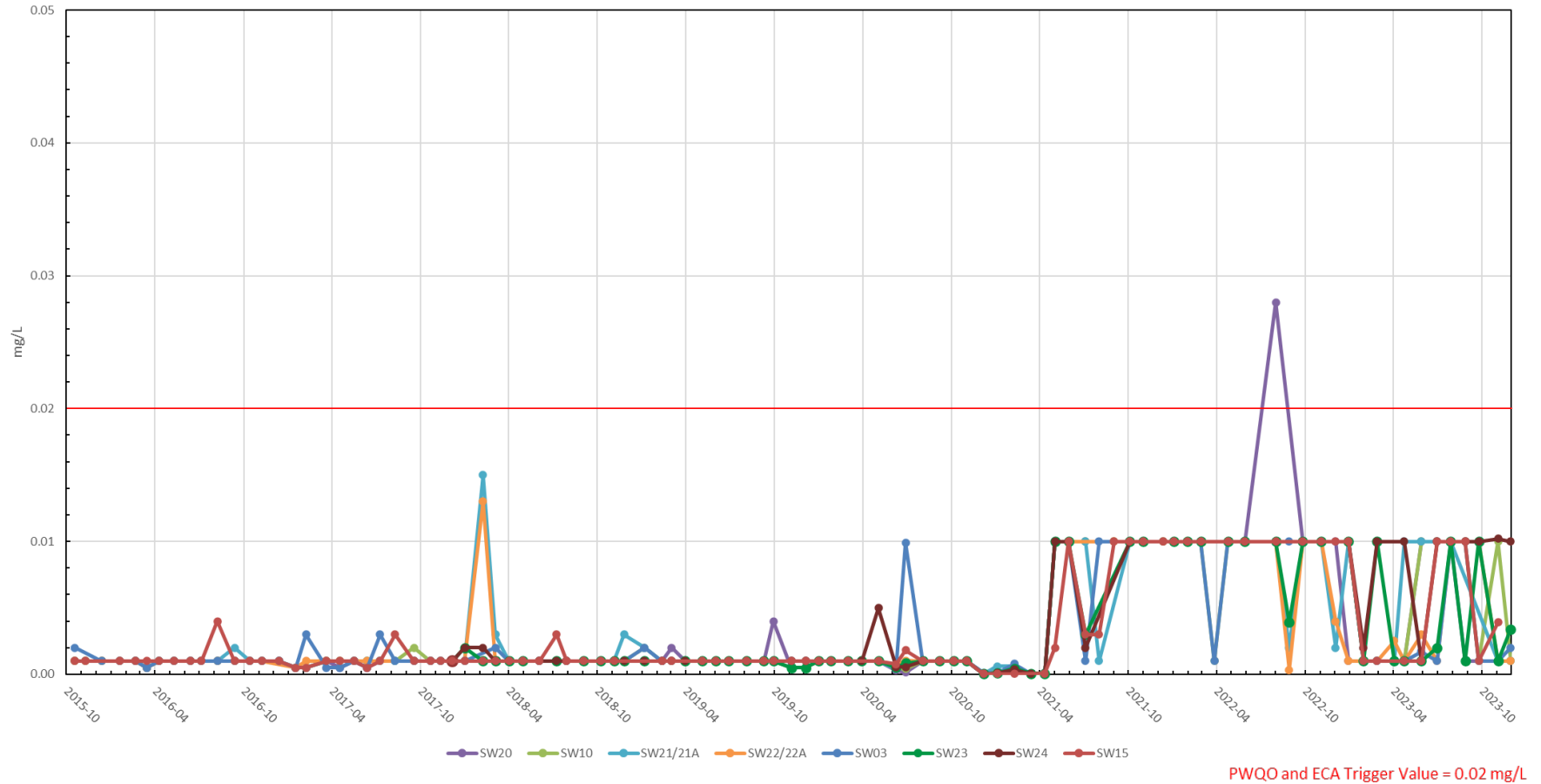


Figure 21: Rainy River Mine, Un-ionized Ammonia in Pinewood River 2023

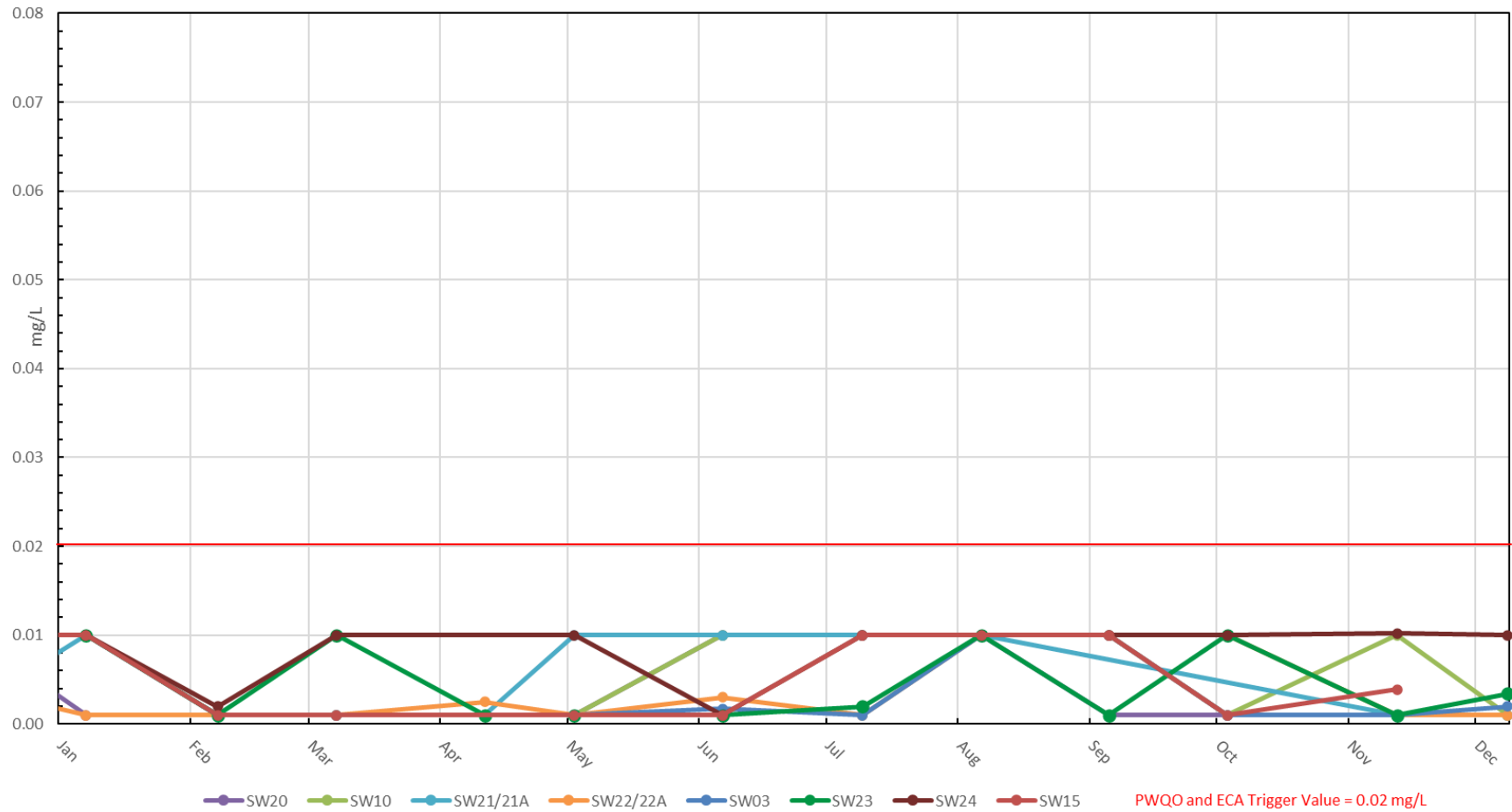


Figure 22: Rainy River Mine, Free Cyanide in Pinewood River 2018-2023

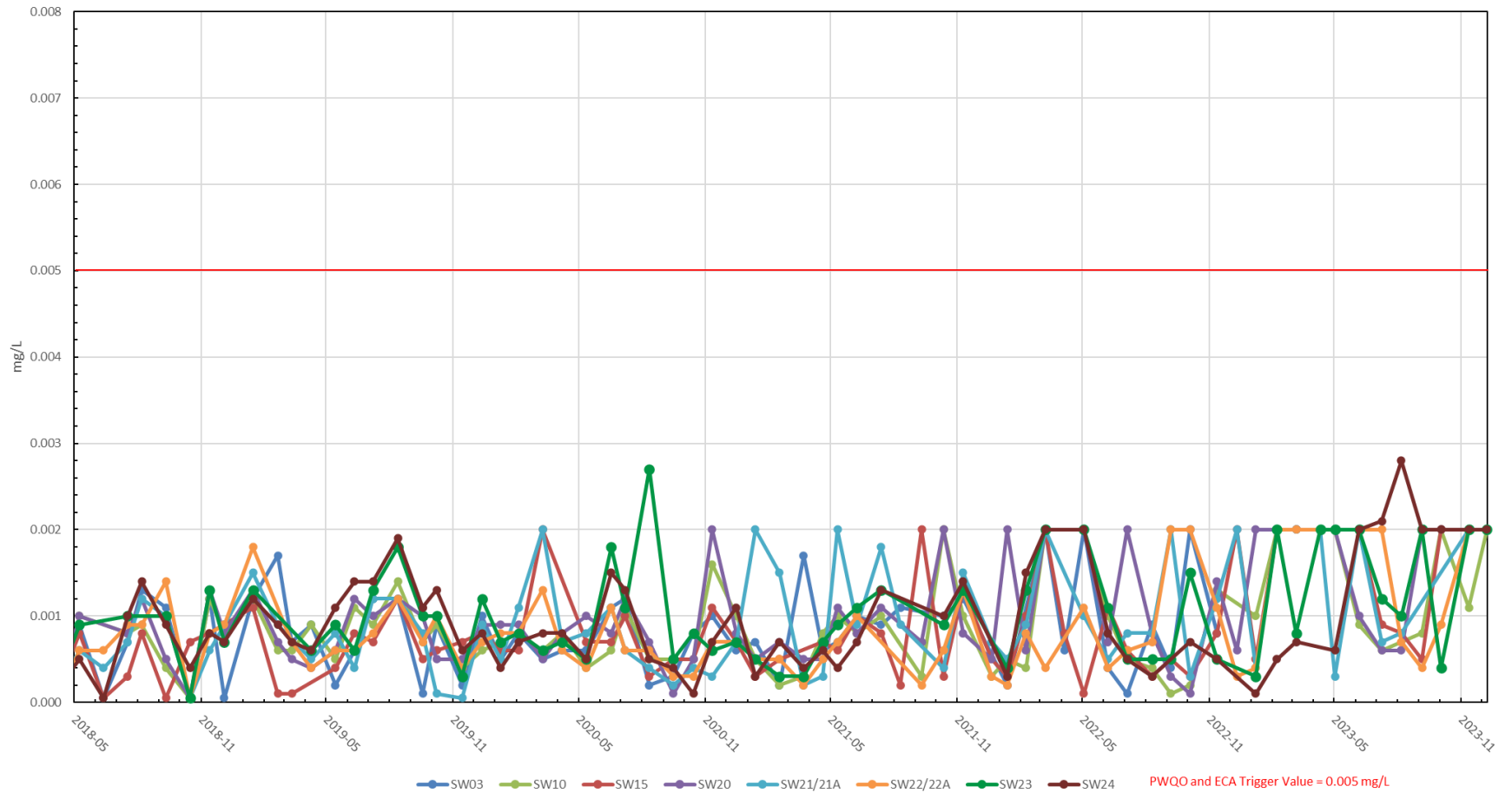


Figure 23: Rainy River Mine, Free Cyanide in Pinewood River 2023

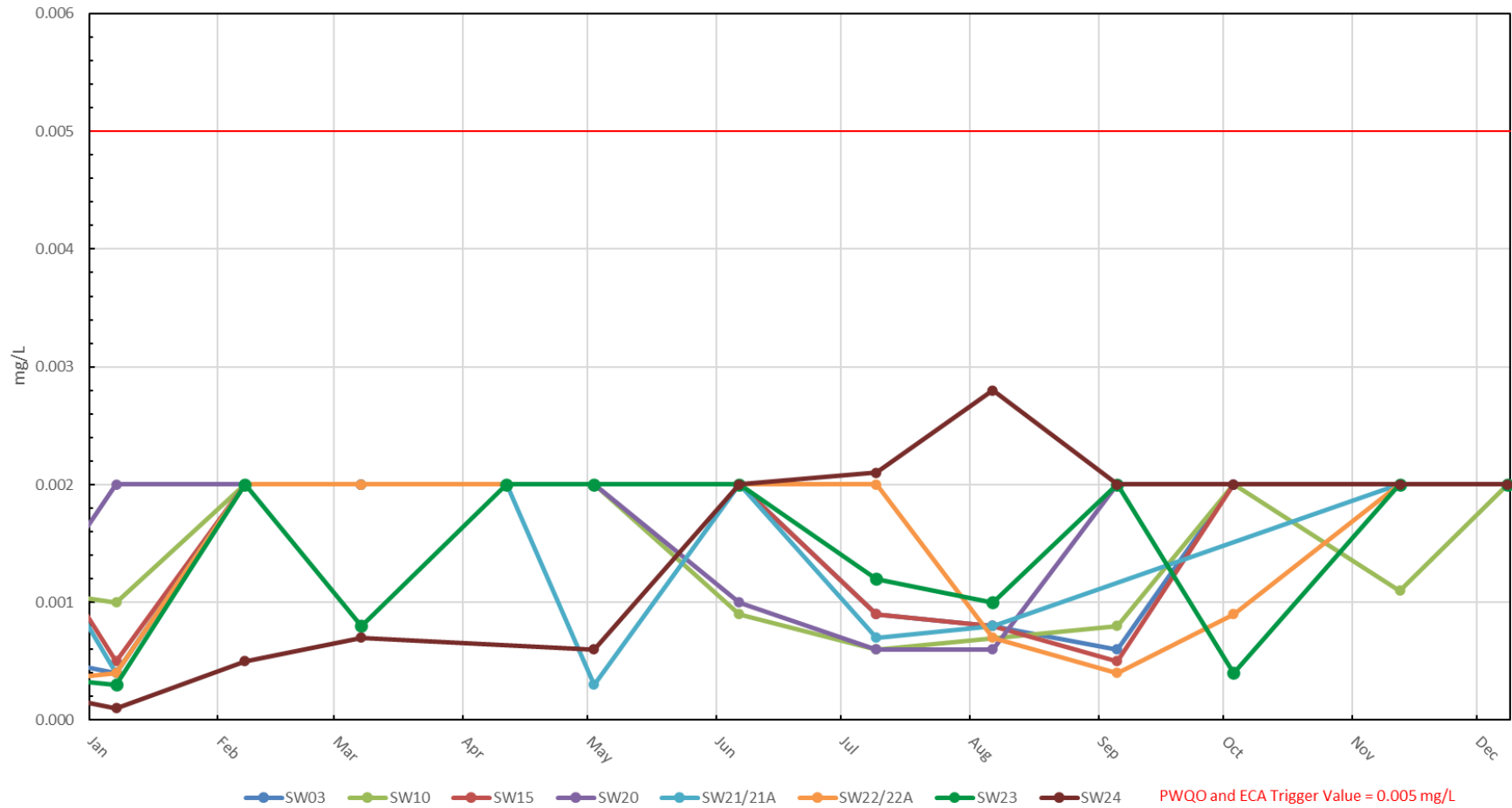


Figure 24: Rainy River Mine, Field pH levels in Area Creeks 2015-2023

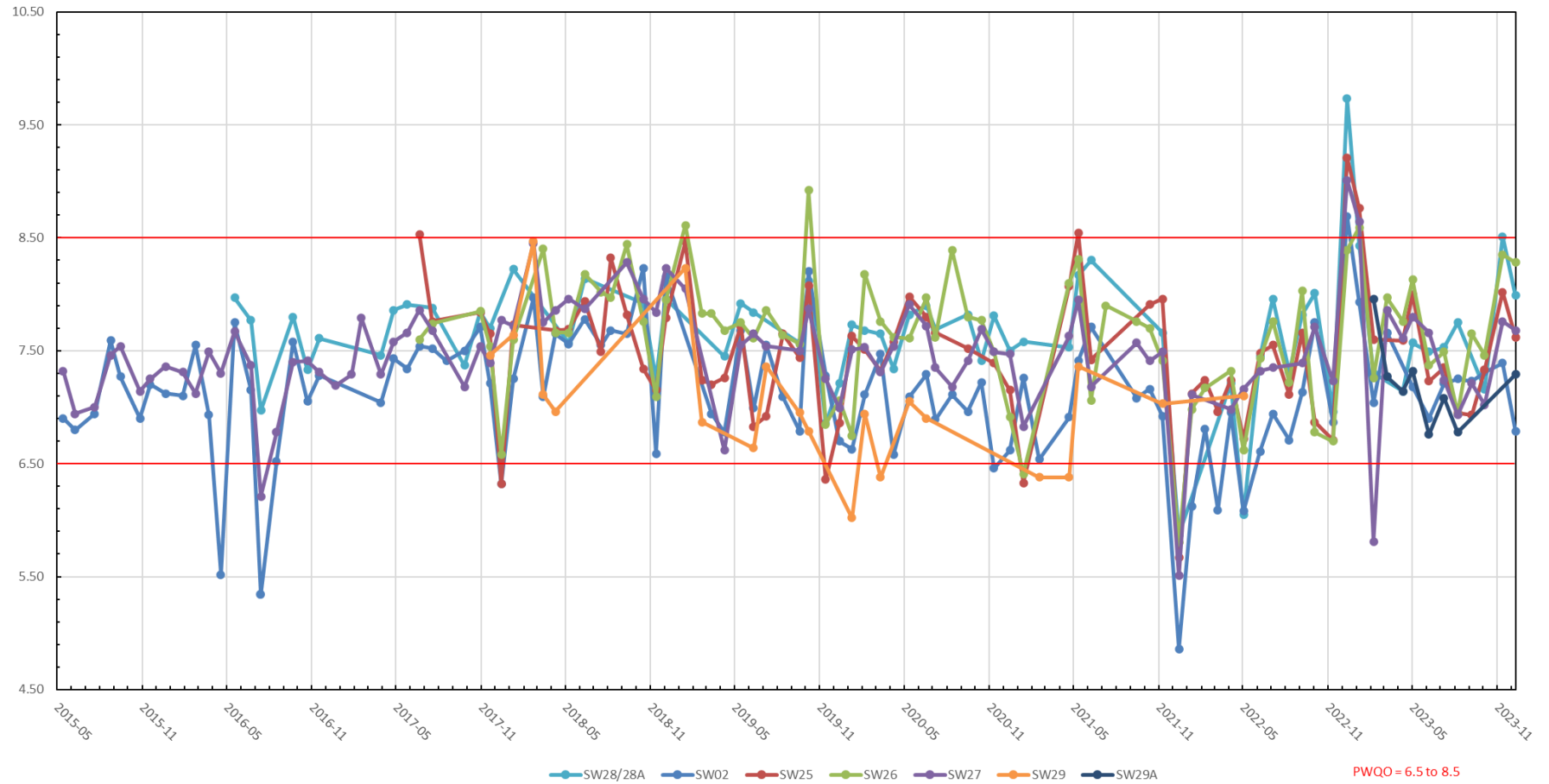


Figure 25: Rainy River Mine, Field pH levels in Area Creeks 2023

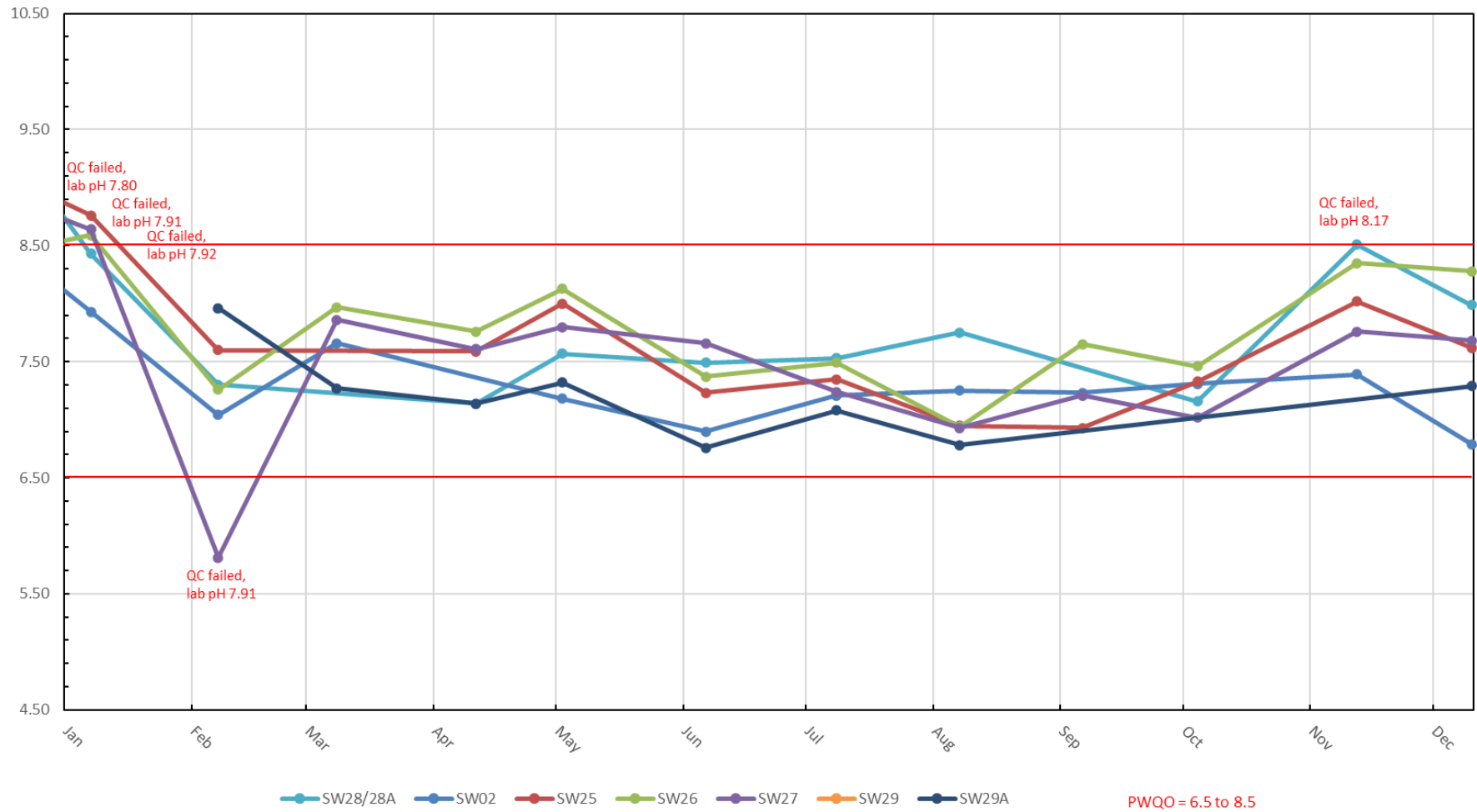


Figure 26: Rainy River Mine, Total Suspended Solids Concentration in Area Creeks 2015-2023

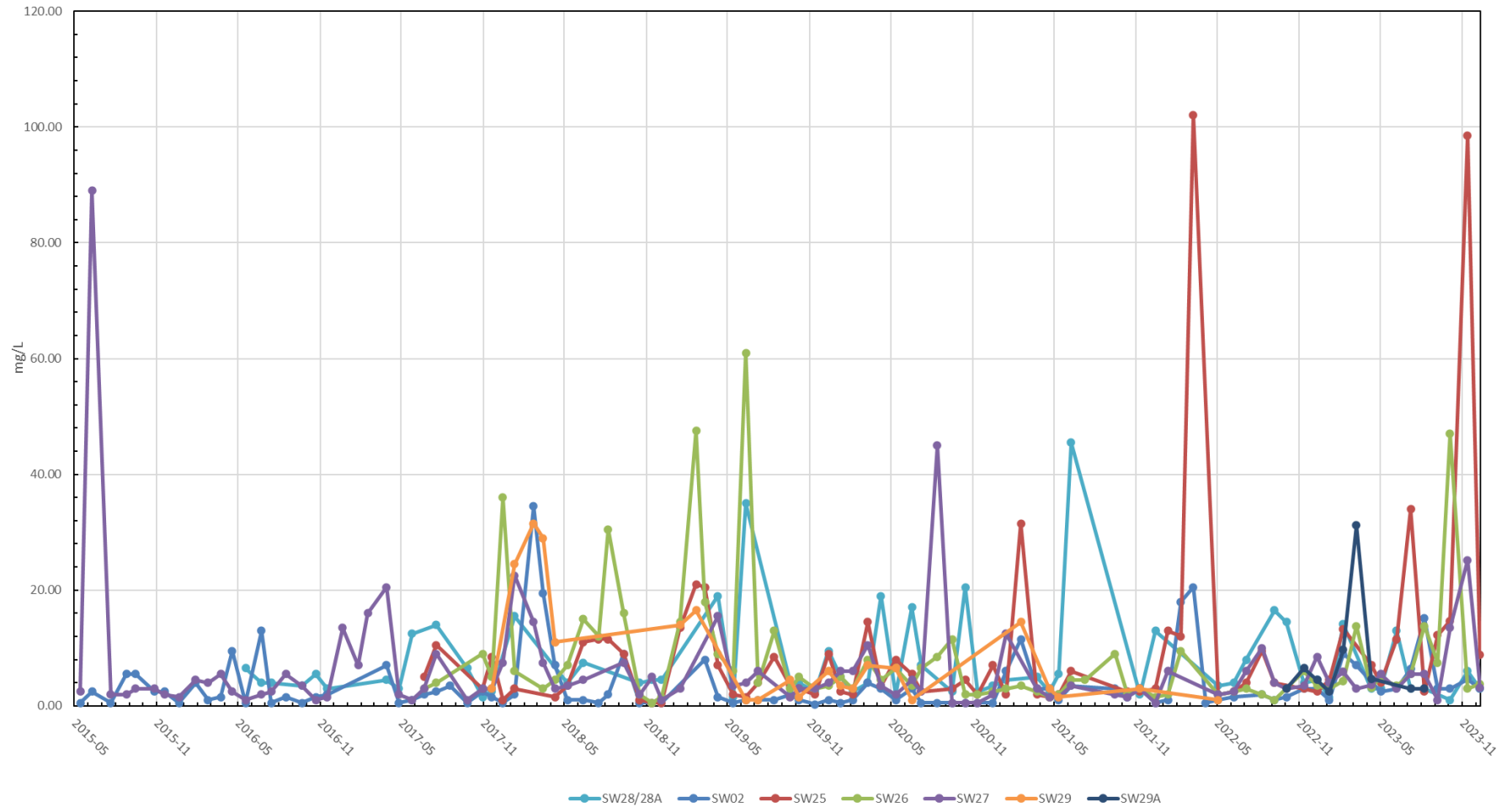


Figure 27: Rainy River Mine, Total Suspended Solids Concentration in Area Creeks 2023

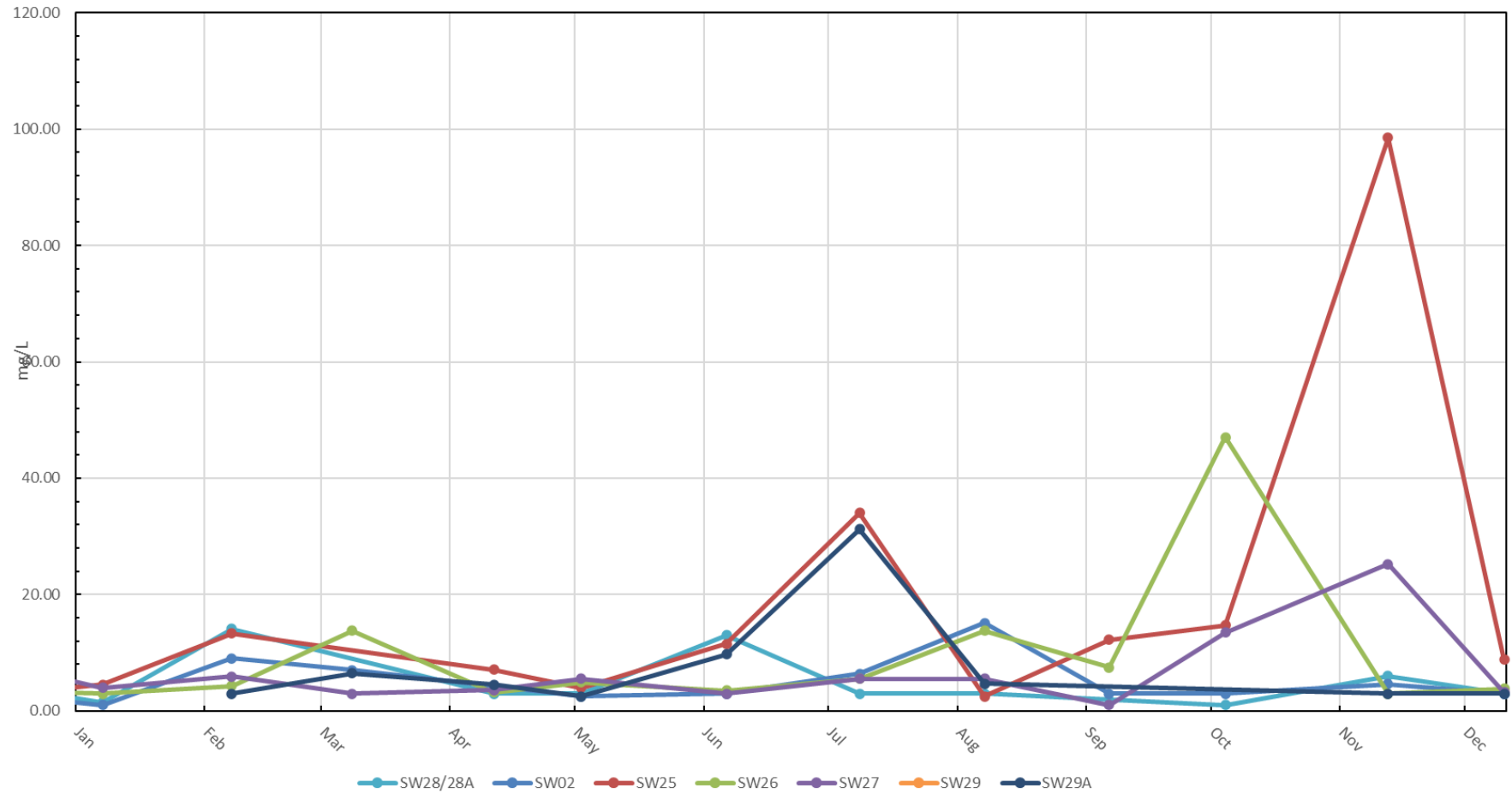


Figure 28: Rainy River Mine, Total Arsenic in Area Creeks 2015-2023

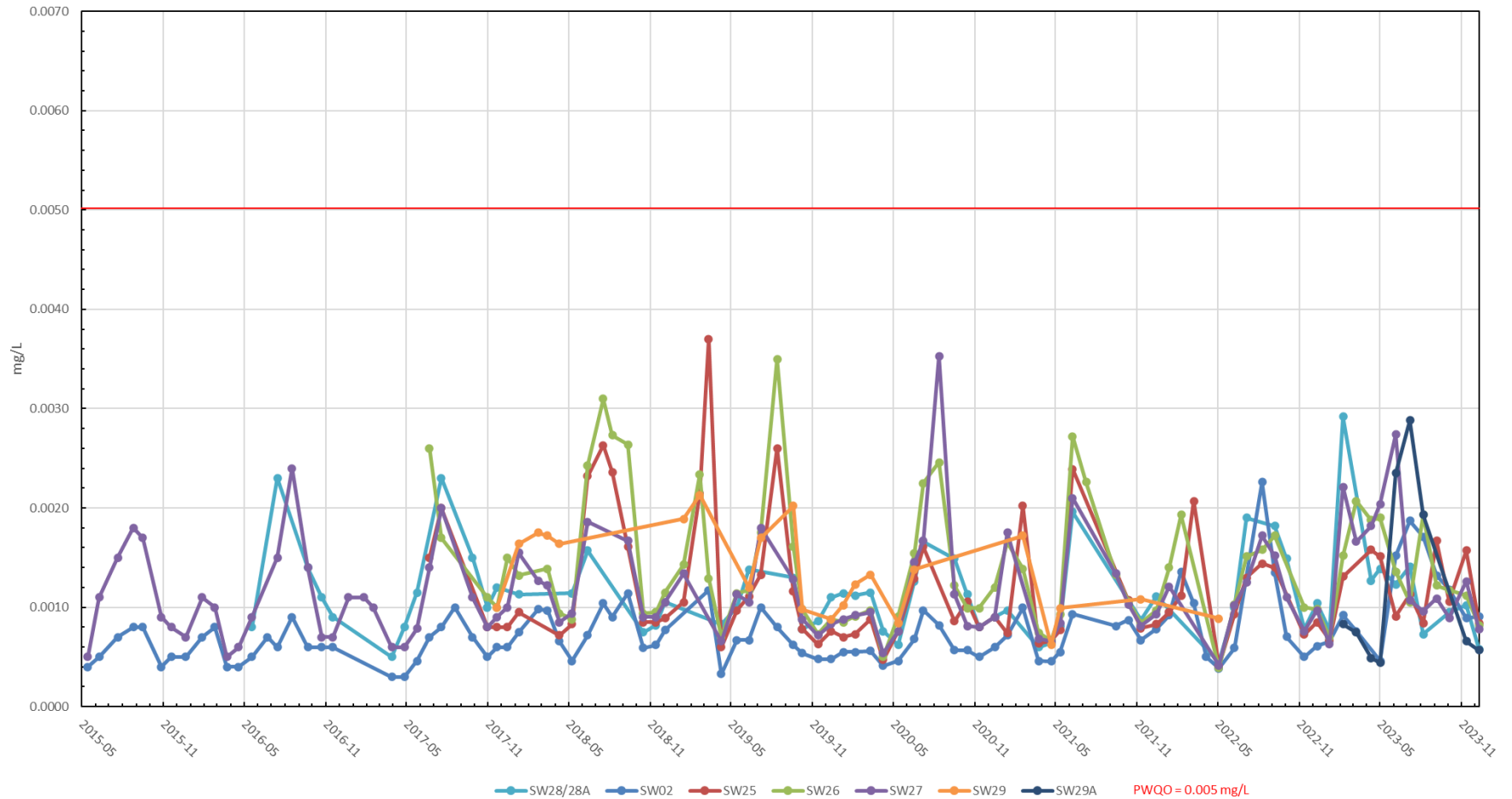


Figure 29: Rainy River Mine, Total Arsenic in Area Creeks 2023

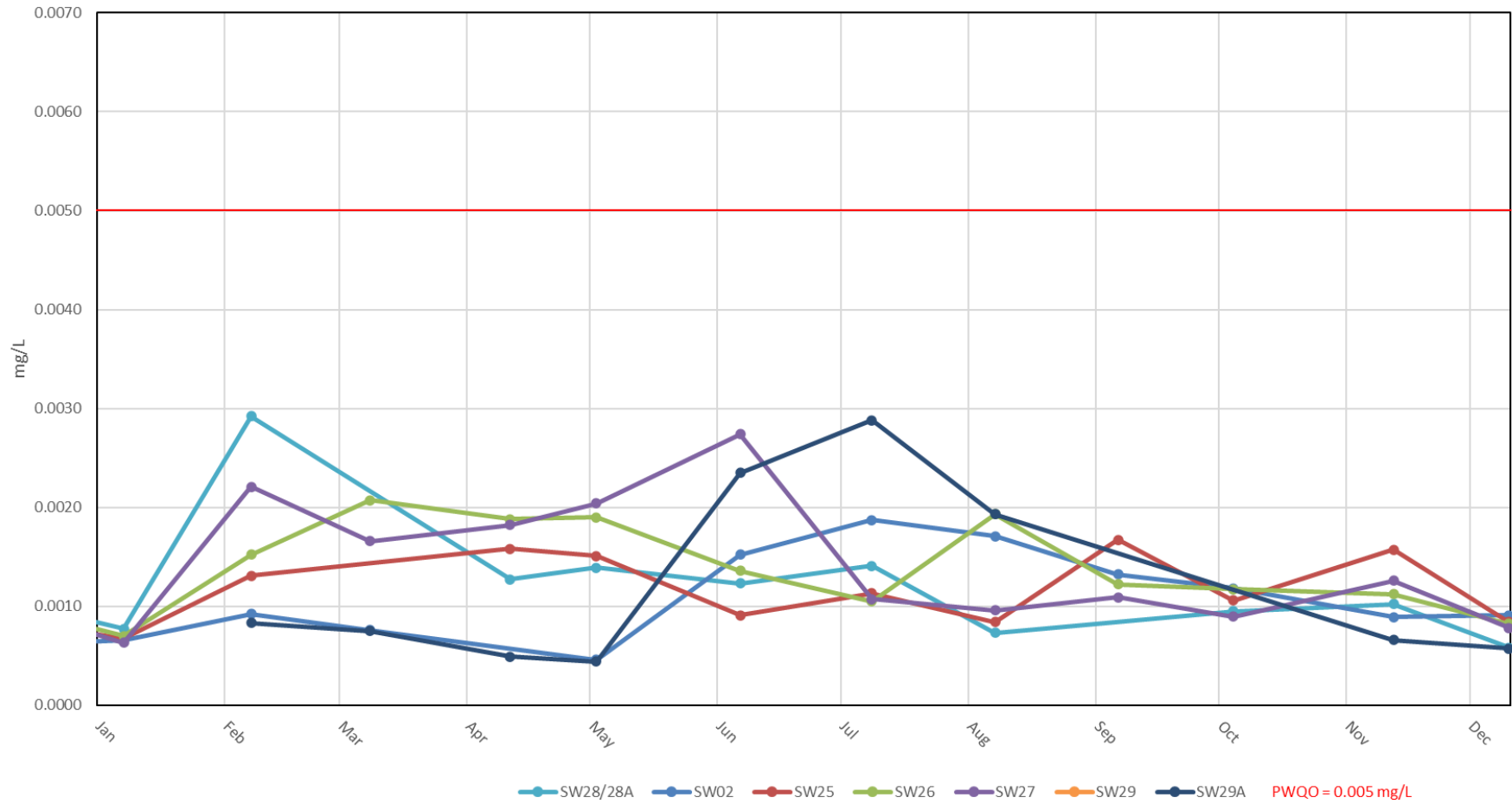


Figure 30: Rainy River Mine, Total Copper in Area Creeks 2015-2023

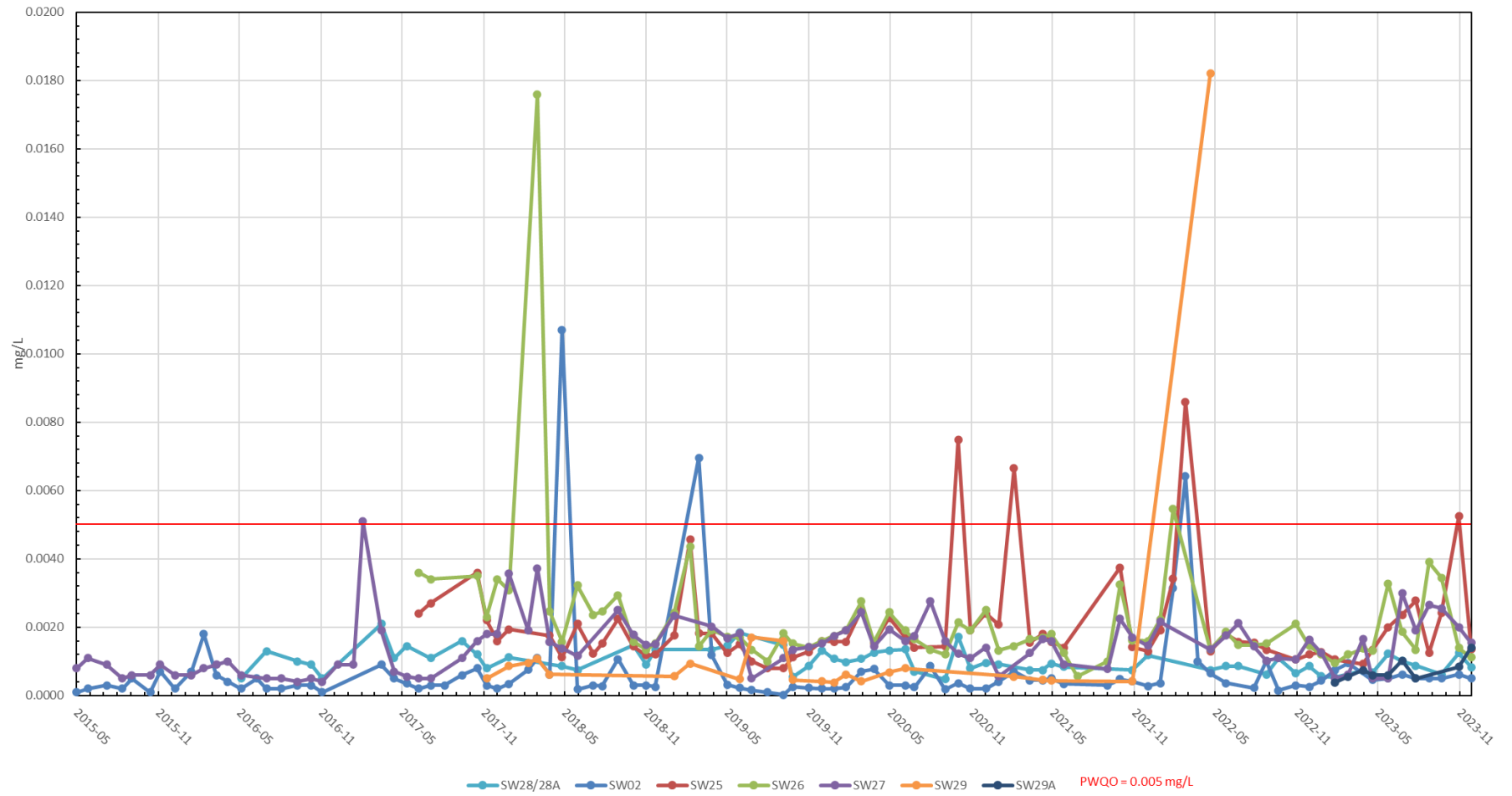


Figure 31: Rainy River Mine, Total Copper in Area Creeks 2023

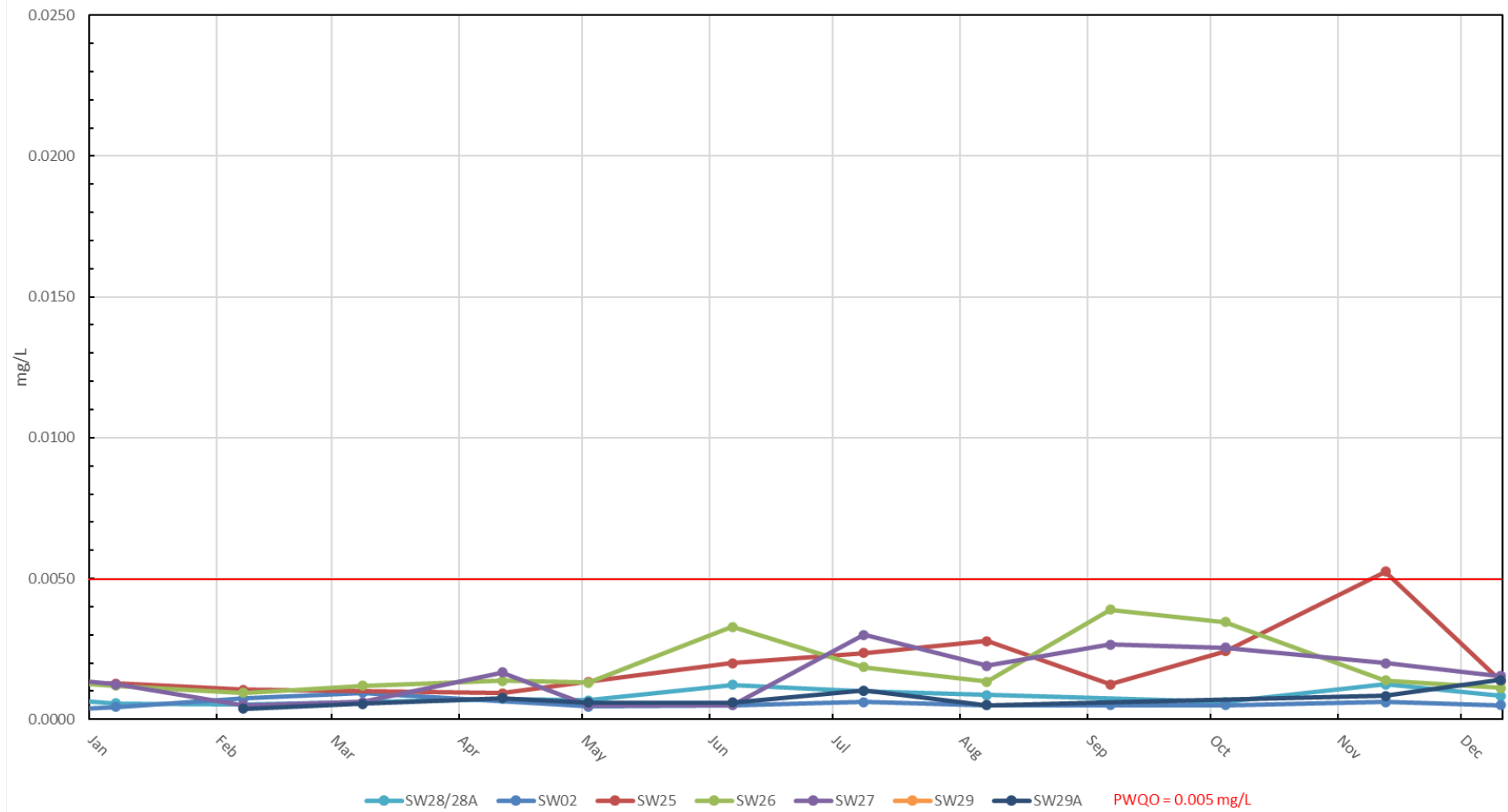


Figure 32: Rainy River Mine, Total Lead in Area Creeks 2015-2023

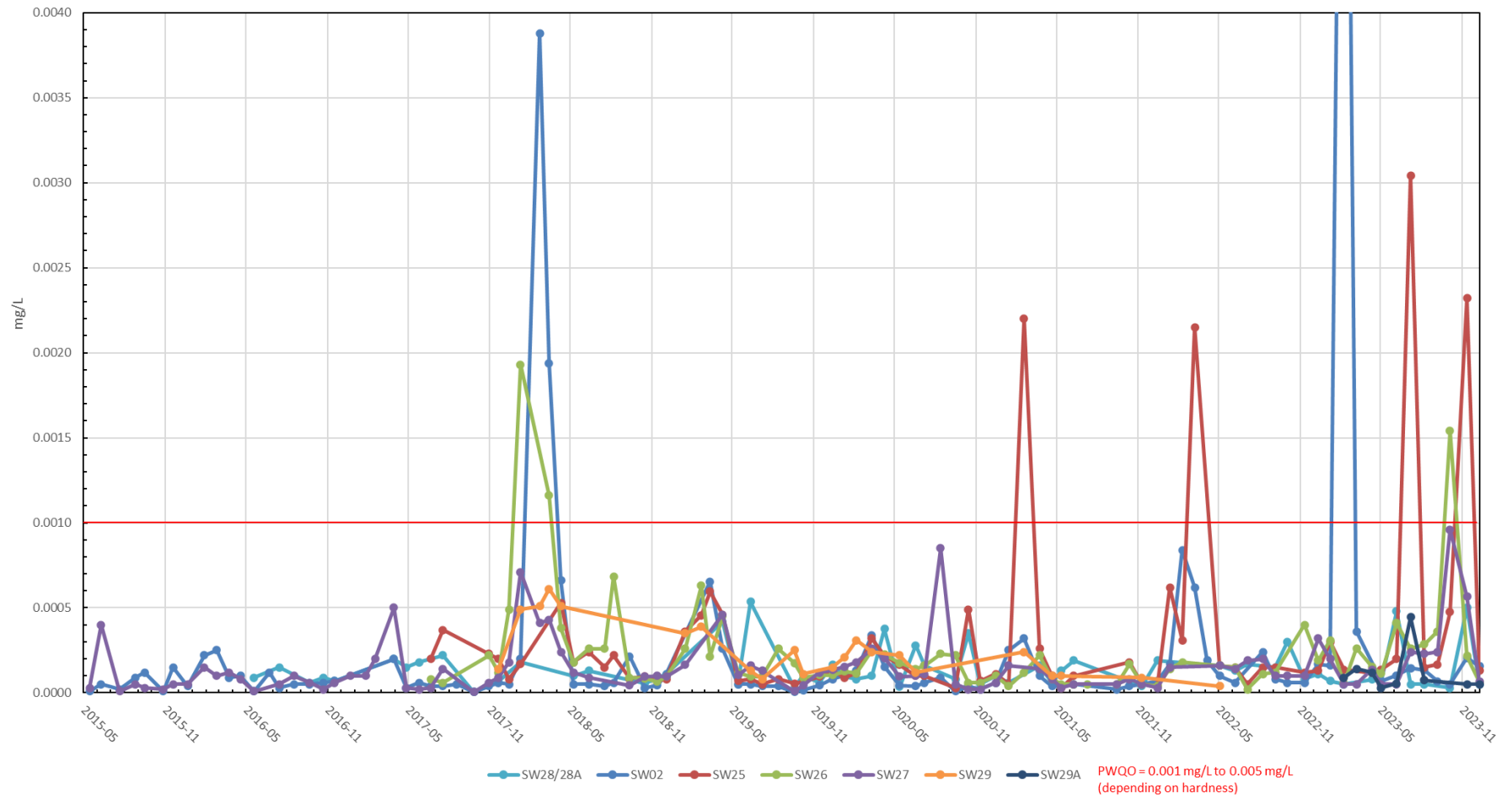


Figure 33: Rainy River Mine, Total Lead in Area Creeks 2023

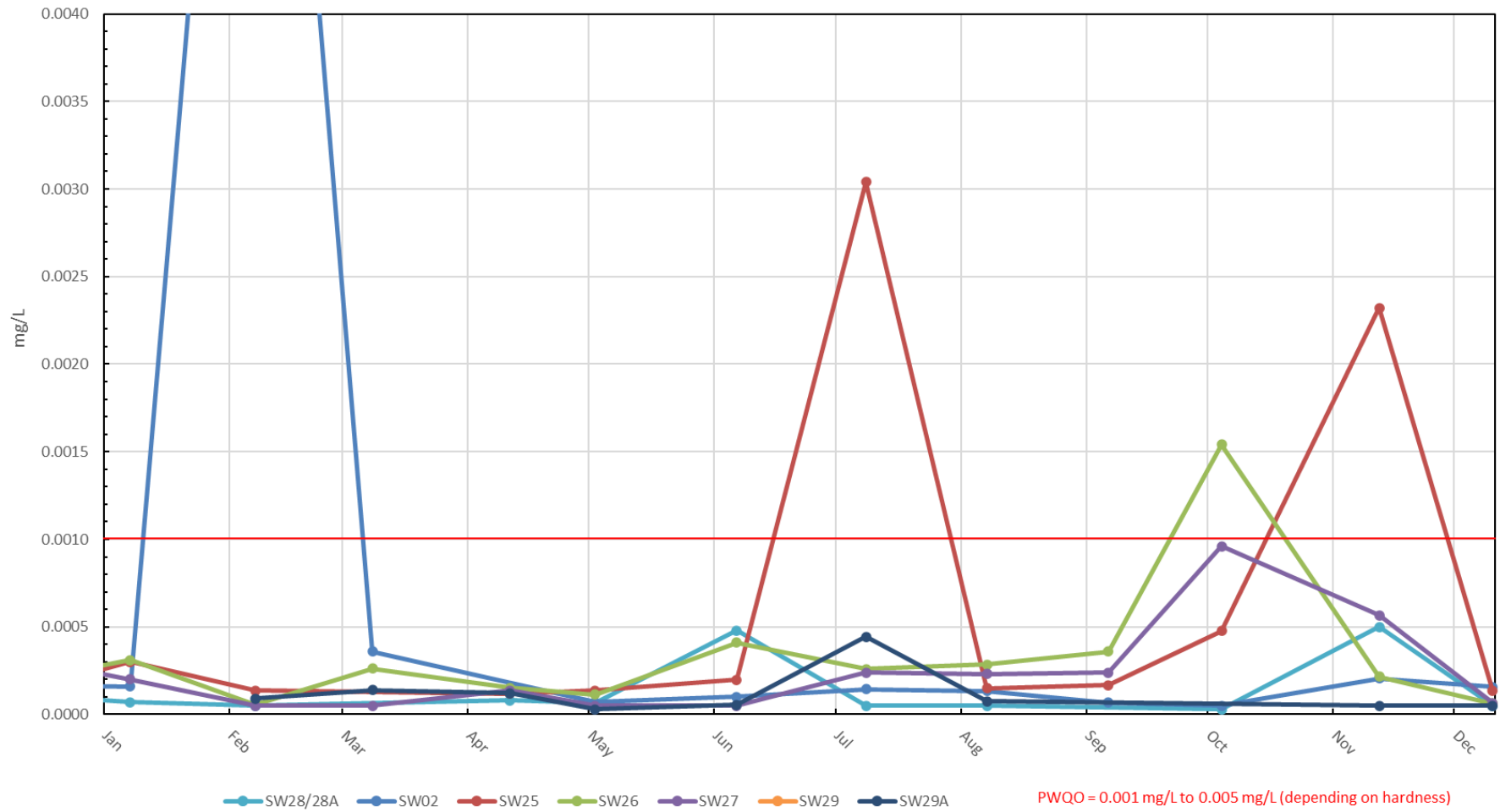


Figure 34: Rainy River Mine, Total Nickel in Area Creeks 2015-2023

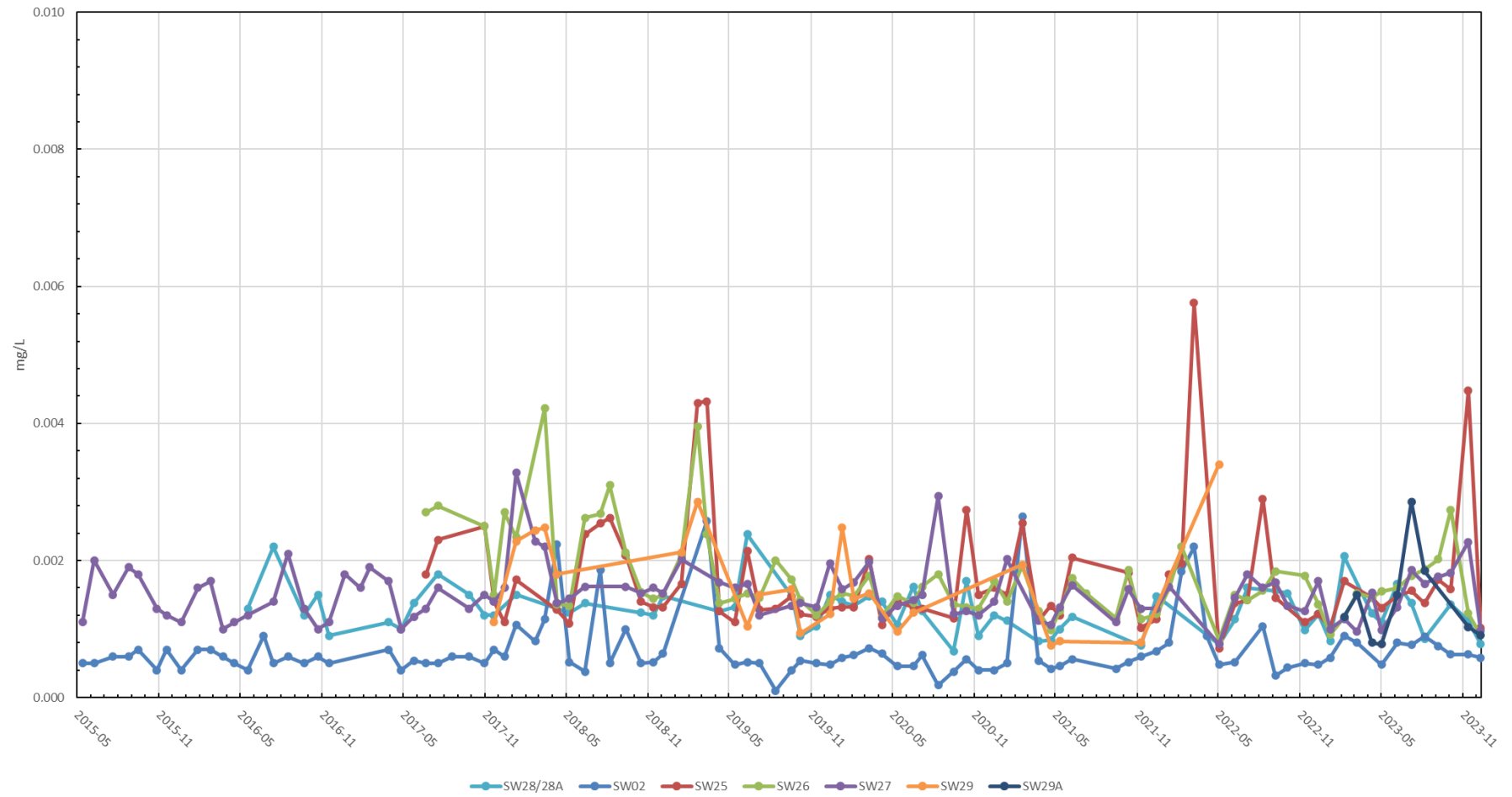


Figure 35: Rainy River Mine, Total Nickel in Area Creeks 2023

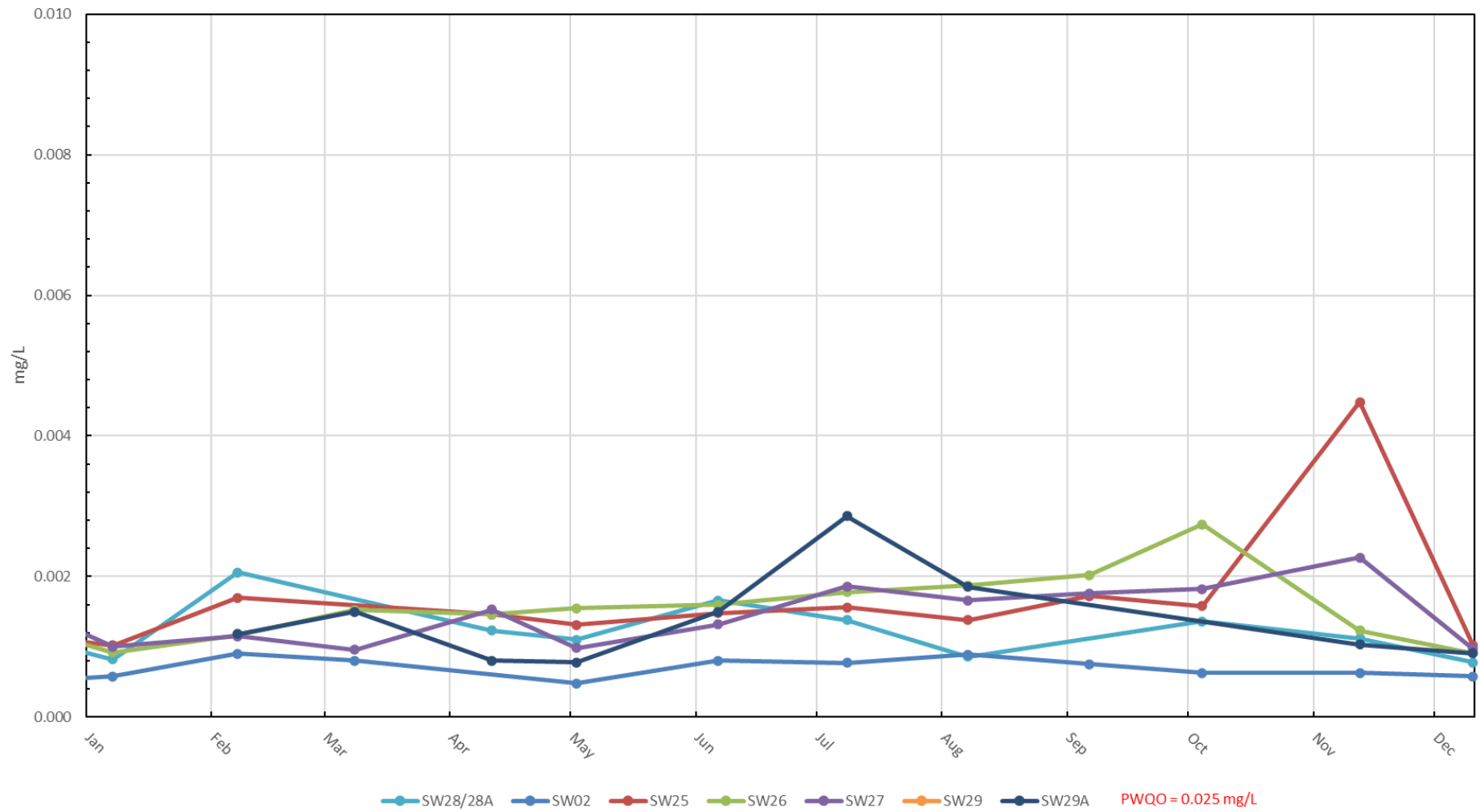


Figure 36: Rainy River Mine, Total Phosphorus in Area Creeks 2017-2023

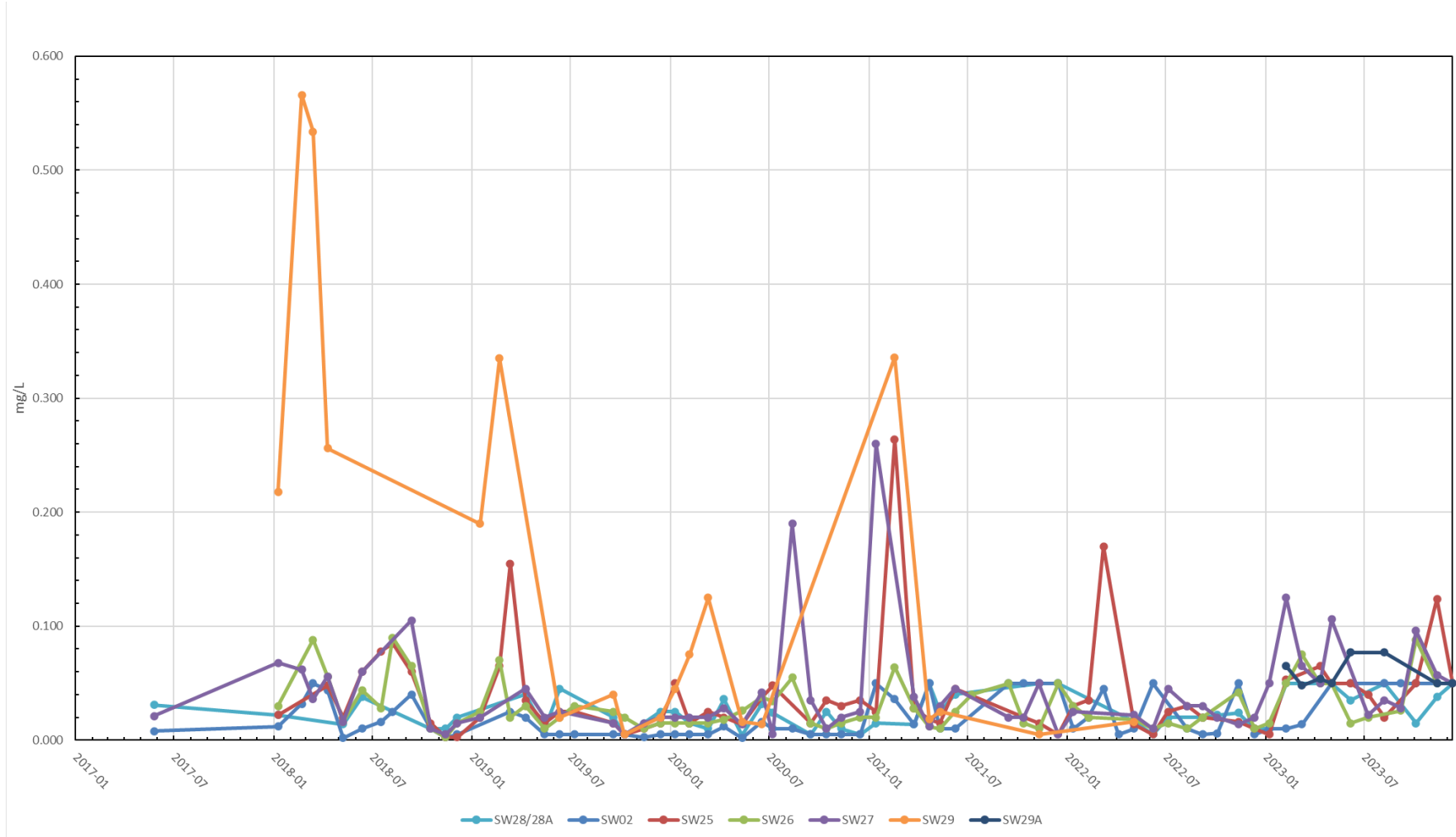


Figure 37: Rainy River Mine, Total Phosphorus in Area Creeks 2023

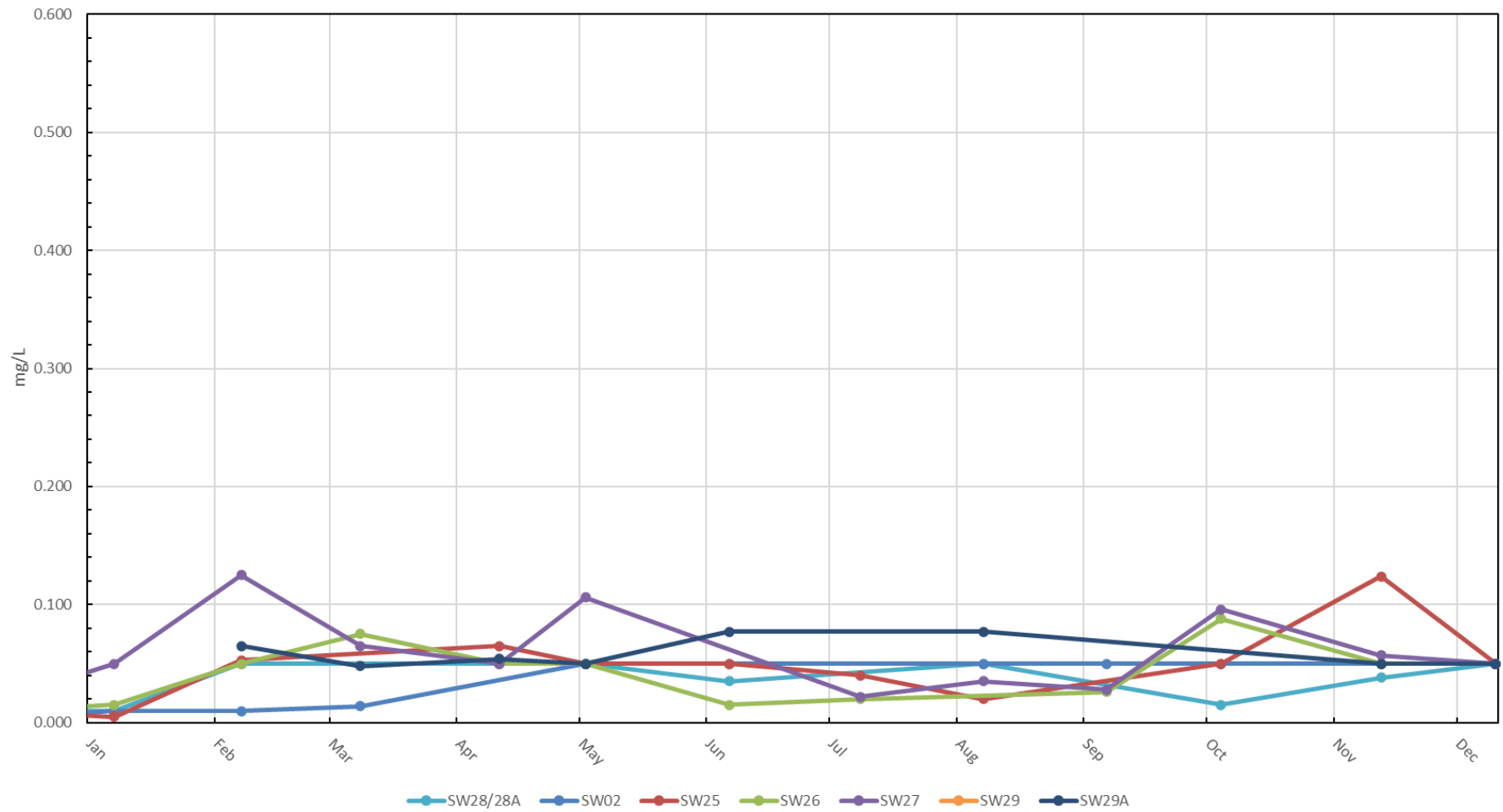


Figure 38: Rainy River Mine, Total Zinc in Area Creeks 2015-2023

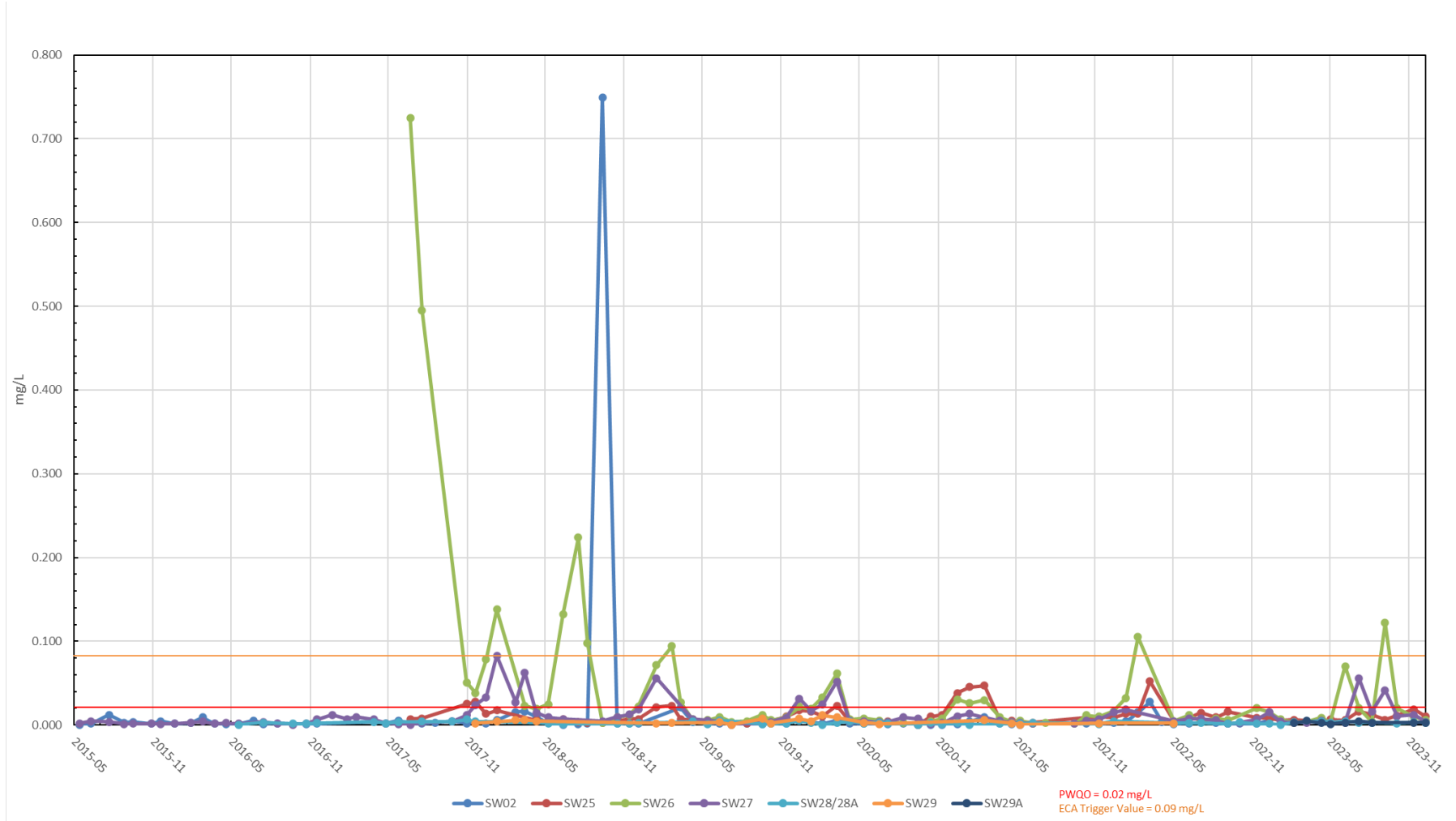


Figure 39: Rainy River Mine, Total Zinc in Area Creeks 2023

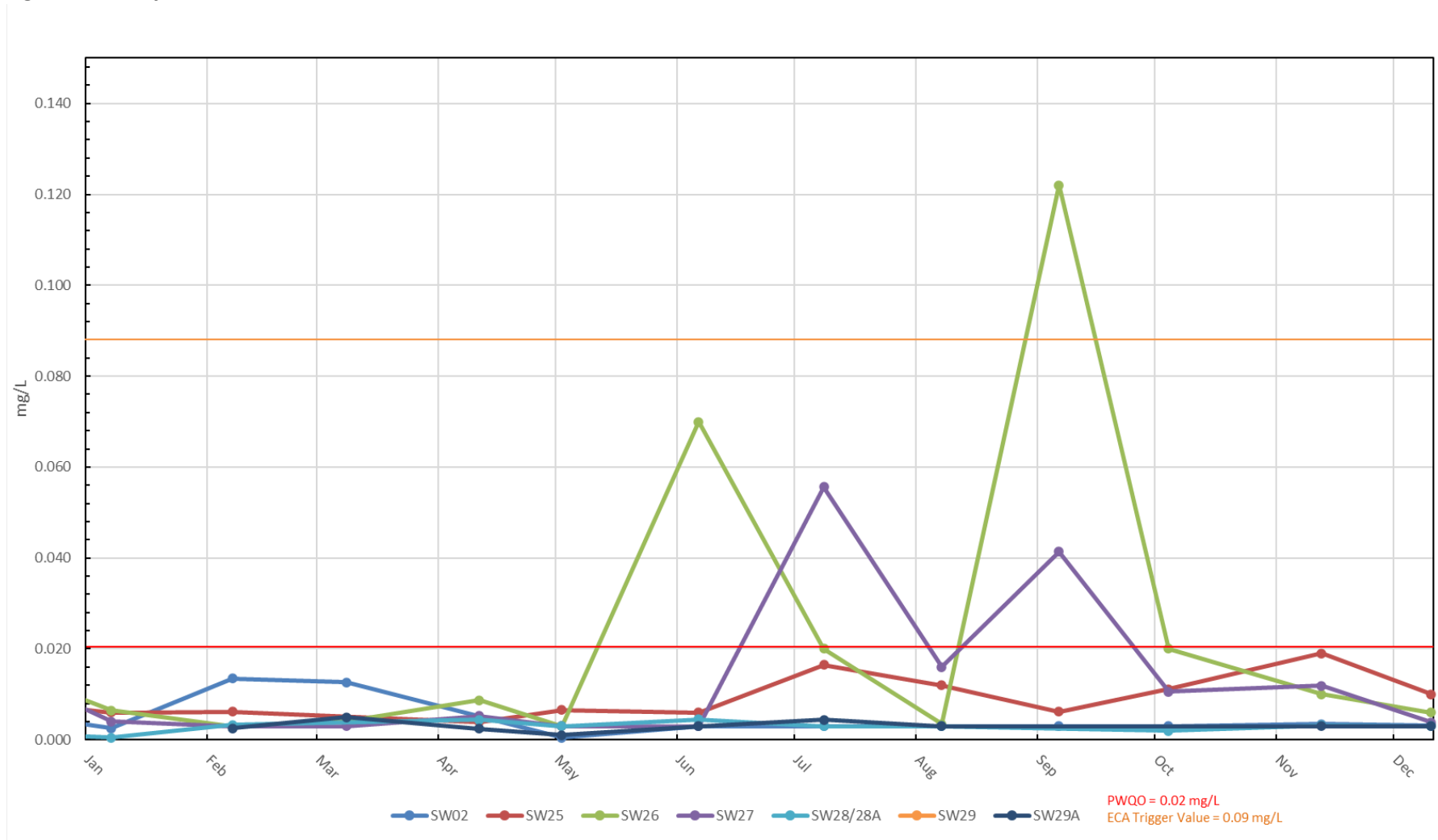


Figure 40: Rainy River Mine, Total Mercury in Area Creeks 2015-2023

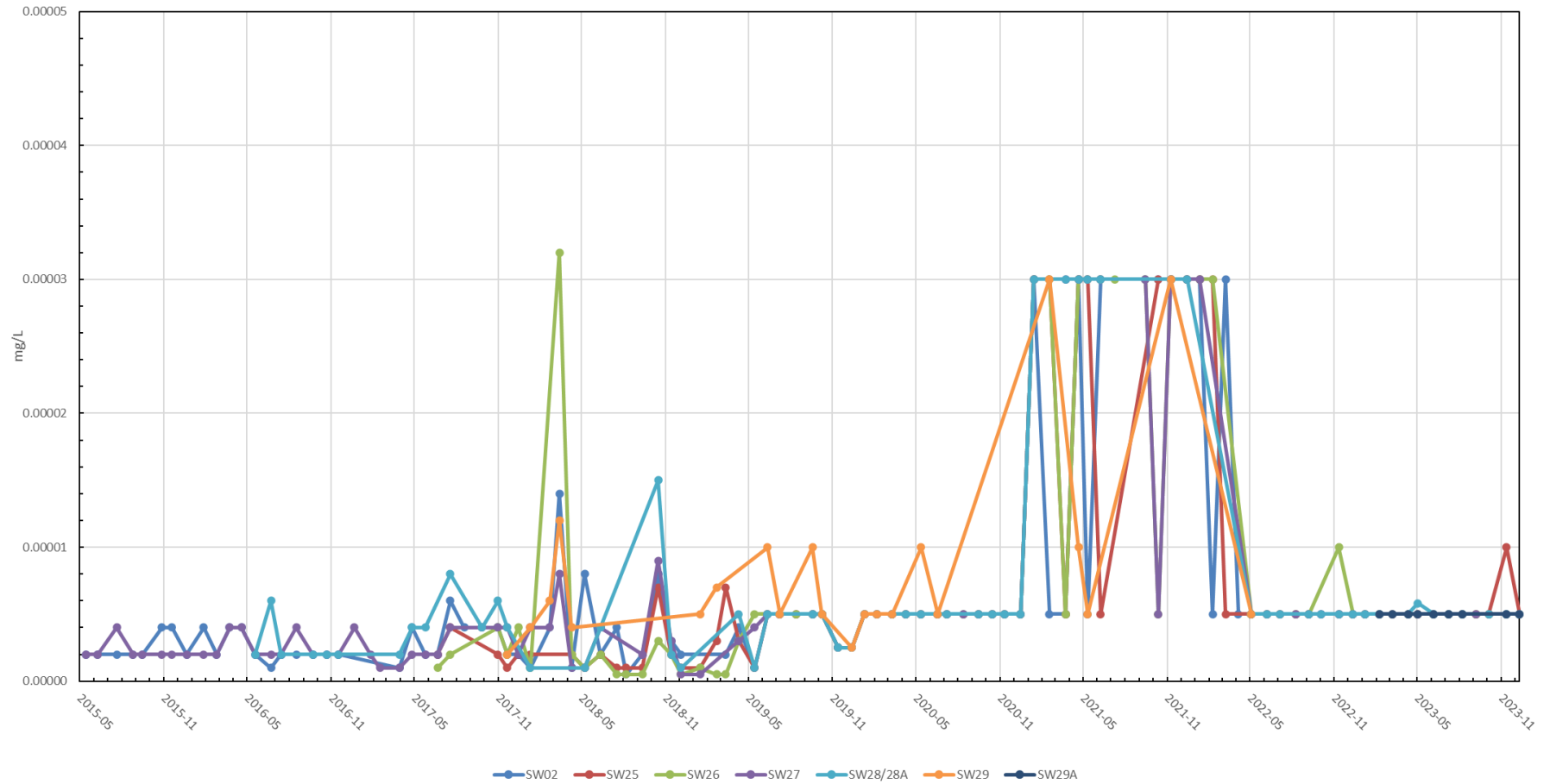


Figure 41: Rainy River Mine, Total Mercury in Area Creeks 2023

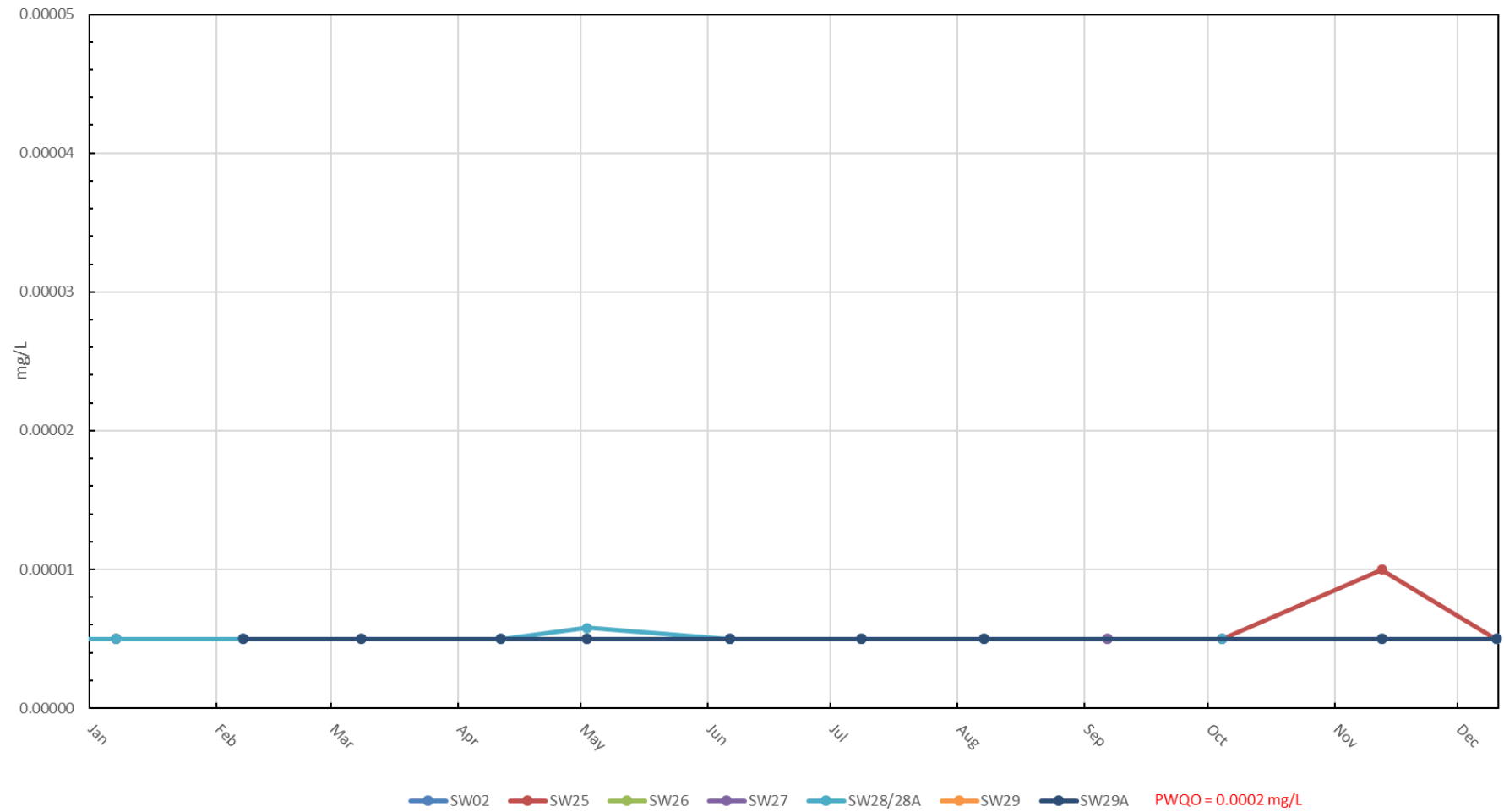


Figure 42: Rainy River Mine, Un-ionized Ammonia in Area Creeks 2015-2023

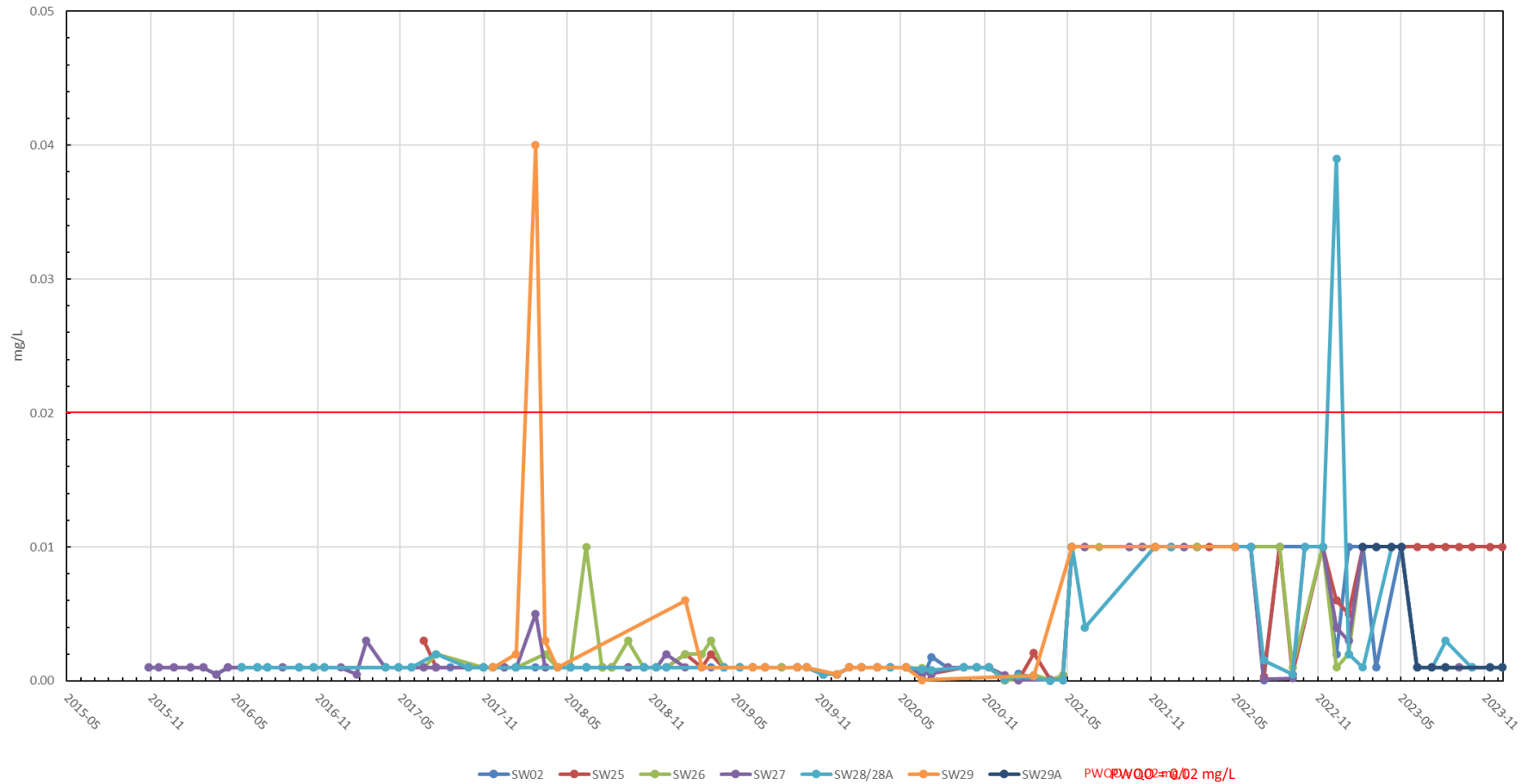


Figure 43: Rainy River Mine, Un-ionized Ammonia in Area Creeks 2023

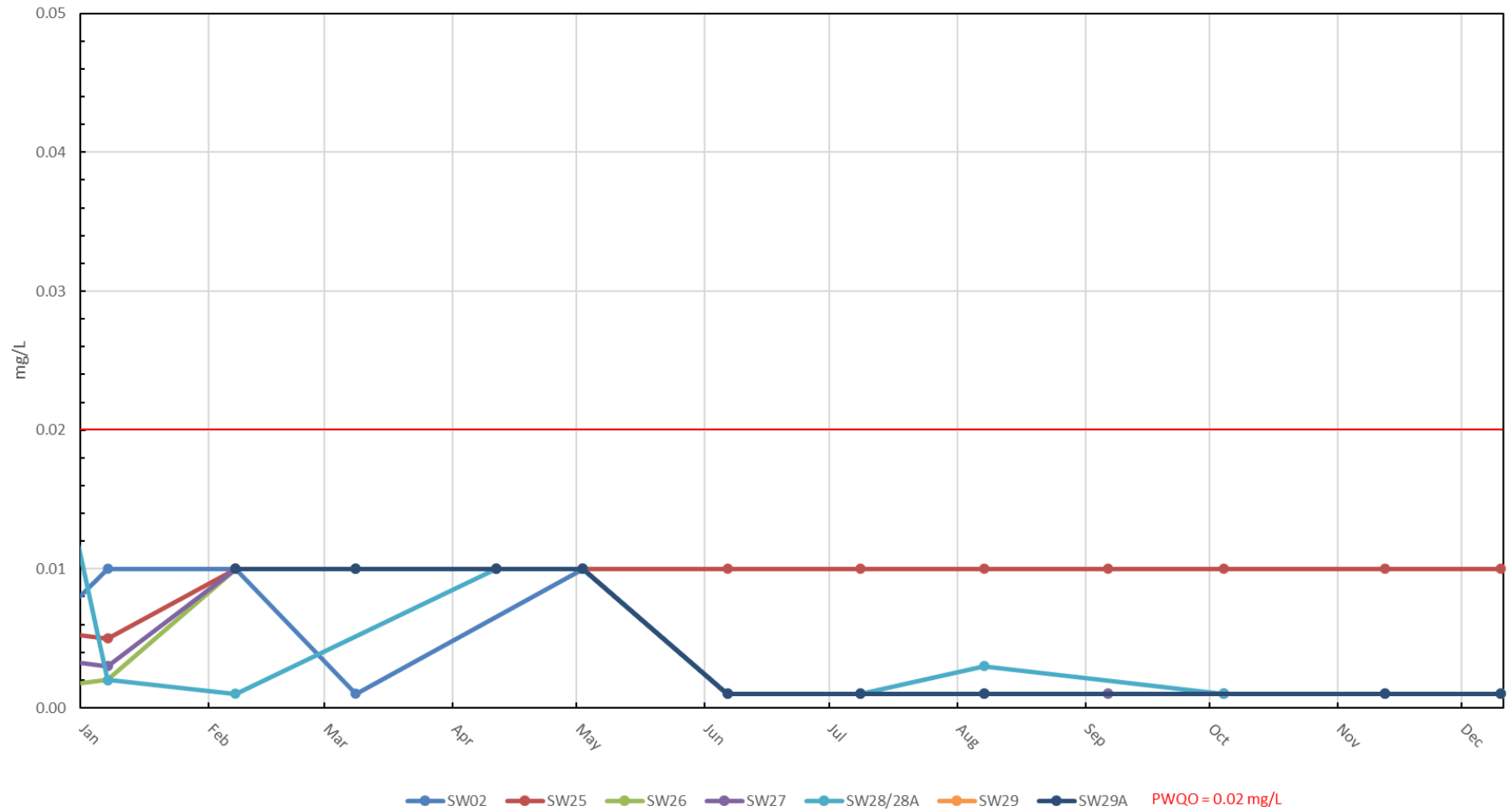


Figure 44: Rainy River Mine, Free Cyanide in Area Creeks 2018-2023

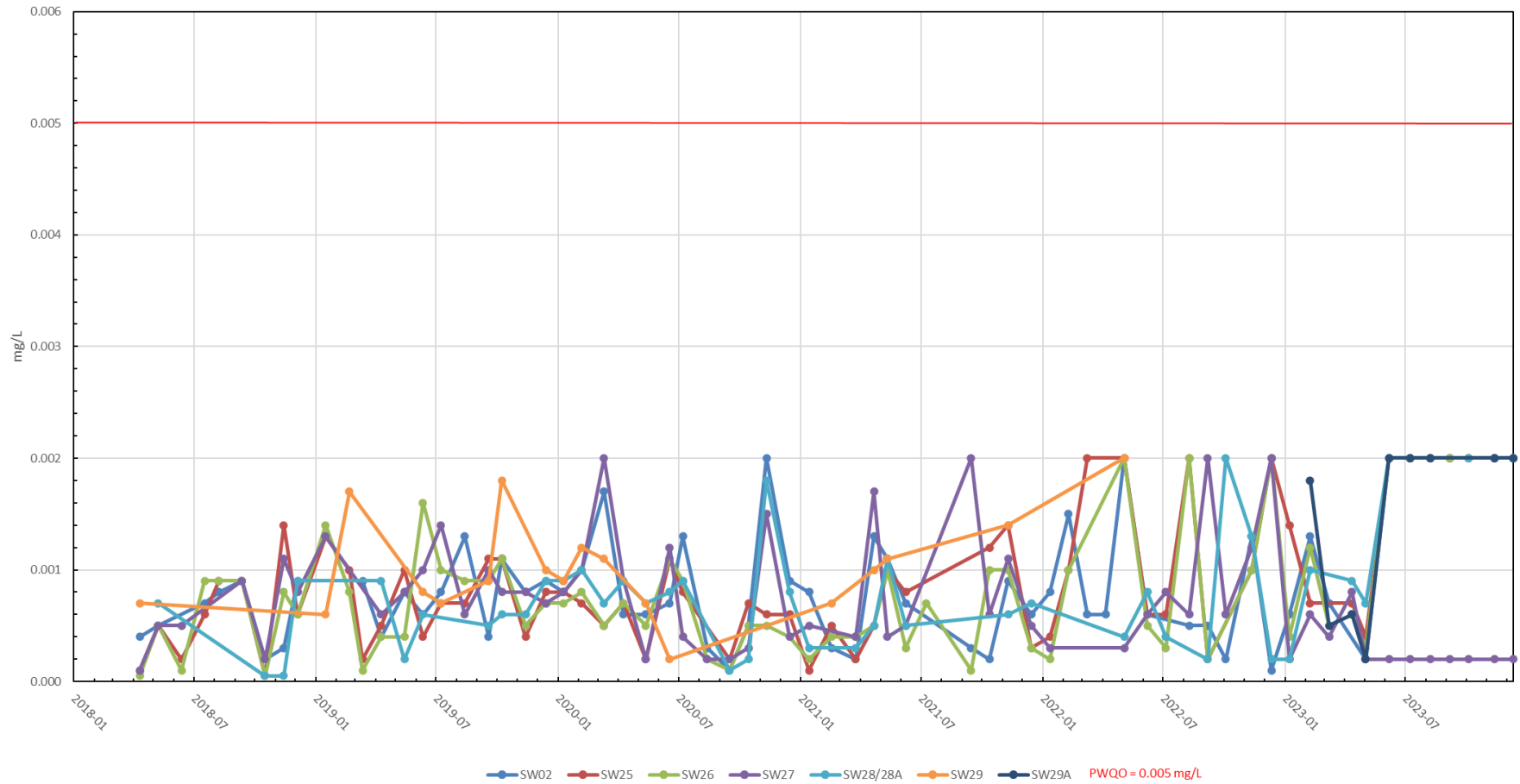


Figure 45: Rainy River Mine, Free Cyanide in Area Creeks 2023

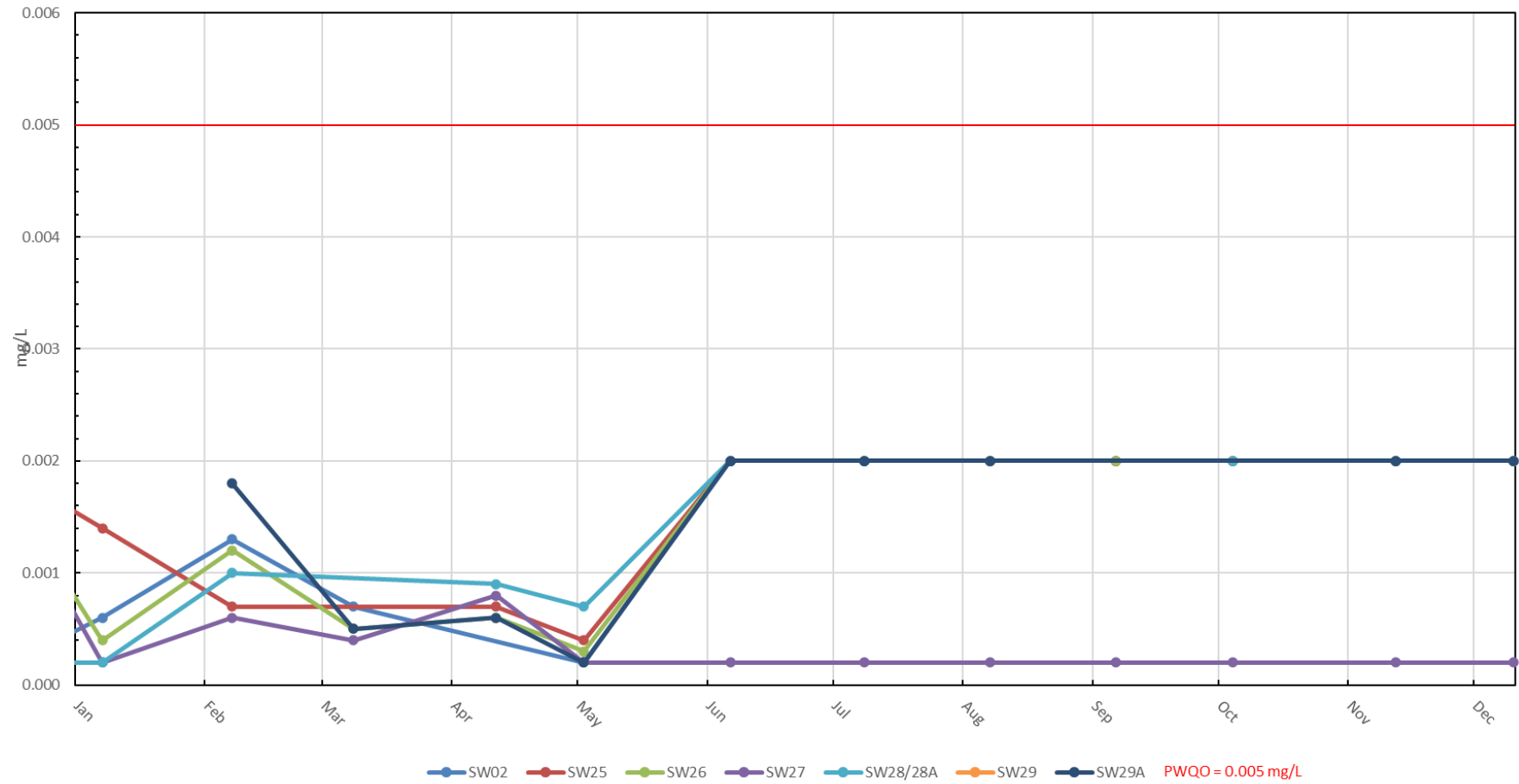


Figure 46: Rainy River Mine, Field pH Levels in Rainy River 2015-2023

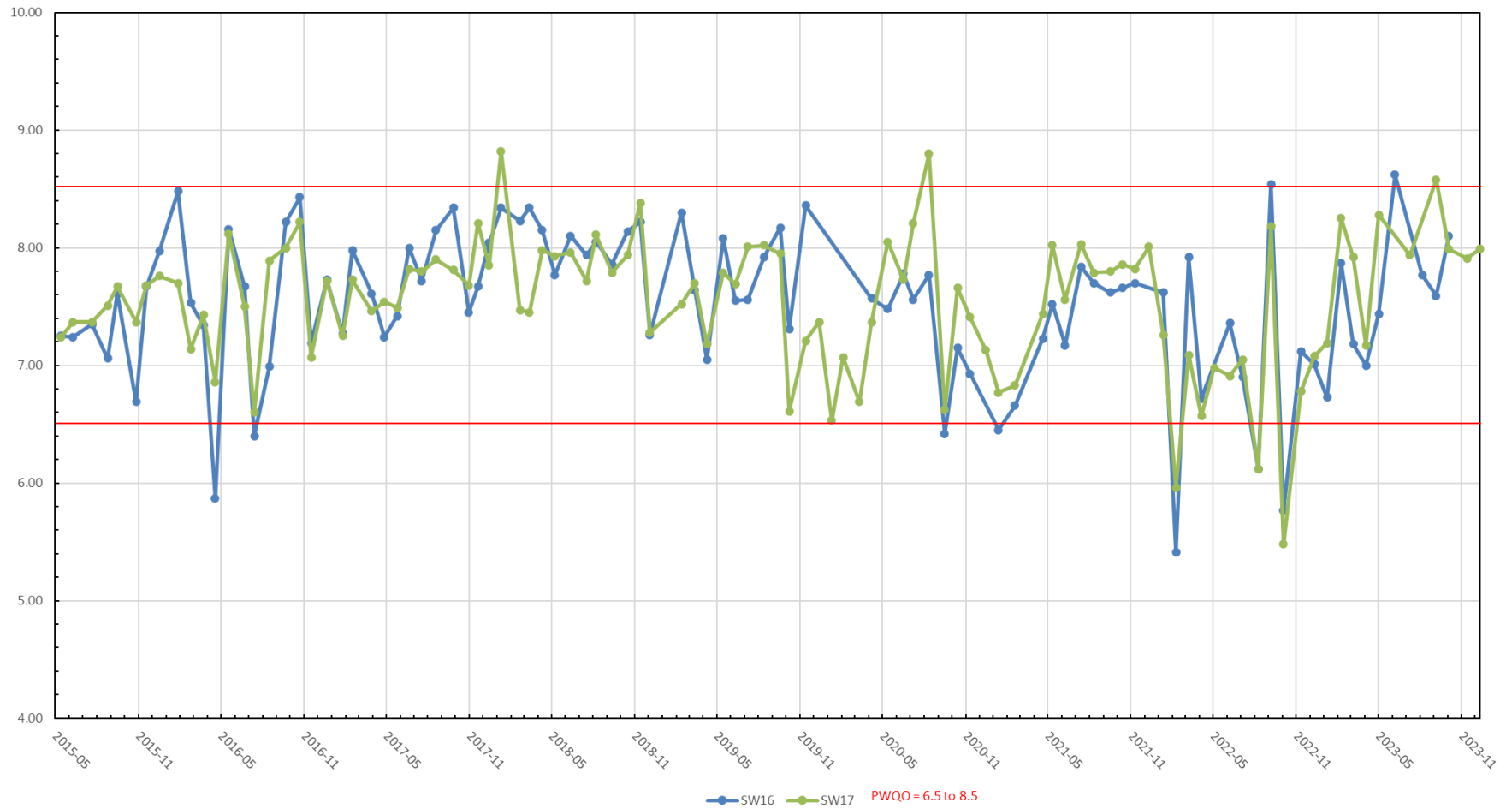


Figure 47: Rainy River Mine, Field pH Levels in Rainy River 2023

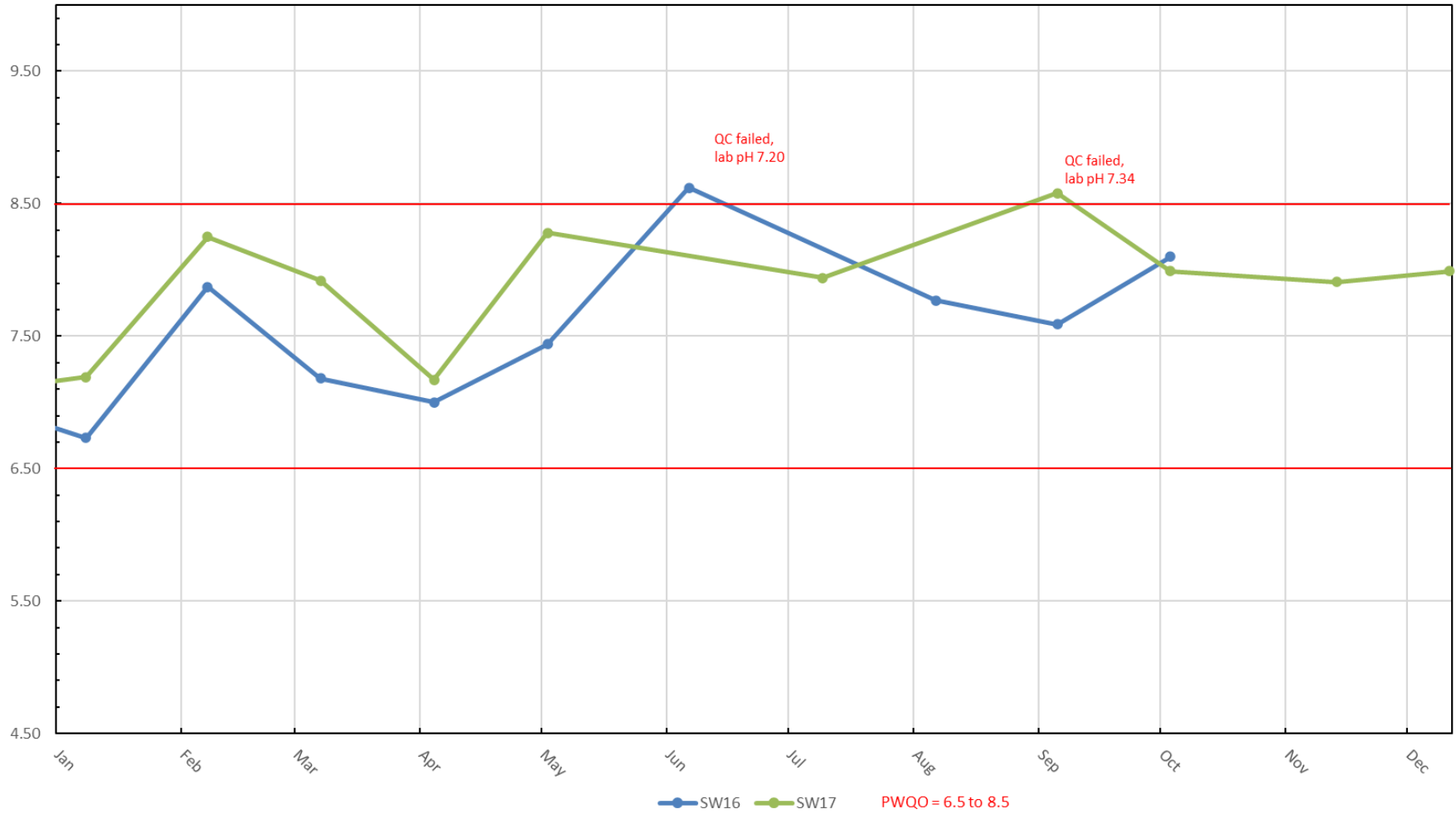


Figure 48: Rainy River Mine, Total Suspended Solids Concentration in Rainy River 2015-2023

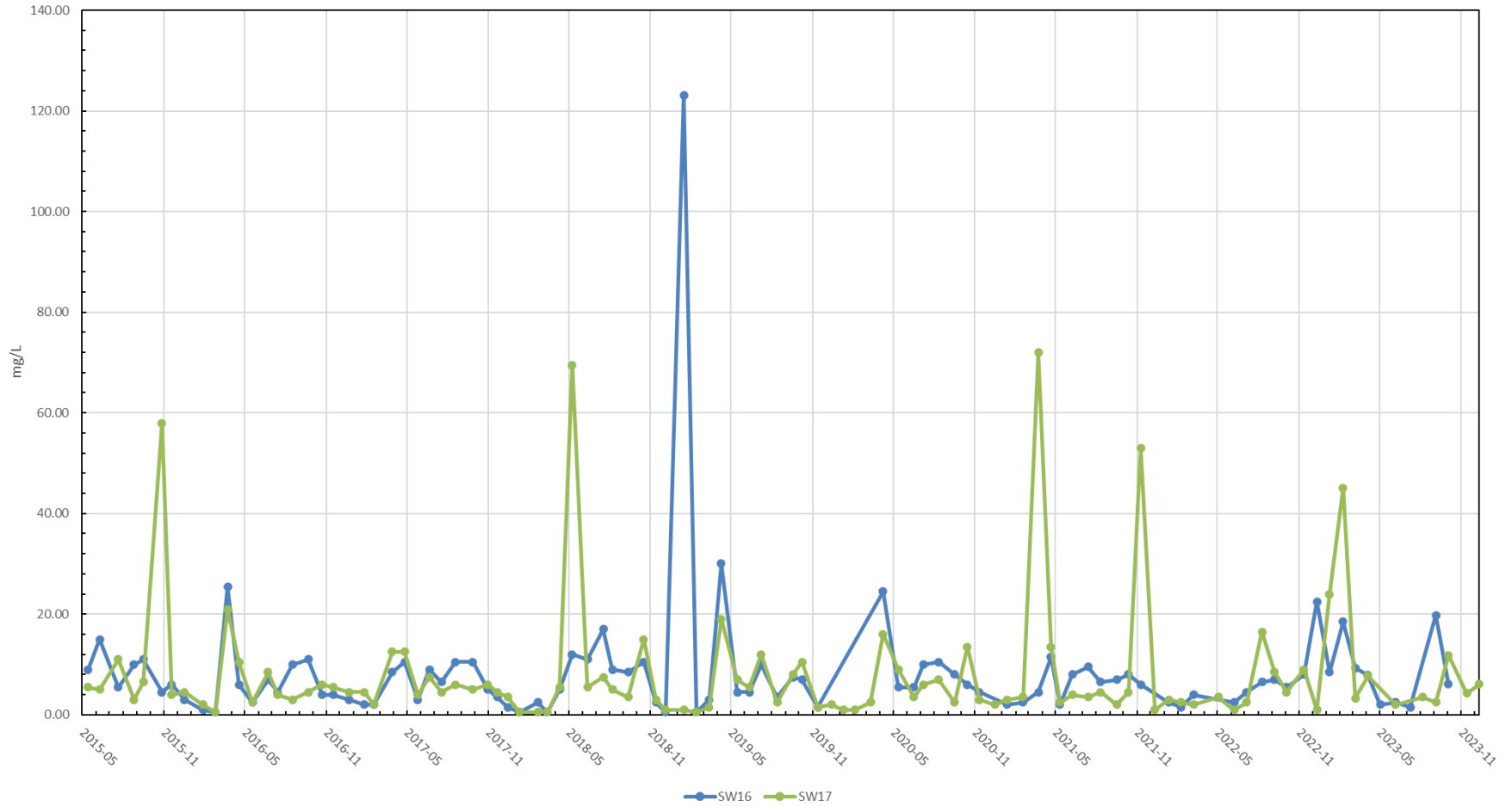


Figure 49: Rainy River Mine, Total Suspended Solids Concentration in Rainy River 2023

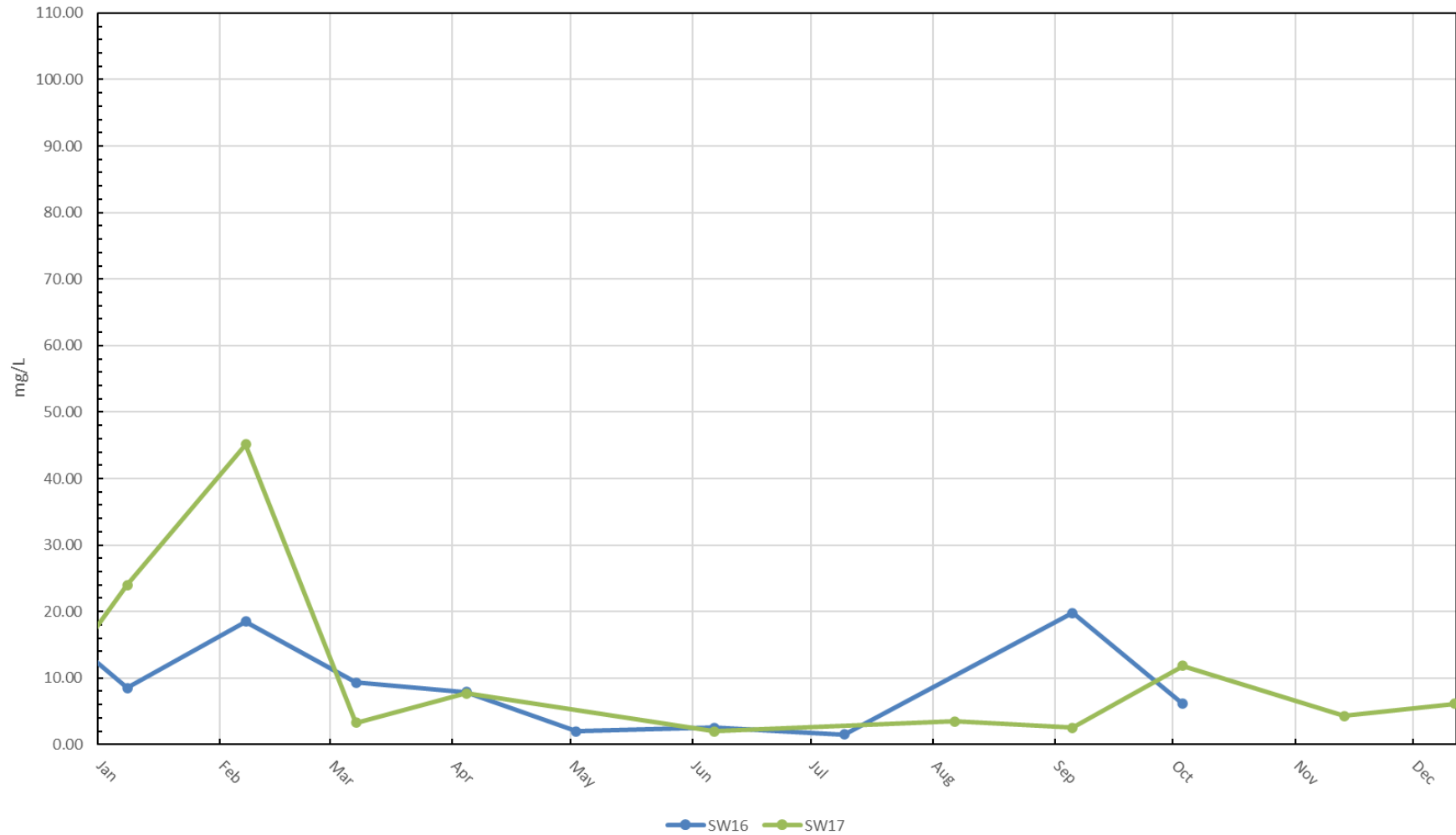


Figure 50: Rainy River Mine, Total Arsenic in Rainy River 2015-2023

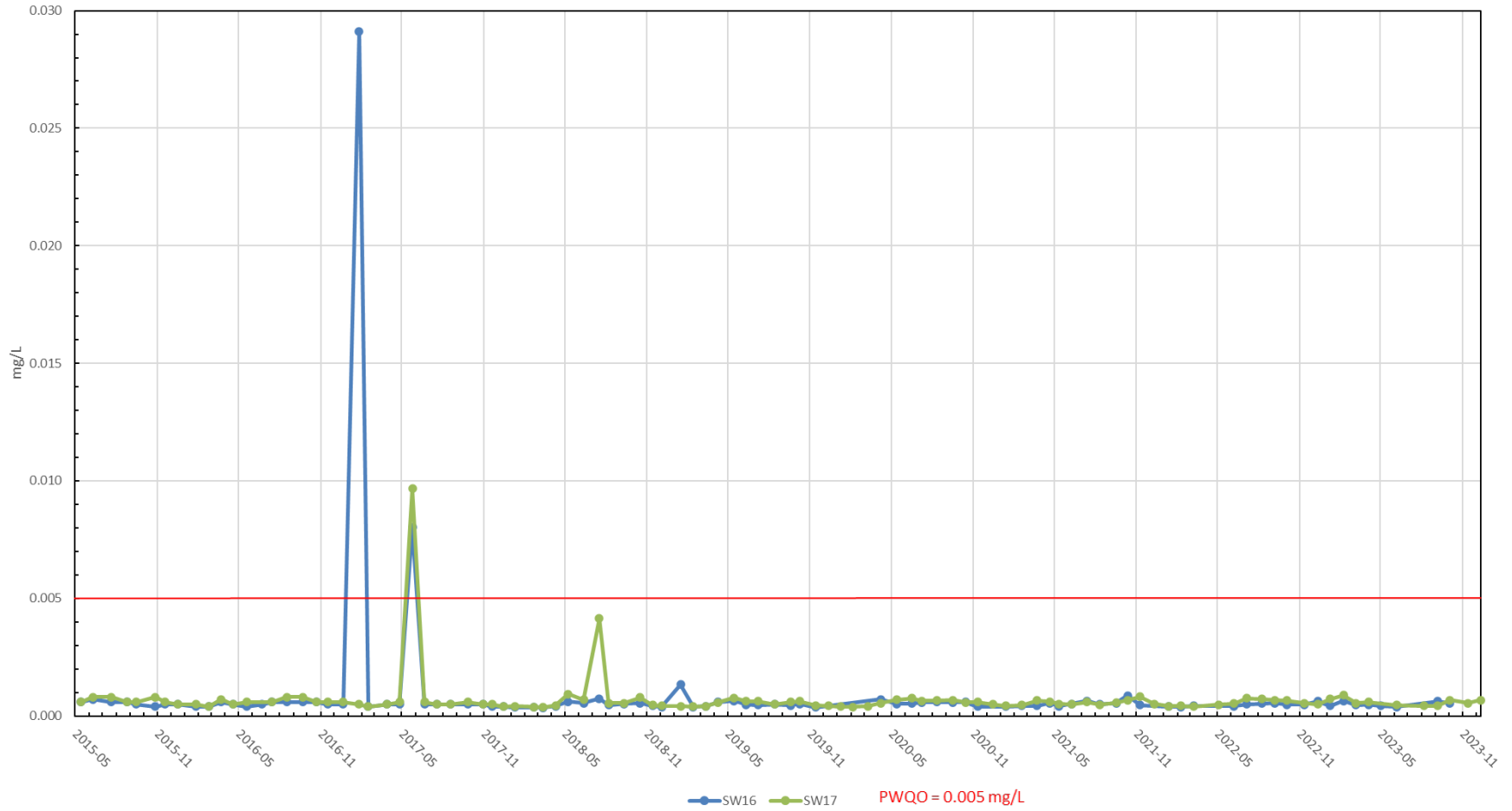


Figure 51: Rainy River Mine, Total Arsenic in Rainy River 2023

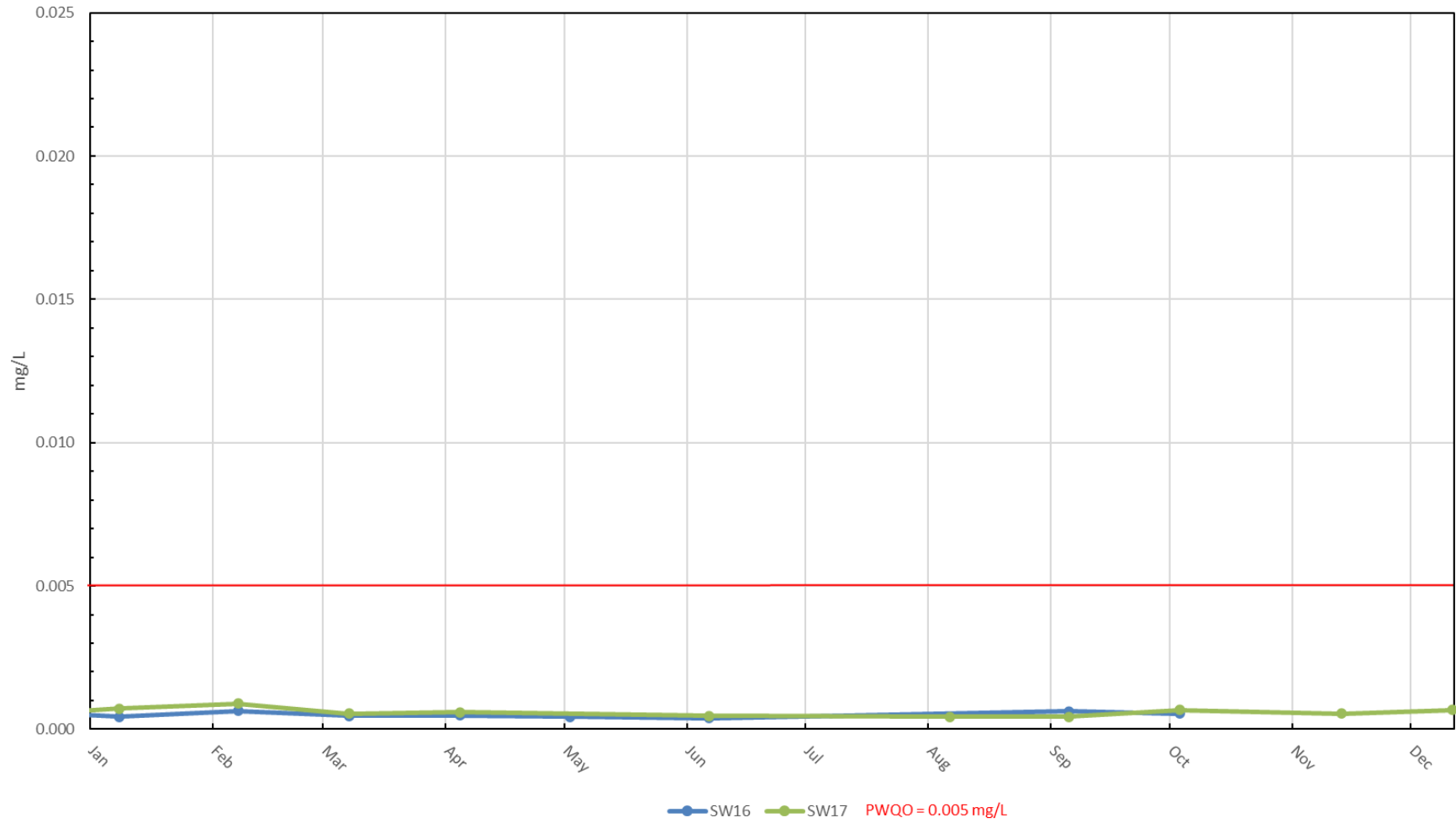


Figure 52: Rainy River Mine, Total Copper in Rainy River 2015-2023

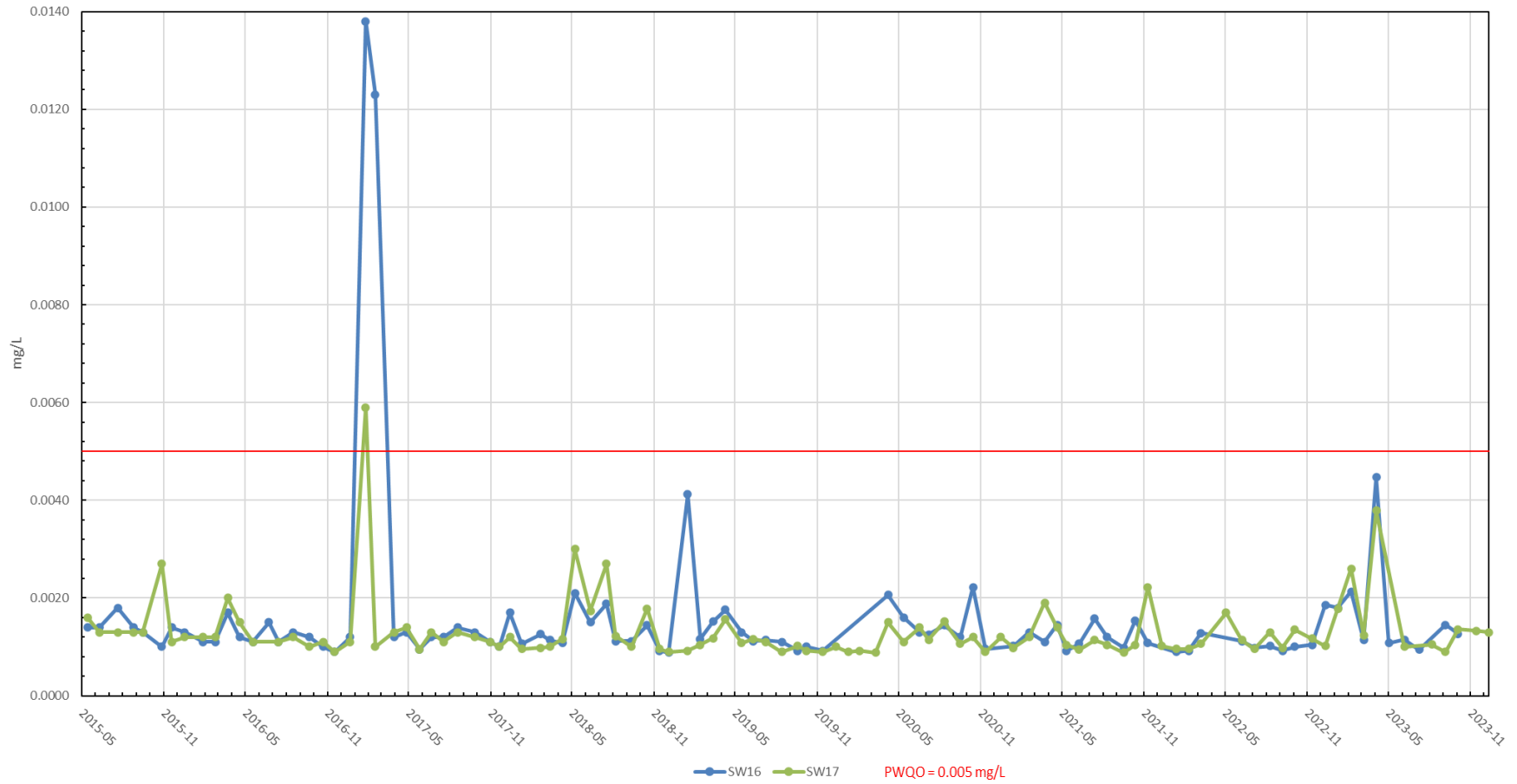


Figure 53: Rainy River Mine, Total Copper in Rainy River 2023

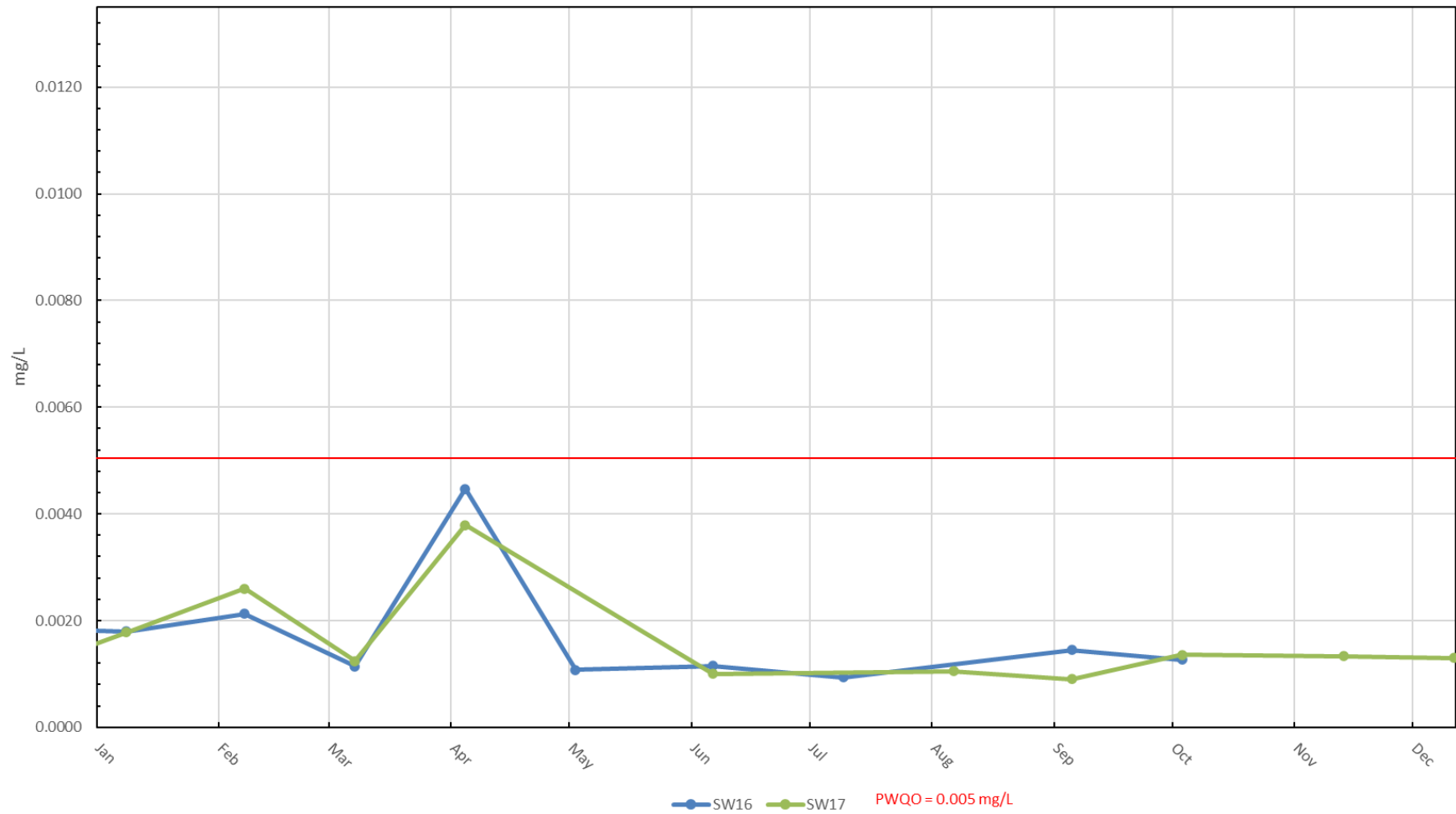


Figure 54: Rainy River Mine, Total Lead in Rainy River 2015-2023

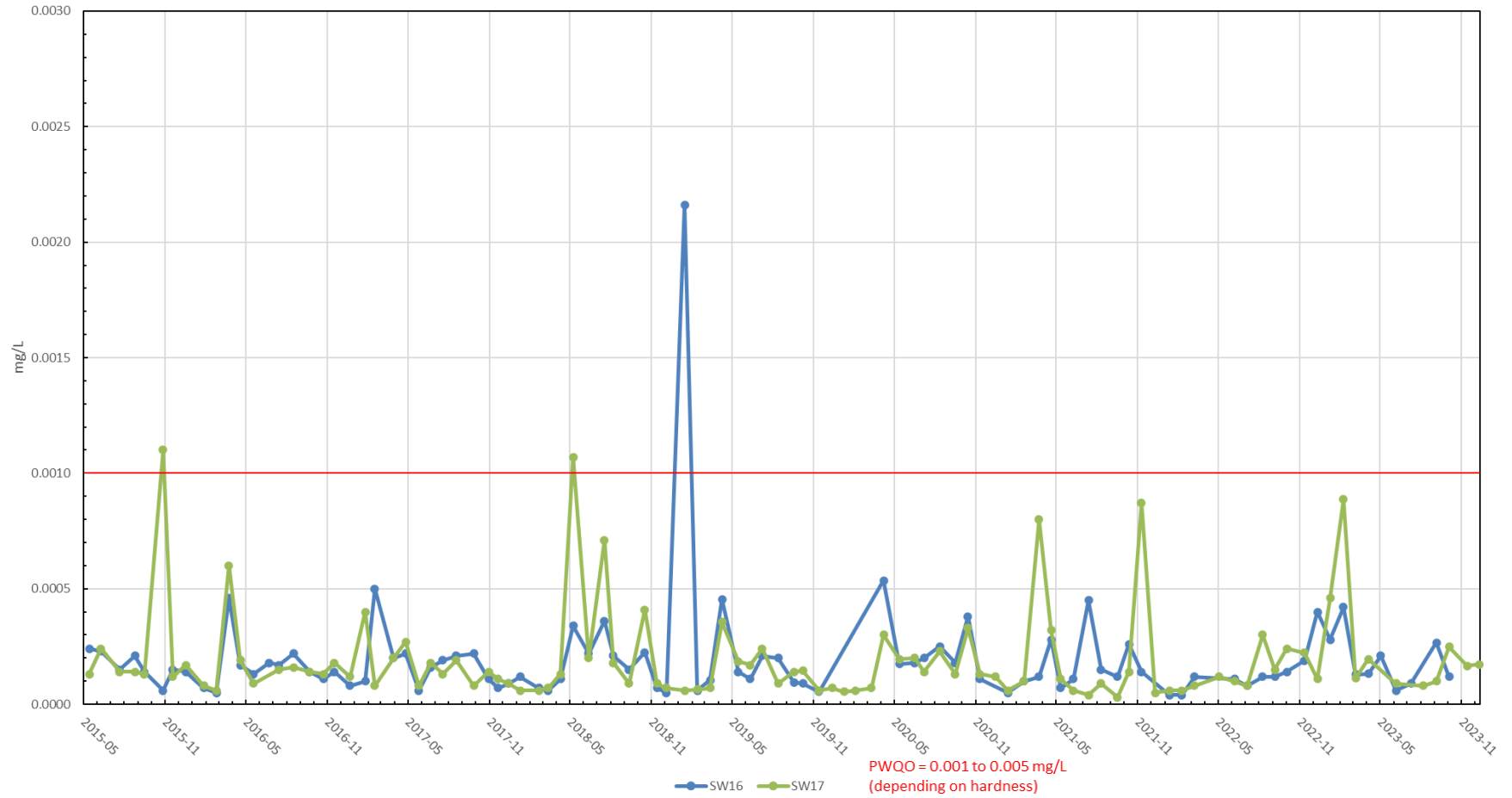


Figure 55: Rainy River Mine, Total Lead in Rainy River 2023

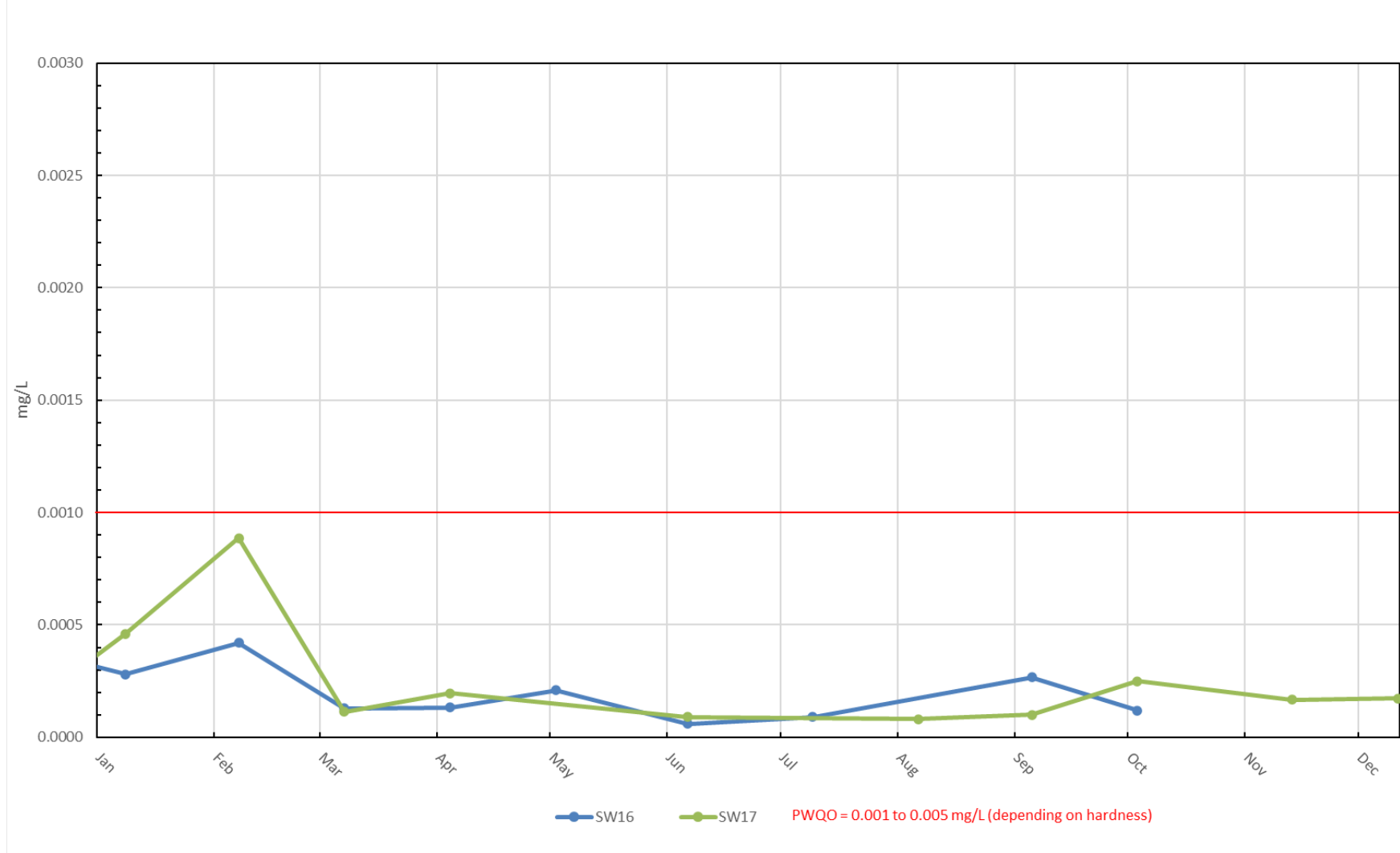


Figure 56: Rainy River Mine, Total Nickel in Rainy River 2015-2023

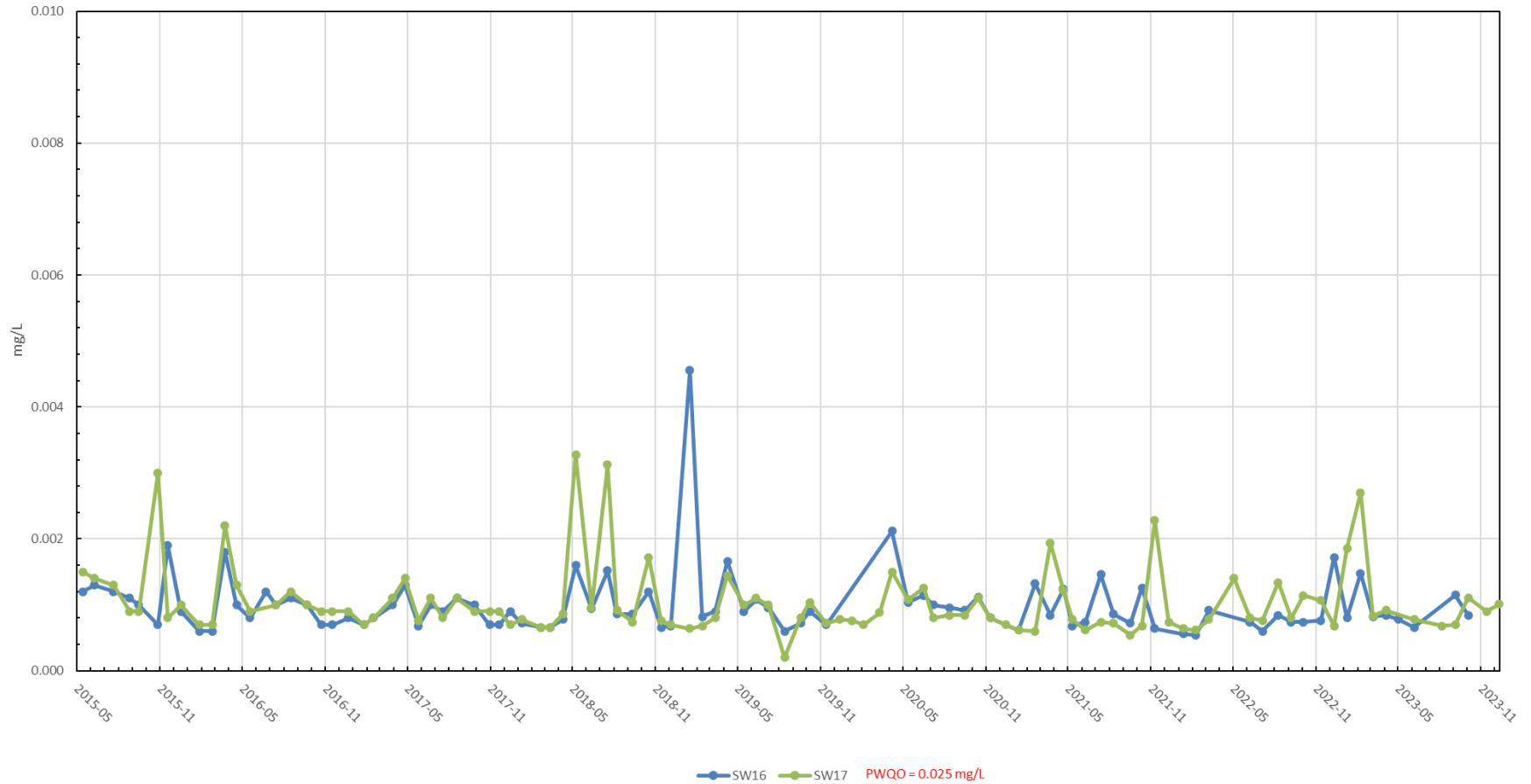


Figure 57: Rainy River Mine, Total Nickel in Rainy River 2023

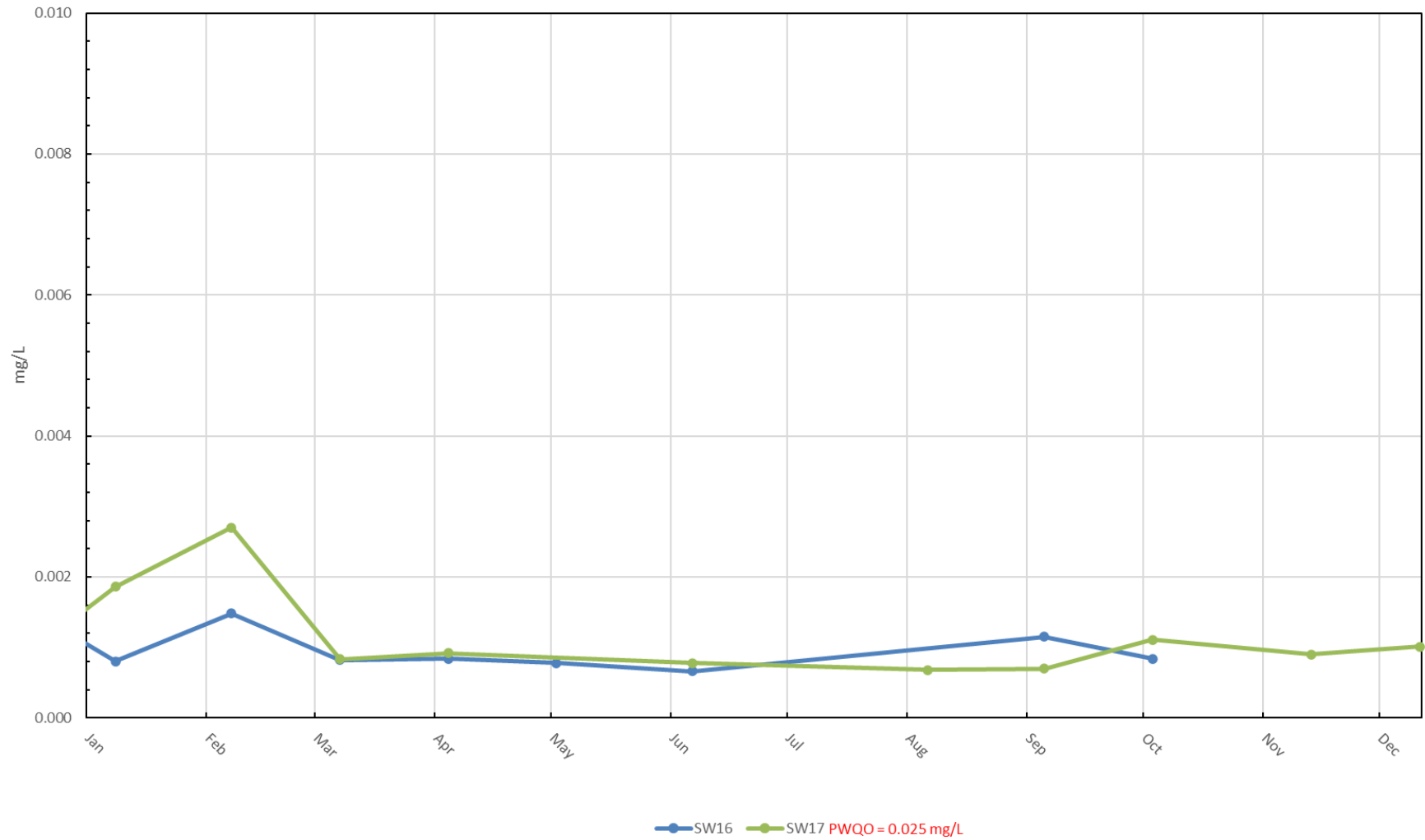


Figure 58: Rainy River Mine, Total Phosphorus in Rainy River 2017-2023

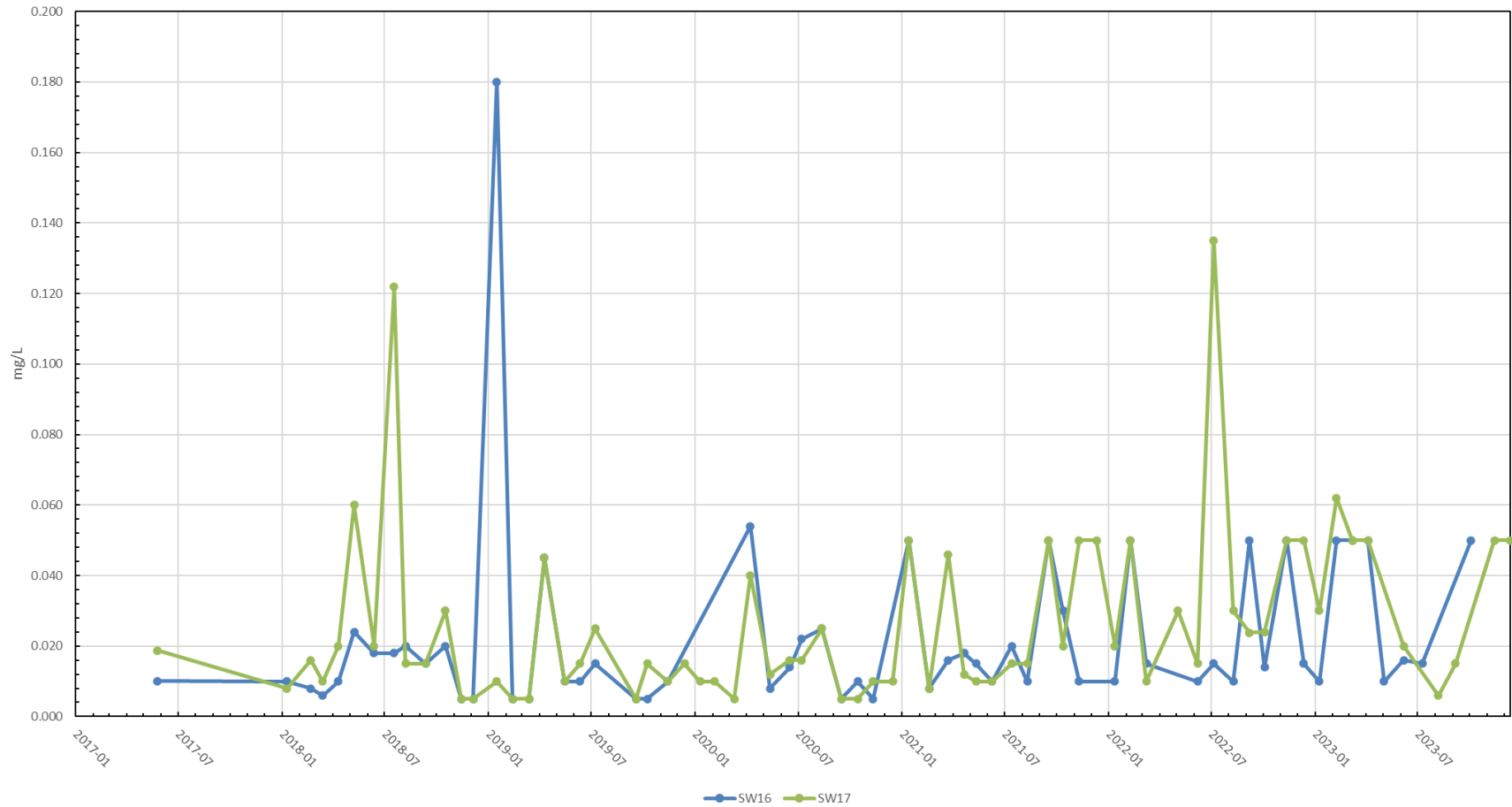


Figure 59: Rainy River Mine, Total Phosphorus in Rainy River 2023

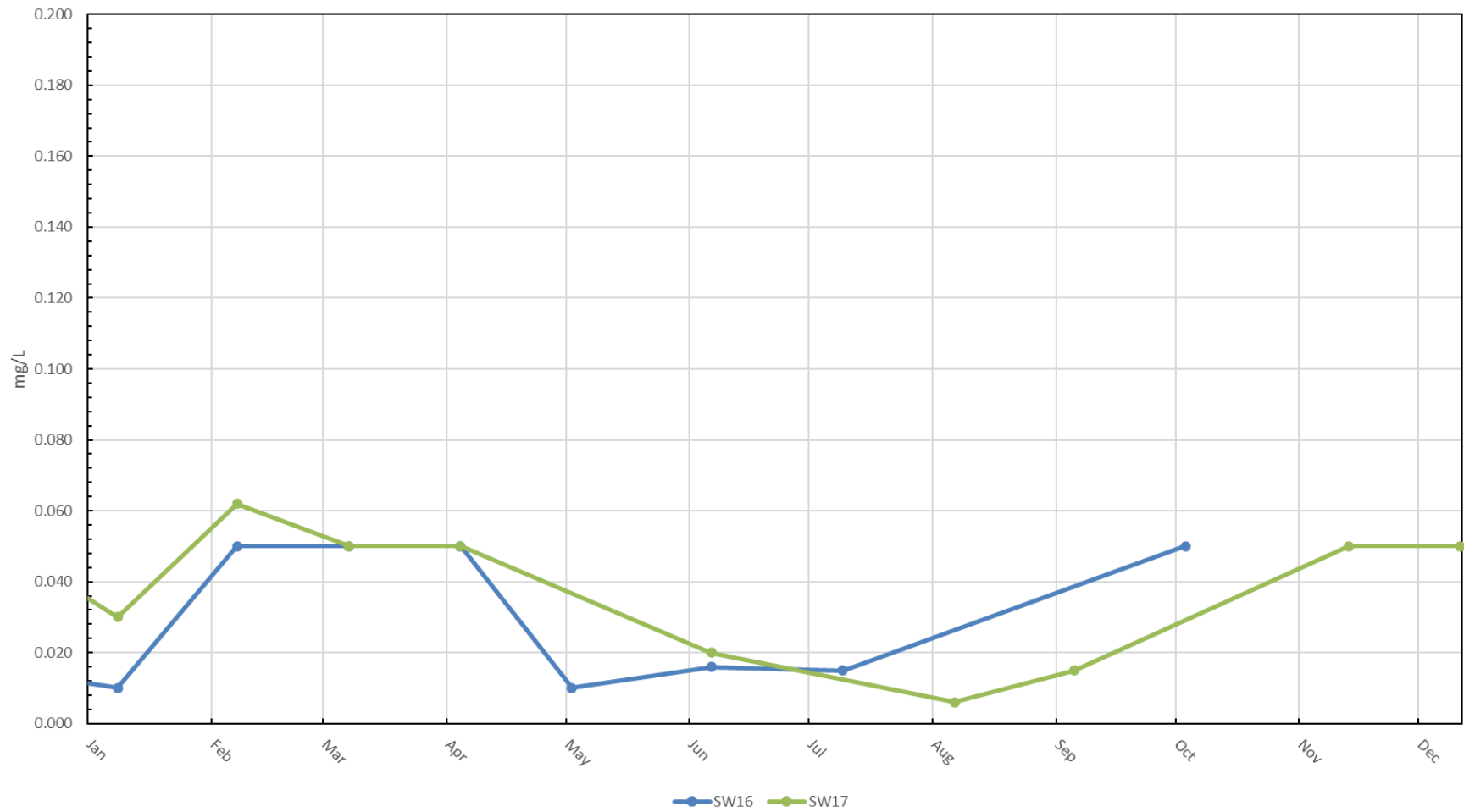


Figure 60: Rainy River Mine, Total Zinc in Rainy River 2015-2023

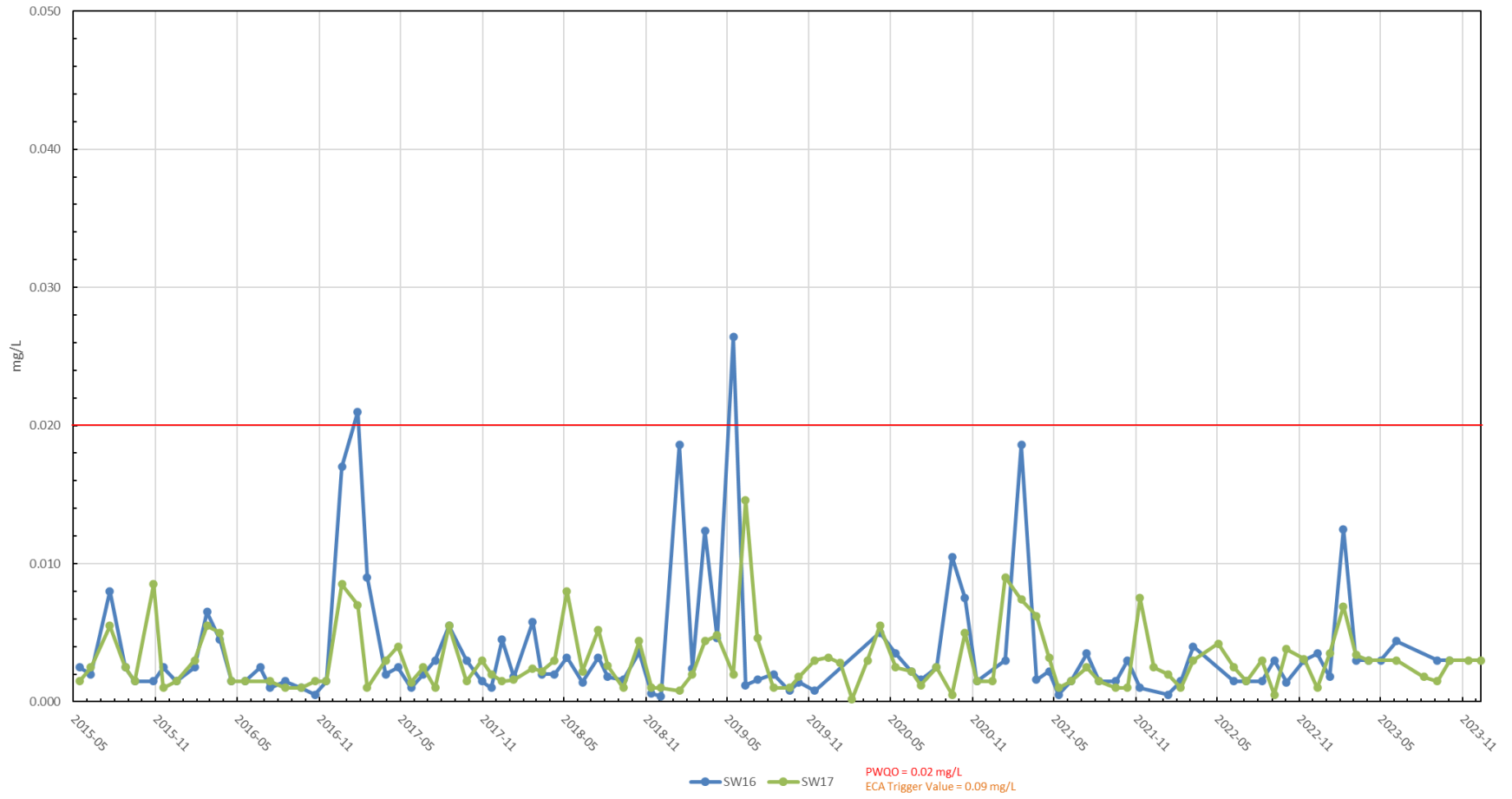


Figure 61: Rainy River Mine, Total Zinc in Rainy River 2023

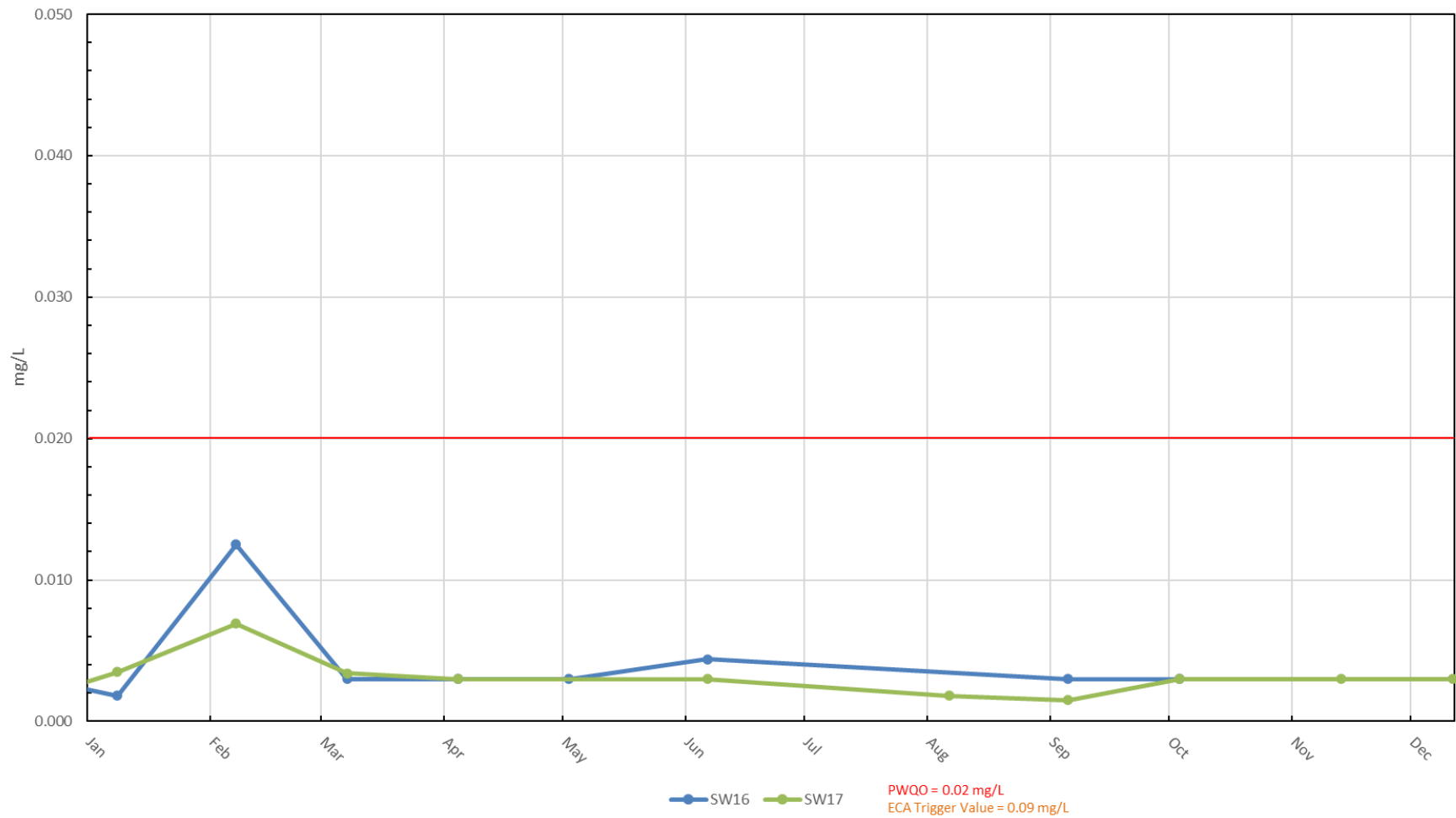


Figure 62: Rainy River Mine, Total Mercury in Rainy River 2015-2023

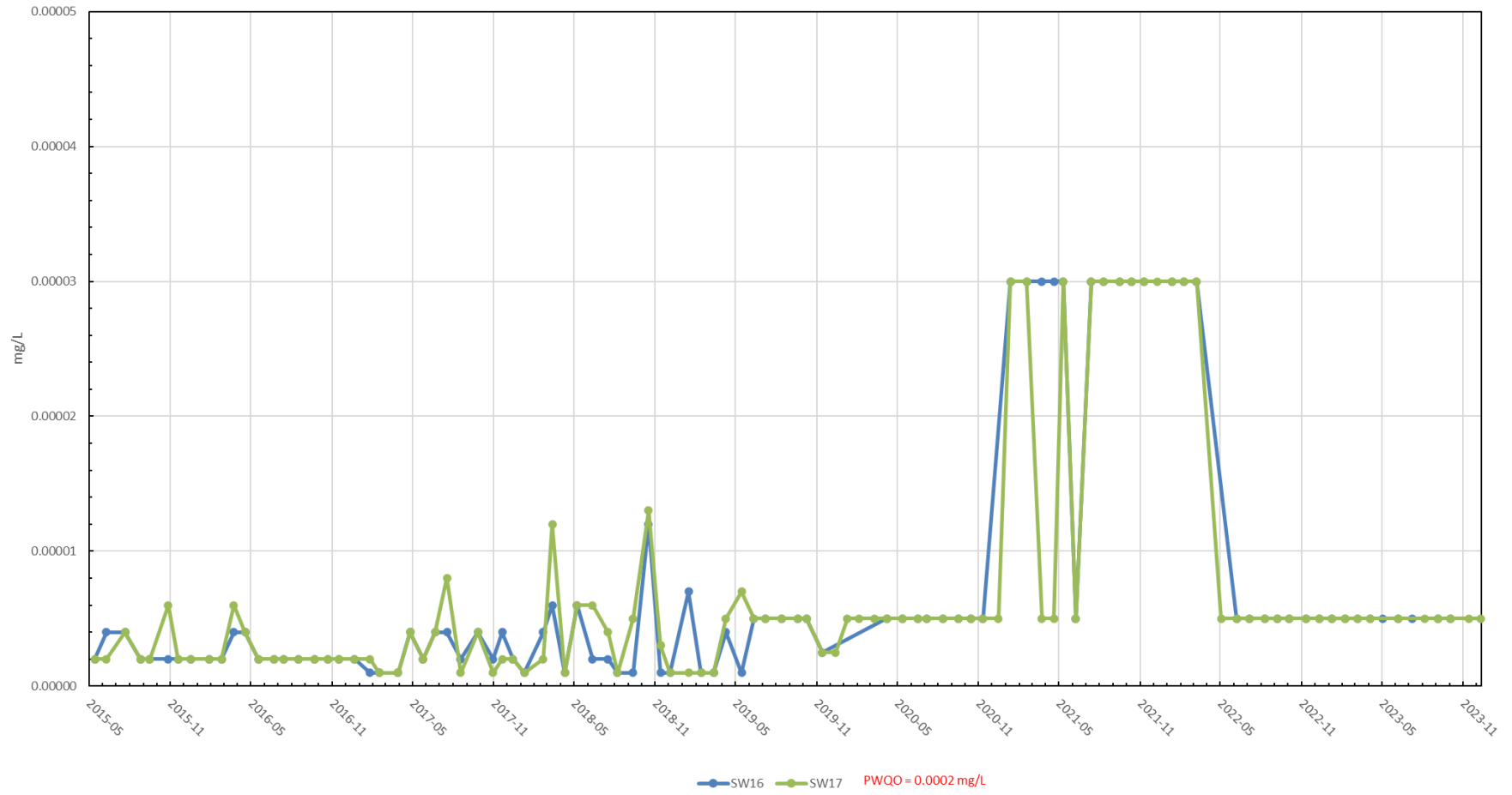


Figure 63: Rainy River Mine, Total Mercury in Rainy River 2023

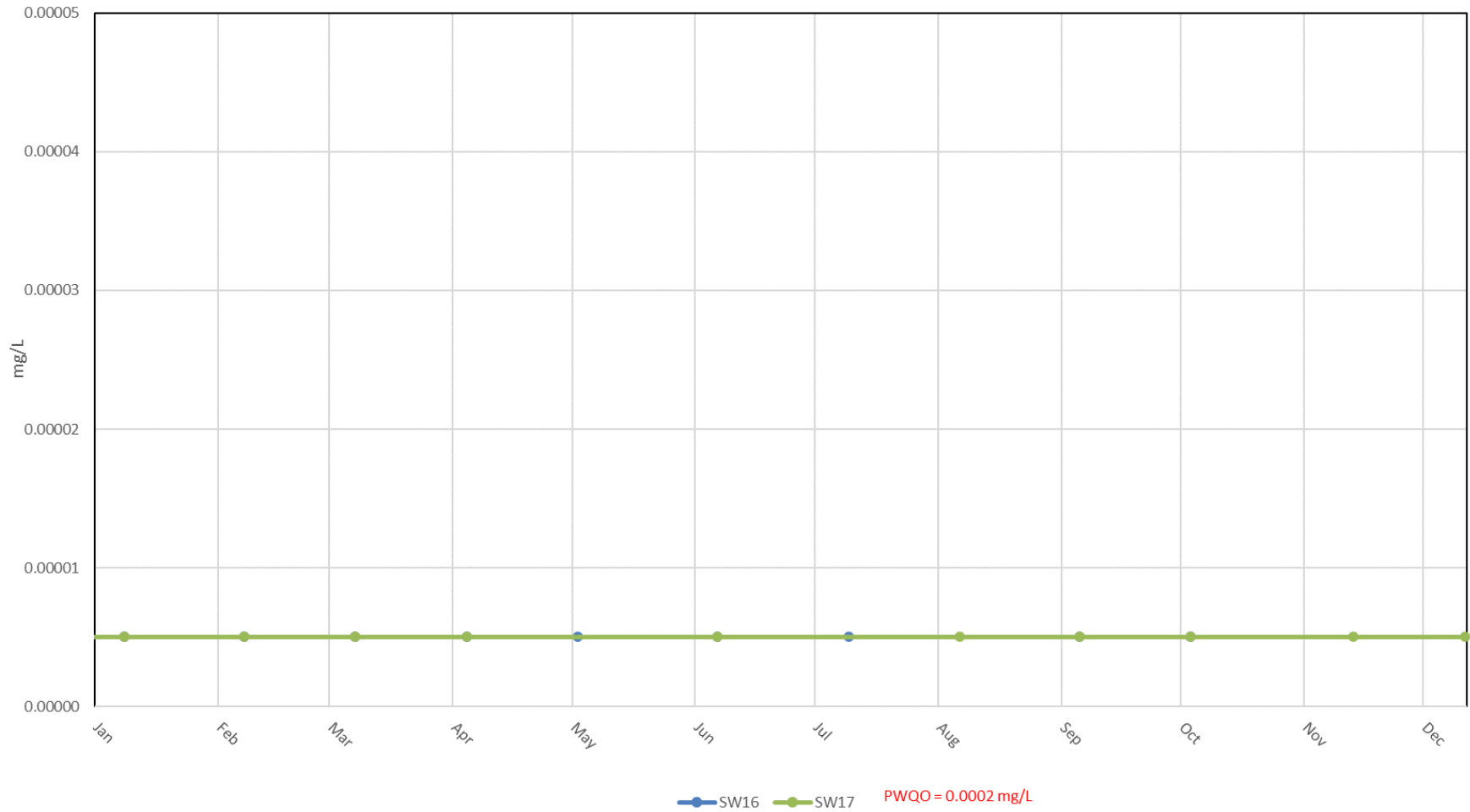


Figure 64: Rainy River Mine, Un-ionized Ammonia in Rainy River 2015-2023

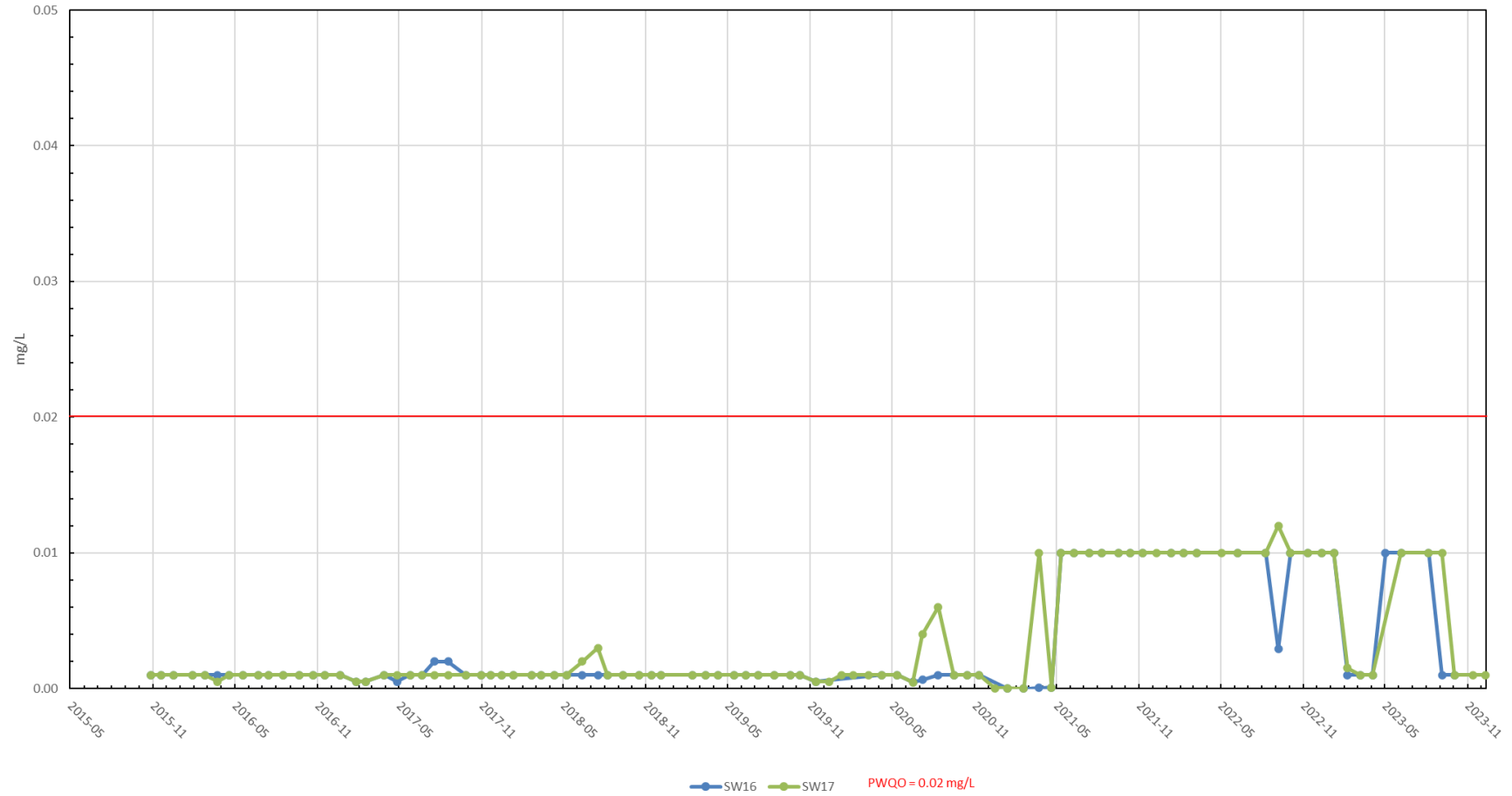


Figure 65: Rainy River Mine, Un-ionized Ammonia in Rainy River 2023

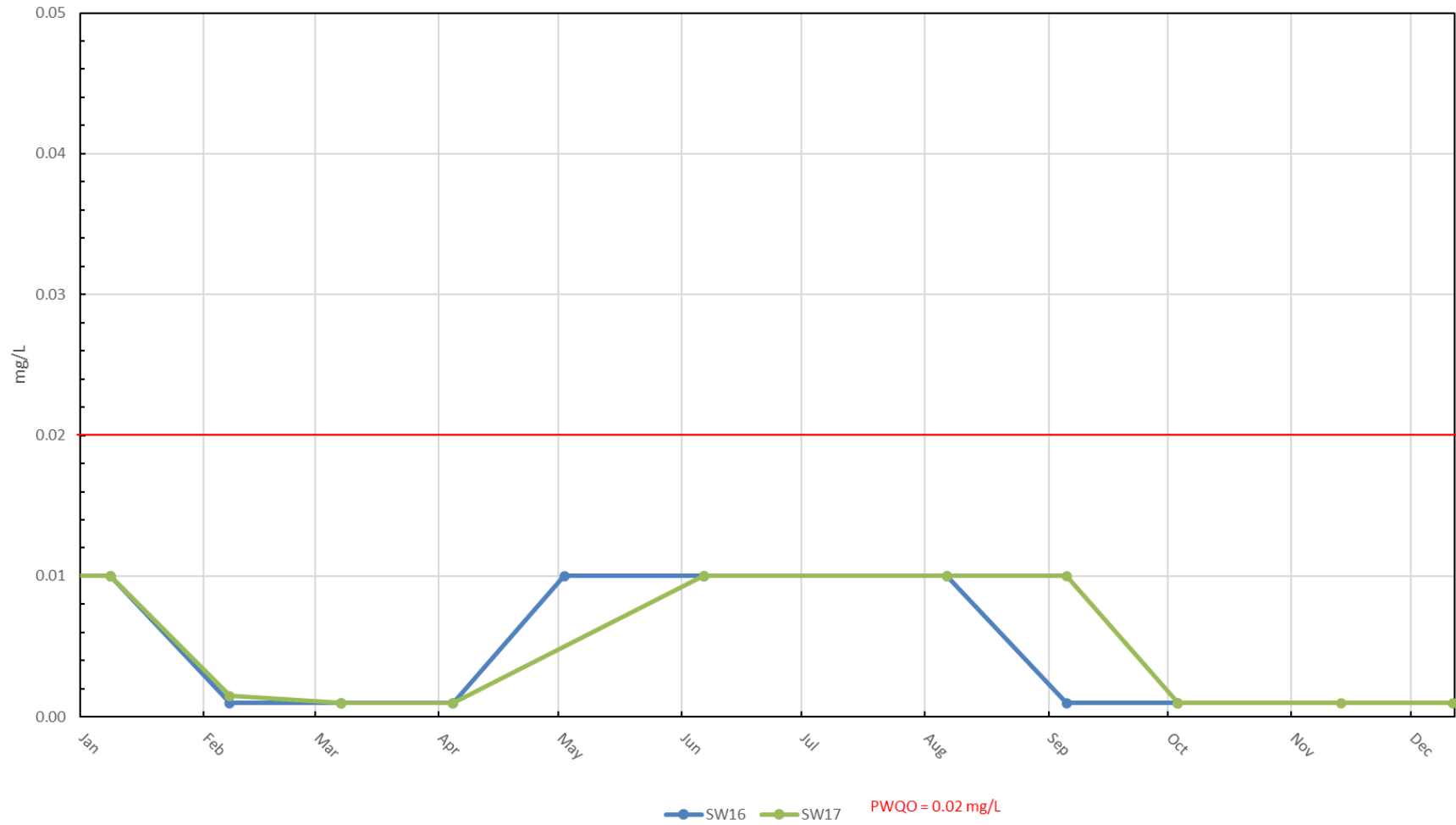


Figure 66: Rainy River Mine, Free Cyanide in Rainy River 2018-2023

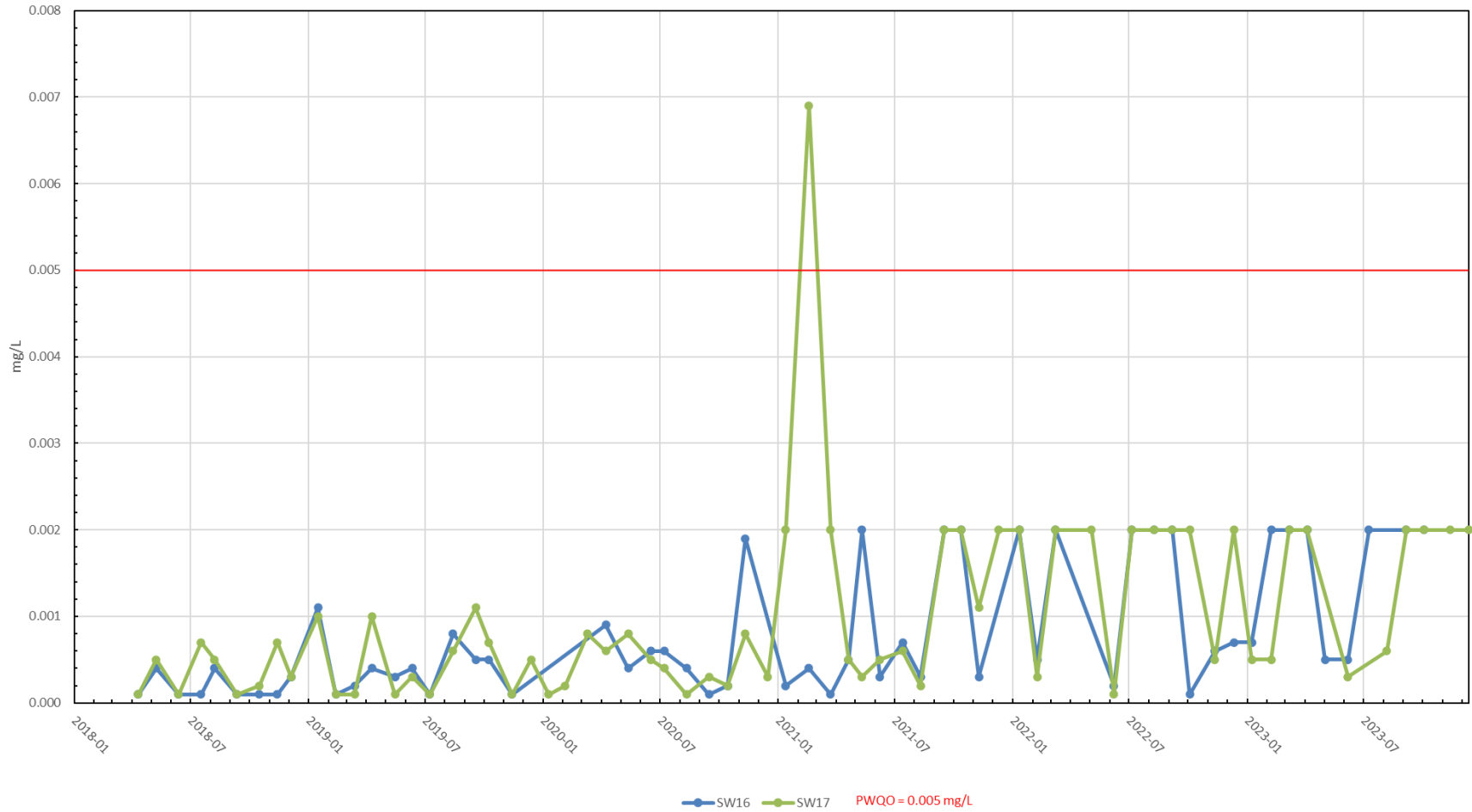
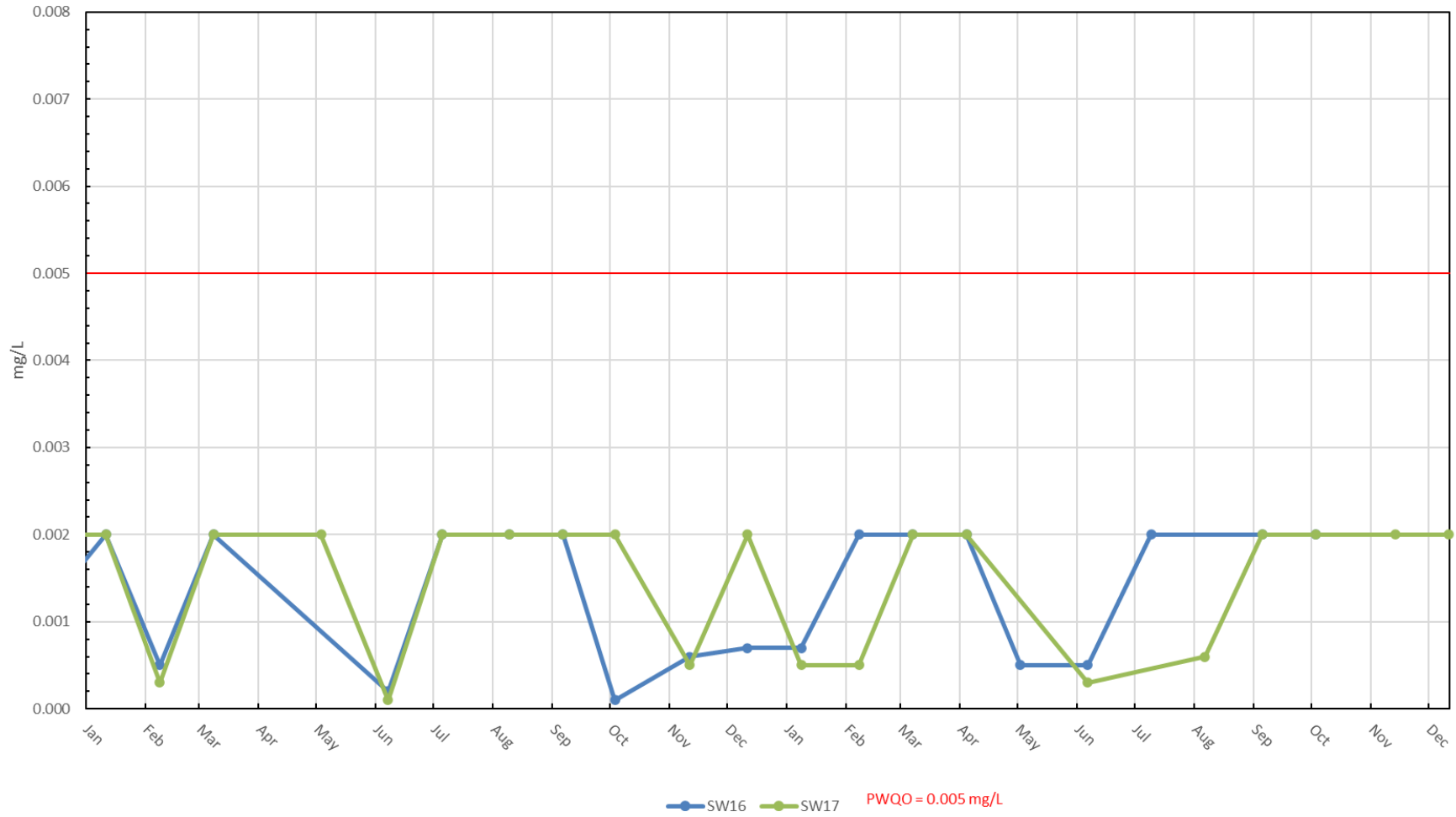


Figure 67: Rainy River Mine, Free Cyanide in Rainy River 2023



2023 Annual Surface Water Report
Appendix A

Certification by Owner

March 31, 2024

Director
Ministry of the Environment, Conservation and Parks
Thunder Bay District Office
331-435 James St S
Thunder Bay, ON P7E 6S7

**Re: Certification regarding Rainy River Mine, 2023 Annual Surface Water Report,
Environmental Compliance Approval #2290-CAVKGN Condition 12(9)**

Regarding the Rainy River Mine located in Un-surveyed Territory (Kenora Area Office), District of Rainy River, Ontario:

I certify that the information in this document and all attachments are correct, accurate and complete to the best of my knowledge.

Should you have any questions or require additional information for any part of this submission, please contact the undersigned at 807-234-8170 or garnet.cornell@newgold.com.

Sincerely,



Garnet Cornell
Environment Manager
New Gold, Rainy River Mine

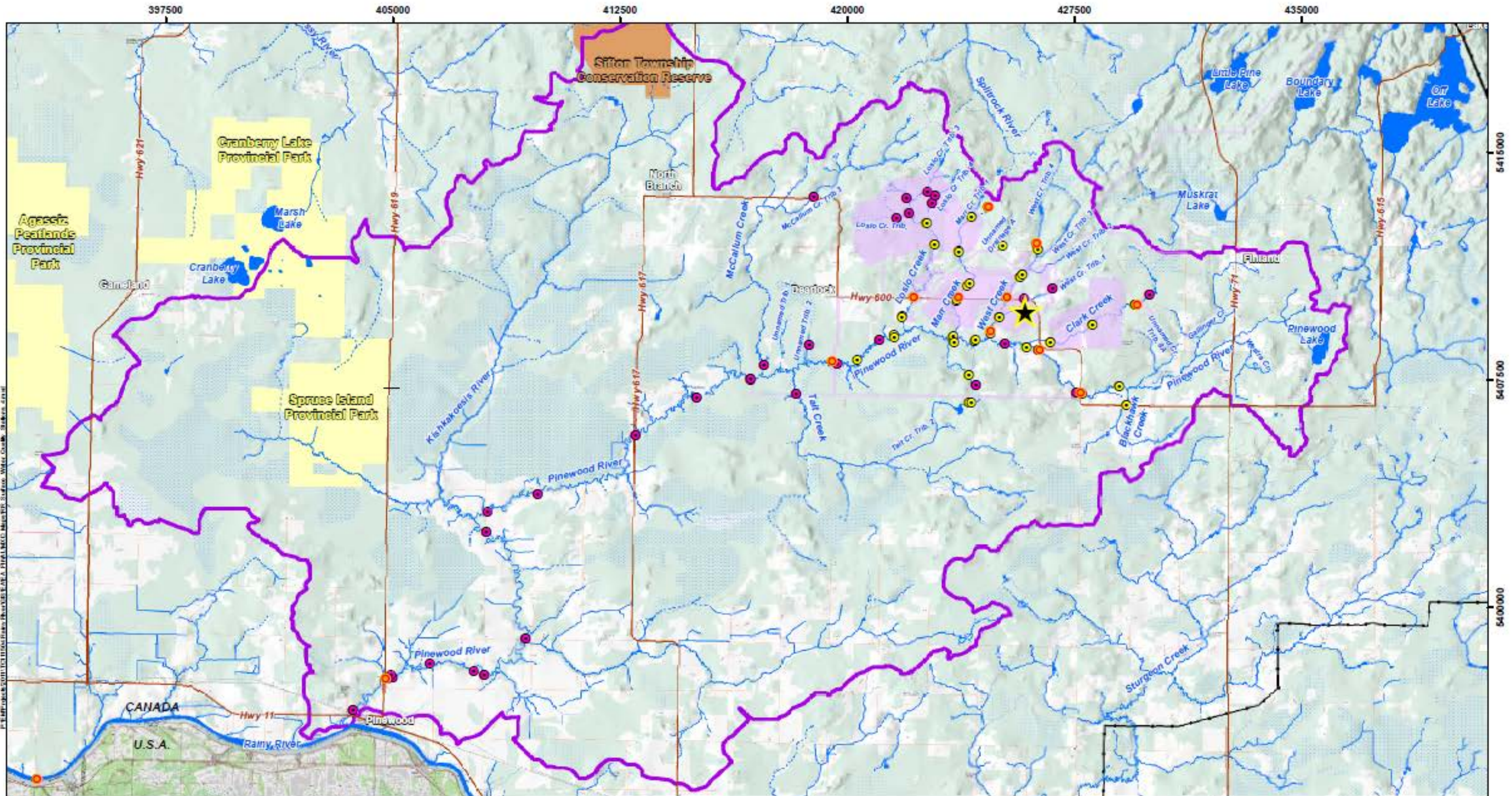
cc: MECP Northern Region Kenora Area Office

2023 Annual Surface Water Report
Appendix B

Baseline Receiver Water Quality Tables and Graphs

Table 5-4: RRP Monthly Surface Water Quality Monitoring Stations

Station	Description	Function (potential longer term function)
SW1	Pinewood River 0.3 km upstream of confluence with Clark Creek (Teeple Drain)	Background data for Pinewood River
SW2	West Creek above Highway 600	Background data for West Creek (this portion of West Creek to be diverted by RRP development)
SW3	Pinewood River at Pinewood River Road approximately 3 km downstream of confluence with Loslo Creek (Cowser Drain)	Pinewood River downstream station (permanent downstream station)
SW4	Unnamed Creek which drains Muskrat Lake, Rainy Lake catchment	Small creek control site outside of RRP influence (permanent reference station)
SW7A	West Creek above confluence with Pinewood River	Background data for West Creek (this portion of West Creek to be diverted by RRP development)
SW10	Pinewood River at Highway 600	Long term Pinewood River control station, positioned upstream of all proposed developments (permanent upstream station)
SW11	Clark Creek (Teeple Drain) 1.5 km north of Township landfill	Background data for Clark Creek (Clark Creek / Teeple Drain to be displaced by RRP development)
SW12A	Marr Creek 3.8 km above Highway 600	Background data for Marr Creek (Marr Creek to be displaced by RRP development)
SW13	Loslo Creek above Highway 600	Background data for Loslo Creek (Loslo Creek to be extensively displaced / modified by RRP development)
SW14	West Creek 2.5 km above Highway 600	Background data for West Creek (this portion of West Creek to be diverted by RRP development)
SW15	Pinewood River approximately 2 km above confluence with Rainy River	Pinewood River furthest downstream station (permanent downstream station)
SW16	Rainy River approximately 40 km upstream of confluence with Pinewood River	Rainy River upstream station (permanent upstream station)
SW17	Rainy River approximately 12 km downstream of confluence with Pinewood River	Rainy River downstream station (permanent downstream station)
SW18	Marr Creek at Highway 600	Background data for Marr Creek (Marr Creek to be displaced by RRP development)



LEGEND

- ★ RRP Site
- Approximate Principal RRP Facilities
- Regional Road / Highway
- Permanent Watercourse
- Intermittent Watercourse
- Transmission Line
- Waterbody
- Pinewood River Watershed
- First Nation Reserve
- Conservation Reserve (Regulated)
- Provincial Park

Water Quality Sampling Locations (within study area)

- Water Quality Sampling Location (AMEC 2012)
- Water Quality Sampling Location (AMEC 2011)
- RRR Monthly Surface Water Quality Stations

Scale: 0 to 30 Kilometres

NOTES:
 - All base data on this map was extracted from Land Information Ontario (LIRIS), Queen's Printer for Ontario, 2011-2012 and MRCA Topographic 1:50,000 NTS DRG map sheets, 2011
 - USA land extracted from ESRI base map service, USGS Topo maps

Datum: NAD83
 Projection: UTM Zone 18N

newgold Rainy River Project **amec**

RAINY RIVER PROJECT

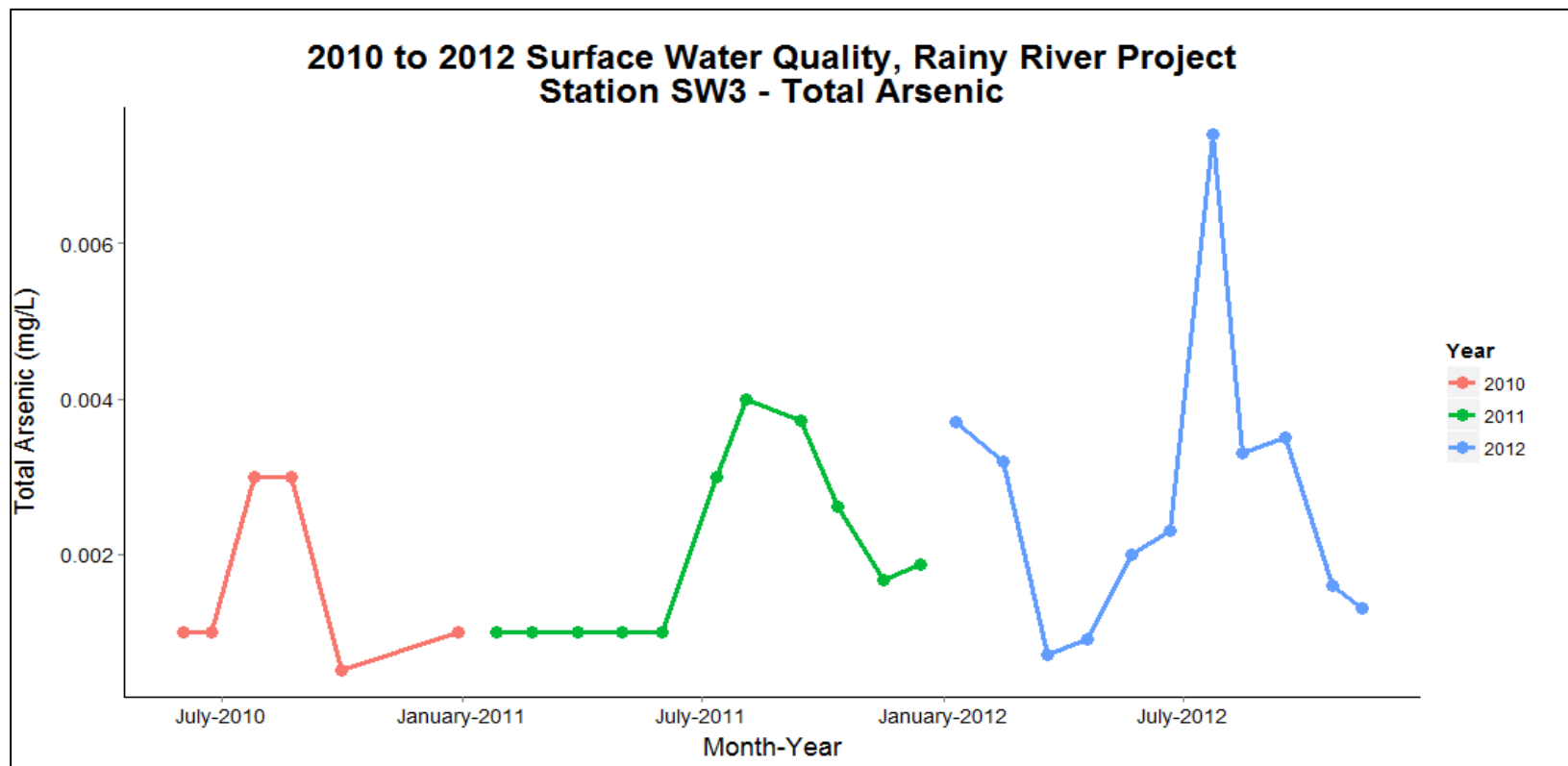
Surface Water Quality Stations

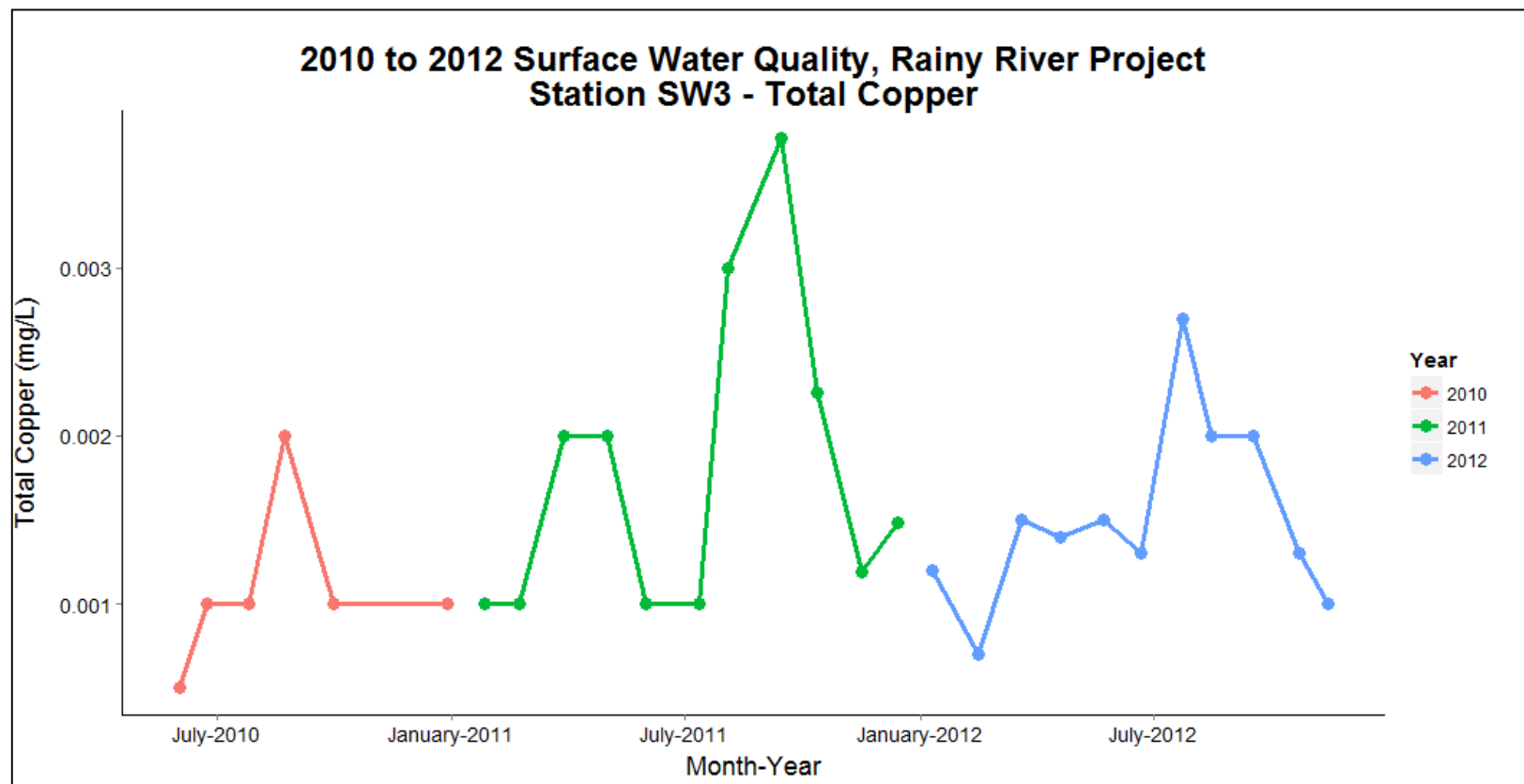
PROJECT N°: TC111504 FIGURE: 5-9

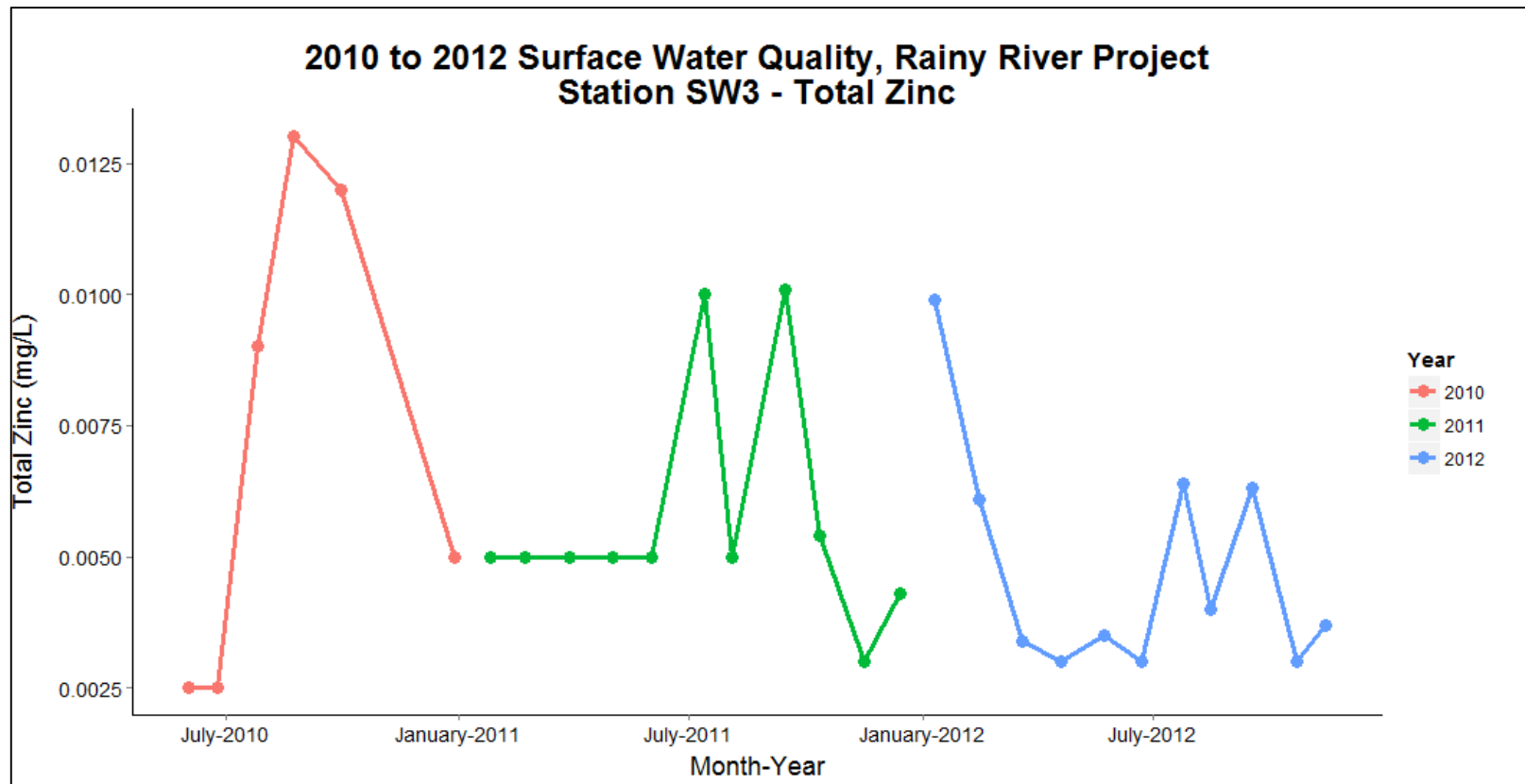
SCALE: 1:119,500 DATE: October 2013

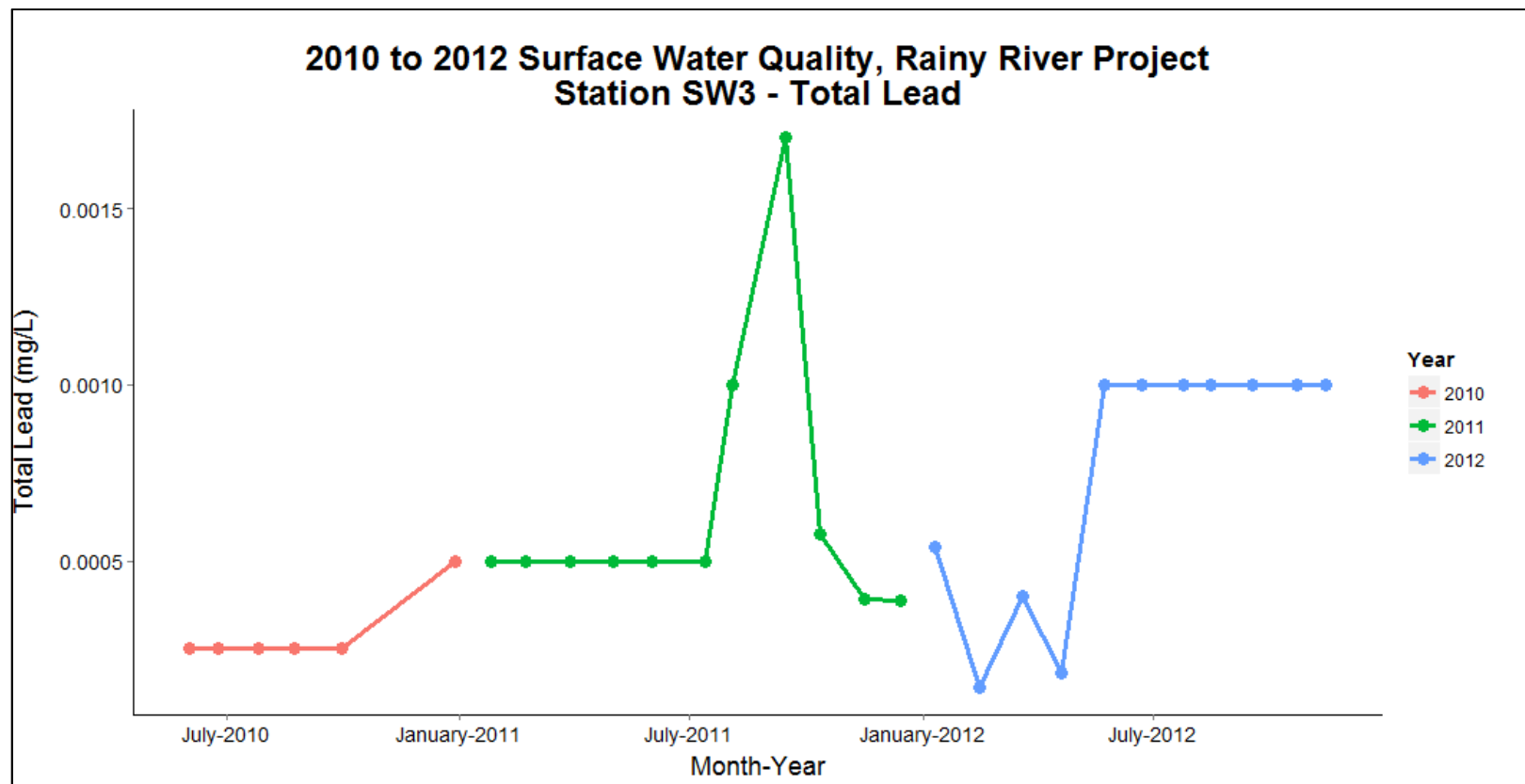
TABLE 5-22: 2010 TO 2012 SURFACE WATER ANALYTICAL RESULTS

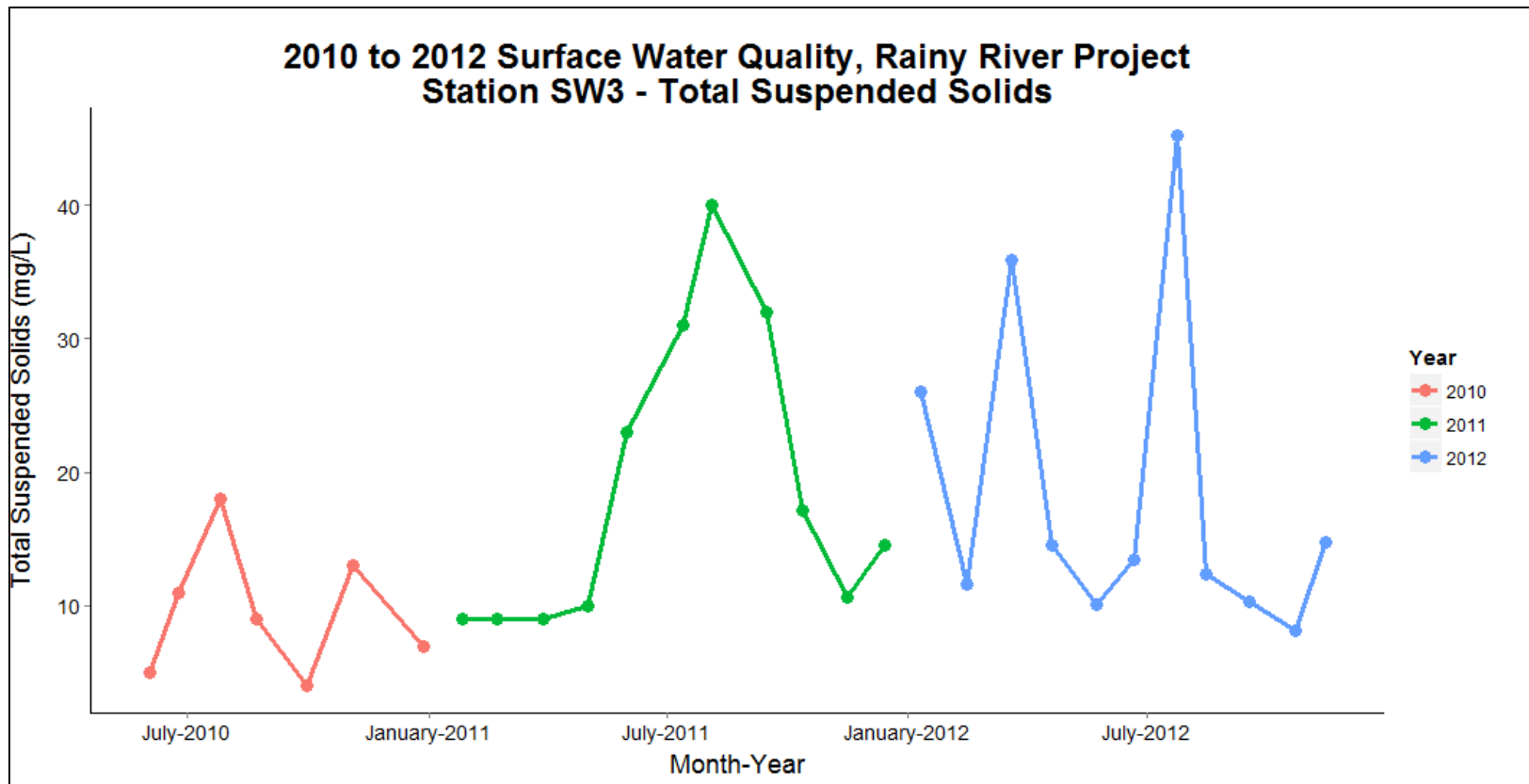
	pH	Conductivity	Hardness as CaCO ₃	Dissolved Organic Carbon	TSS	Total Ammonia-N	Fluoride	Nitrate	Nitrite	Cyanide Total	Aluminum-Dissolved	Aluminum-Total	Antimony-Total	Arsenic-Total	Boron-Total	Cadmium-Total	Chromium-Total	Cobalt-Total	Copper-Total	Iron-Total	Lead-Total	Mercury-Total	Molybdenum-Total	Nickel-Total	Phosphorus-Total	Selenium-Total	Thallium-Total	Uranium-Total	Vanadium-Total	Zinc-Total	
PWQO	6.5-8.5	-	-	-	-	-	-	-	-	0.005 ^A	0.075 ^B	-	0.02 ^C	0.1(0.005)	0.2	0.002	0.001 / 0.008 ^F	0.0009	0.005 / 0.005 ^F	0.3	0.020 / 0.025 (0.003 / 0.005) ^F	0.0002	0.04 ^G	0.025	0.03 ^H	0.1	0.0003 ^I	0.005	0.006 ^J	0.03(0.02)	
CEQG	6.5-9.0	-	-	-	-	-	0.12	2.935	0.06	0.005 ^A	0.1 ^F	-	-	0.005	1.5	0.00015-0.0008 ^F	0.001 / 0.008 ^F	-	0.002 - 0.0062 ^F	0.3	0.00102 - 0.0134 ^F	0.000026	0.073 ^G	0.025 ^H	-	0.001	0.0008	0.015	-	0.03	
RDL	0.10	3.0	5.0	1.0	2.0	0.020	0.030	0.030	0.020	0.0020	0.0050	0.0050	0.00010 / 0.00050 / 0.00060 / 0.00090 ^F	0.0010	0.050	0.00010 / 0.00050 / 0.00060 / 0.00090 ^F	0.00050 / 0.0010	0.00050	0.00070 / 0.0010	0.020	0.00010 / 0.0010	0.000020	0.00020 / 0.0010	0.0020	0.00050 / 0.00040 / 0.00020 / 0.0010 / 0.0020	0.000030 / 0.00050 / 0.00030	0.00050	0.0010	0.0020 / 0.0030 / 0.0050		
	units	uS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SW1A	Min	7.17	180.0	79.0	11.1	4.7	0.020	0.030	0.030	0.01	0.0020	0.0025	0.042	0.0001	0.0007	0.010	0.0001	0.0002	0.0009	0.266	0.0002	0.0001	0.0003	0.0010	0.028	0.0002	0.0001	0.0003	0.0006	0.0010	
	Max	8.83	574.0	301.0	38.9	74.0	0.134	0.107	0.795	0.02	0.0050	0.0570	0.521	0.0050	0.0030	0.050	0.0001	0.0006	0.0020	0.942	0.0036	0.0001	0.0010	0.0079	0.130	0.0020	0.00030	0.0050	0.0020	0.03	
	Median	7.70	331.0	183.0	21.4	10.0	0.033	0.090	0.048	0.02	0.0020	0.0095	0.256	0.0005	0.0013	0.021	0.0004	0.0012	0.0005	0.0010	0.615	0.0005	0.00005	0.0010	0.0020	0.063	0.0010	0.00005	0.0007	0.0012	0.0048
	St Dev.	0.29	97.3	56.9	6.9	15.5	0.026	0.025	0.143	0.01	0.0013	0.0116	0.132	0.0009	0.0008	0.015	0.0004	0.0018	0.0001	0.0004	0.195	0.0007	0.00004	0.0003	0.0012	0.006	0.00012	0.0019	0.0005	0.0006	0.0064
	N	28	28	23	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	25	28	28	23	28	28	28	28	28
75th %	7.90	384.5	216.5	25.2	18.6	0.050	0.100	0.100	0.02	0.0050	0.0143	0.369	0.0005	0.0026	0.033	0.00010	0.0050	0.0005	0.0013	0.775	0.0010	0.0001	0.0010	0.0022	0.093	0.0020	0.00011	0.0031	0.0020	0.0053	
SW2	Min	7.30	136.0	72.1	8.9	2.0	0.020	0.030	0.030	0.01	0.0020	0.0021	0.019	0.0005	0.00050	0.00005	0.00050	0.00007	0.0005	0.174	0.0005	0.00010	0.00031	0.0010	0.0128	0.00020	0.00003	0.00010	0.00050	0.0022	
	Max	9.38	447.0	256.0	28.4	142.0	0.088	0.114	0.383	0.02	0.0050	0.035	0.610	0.0050	0.0030	0.050	0.00010	0.0010	0.0040	1.03	0.0012	0.0001	0.0010	0.0030	0.126	0.0020	0.00030	0.0050	0.0032	0.0506	
	Median	7.83	244.0	155.5	19.9	6.9	0.029	0.076	0.050	0.01	0.0025	0.0130	0.140	0.0005	0.0010	0.011	0.00050	0.0005	0.0010	0.550	0.0005	0.000075	0.0010	0.0020	0.038	0.0020	0.00005	0.0003	0.0010	0.0050	
	St Dev.	0.44	86.5	56.1	4.6	24.2	0.019	0.025	0.064	0.01	0.0087	0.122	0.0008	0.00062	0.0144	0.00037	0.00189	0.00017	0.0009	0.268	0.00031	0.00004	0.00026	0.0006	0.029	0.00063	0.00010	0.0017	0.00053	0.0082	
	N	35	35	20	35	35	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	20	33	33	33	33	33
75th %	8.00	293.5	205.3	22.7	17.0	0.050	0.100	0.100	0.02	0.0050	0.020	0.215	0.0005	0.0012	0.015	0.000100	0.0050	0.00050	0.0020	0.860	0.0005	0.0001	0.0010	0.0020	0.060	0.0020	0.00005	0.0008	0.0012	0.0050	
SW3	Min	7.27	181.0	83.0	9.0	4.0	0.020	0.030	0.030	0.005	0.00020	0.0029	0.082	0.00008	0.00050	0.010	0.00011	0.00022	0.00050	0.290	0.00014	0.00010	0.00041	0.0010	0.0292	0.00031	0.00004	0.00030	0.00050	0.0025	
	Max	8.61	780.0	450.0	39.4	45.2	0.47	0.136	0.381	0.020	0.0050	0.038	2.77	0.0050	0.0074	0.050	0.000100	0.0050	0.0047	0.0038	3.72	0.0017	0.0001	0.0015	0.0050	0.194	0.0020	0.00030	0.0050	0.0084	0.0130
	Median	7.80	343.0	195.0	21.1	12.4	0.025	0.093	0.050	0.020	0.0020	0.0101	0.300	0.00050	0.0018	0.019	0.00050	0.0025	0.00050	0.0013	0.789	0.0005	0.00005	0.0010	0.0020	0.069	0.00100	0.00005	0.0010	0.0014	0.0050
	St Dev.	0.30	125.0	75.7	6.7	10.8	0.08	0.026	0.070	0	0.0083	0.505	0.0009	0.0015	0.015	0.00035	0.0018	0.00107	0.00076	0.74	0.00037	0.00004	0.00030	0.0012	0.044	0.00063	0.00012	0.0019	0.0015	0.0029	
	N	29	29	23	29	29	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
75th %	7.97	386.0	208.5	25.6	18.0	0.050	0.100	0.100	0.020	0.0050	0.015	0.389	0.00053	0.0031	0.037	0.000100	0.0050	0.00065	0.0020	0.93	0.0010	0.0001	0.0010	0.0033	0.105	0.0020	0.00011	0.0027	0.0020	0.0063	
SW4	Min	6.64	74.0	34.9	7.9	1.0	0.020	0.030	0.030	0.005	0.0020	0.0056	0.018	0.0003	0.00030	0.0050	0.00005	0.00005	0.00008	0.00050	0.140	0.00009	0.00010	0.00005	0.0004	0.0123	0.00003	0.00012	0.00020	0.0024	
	Max	8.32	168.0	81.0	32.7	13.0	0.20	0.100	0.100	0.020	0.0050	0.028	2.44	0.0050	0.0010	0.050	0.000100	0.0050	0.00070	0.0010	1.200	0.0010	0.0001	0.0010	0.0092	0.037	0.0020	0.00030	0.0050	0.0010	0.0129
	Median	7.00	131.5	61.8	18.5	4.1	0.050	0.038	0.050	0.020	0.0020	0.010	0.042	0.00050	0.0010	0.010	0.00040	0.00175	0.00050	0.0010	0.345	0.0005	0.00005	0.0008	0.0010	0.0217	0.00100	0.00005	0.0028	0.0008	0.0035
	St Dev.	0.30	22.1	11.6	7.1	3.3	0.056	0.030	0.030	0	0.0054	0.058	0.0009	0.00025	0.018	0.00038	0.00185	0.00017	0.00021	0.271	0.00034	0.00004	0.00038	0.00117	0.00682	0.00064	0.00019	0.0025	0.00032	0.0027	
	N	28	28	23	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	25	28	28	23	28	28	28	28	28
75th %	7.18	150.3	68.5	26.5	6.4	0.091	0.100	0.100	0.020	0.0050	0.016	0.067	0.00053	0.0010	0.022	0.000100	0.0050	0.00050	0.0010	0.430	0.0006	0.0001	0.0010	0.0020	0.0266	0.0020	0.00017	0.0050	0.0010	0.0050	
SW6	Min	6.87	95.5	48.0	10.5	1.0	0.020	0.030	0.030	0.010	0.0020	0.0023	0.030	0.00004	0.00087	0.00009	0.00018	0.00008	0.00003	0.130	0.00009	0.00010	0.00009	0.0010	0.0141	0.0002	0.00004	0.00002	0.00043	0.0029	
	Max	8.65	456.0	270.0	41.0	238.0	0.77	0.145	0.300	0.020	0.0050	0.038	1.44	0.0050	0.0040	0.050	0.000100	0.0050	0.0032	0.0041	6.74	0.0011	0.0001	0.0011	0.0040	0.208	0.0020	0.00030	0.0050	0.0039	0.046
	Median	7.78	240.0	122.0	20.7	8.2	0.050	0.065	0.035	0.020	0.0020	0.009	0.150	0.00050	0.0010	0.018	0.00020	0.0012	0.00050	0.0010	0.560	0.0005	0.00010	0.0010	0.0020	0.043	0.001	0.00005	0.0010	0.0010	0.0042
	St Dev.	0.45	106.6	66.5	6.5	52.2	0.15	0.036	0.073	0.01	0.0041	0.346	0.0010	0.00081	0.017	0.00041	0.00194	0.00057	0.00008	1.32	0.00033	0.00005	0.00031	0.00083	0.055	0.00007	0.00013	0.0022	0.0009	0.009	
	N	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
75th %	7.98	352.5	211.0	24.2	21.4	0.058	0.100	0.100	0.020	0.0050	0.018	0.384	0.00060	0.0018	0.050	0.000100	0.00500	0.00055	0.0013	0.90	0.0010	0.0001	0.0010	0.0023	0.089	0.0020	0.00030	0.0050	0.0019	0.0050	
SW7A	Min	7.58	202.0	110.0	8.6	2.0	0.020	0.030	0.030	0.005	0.0020	0.0023	0.018	0.00004	0.00050	0															

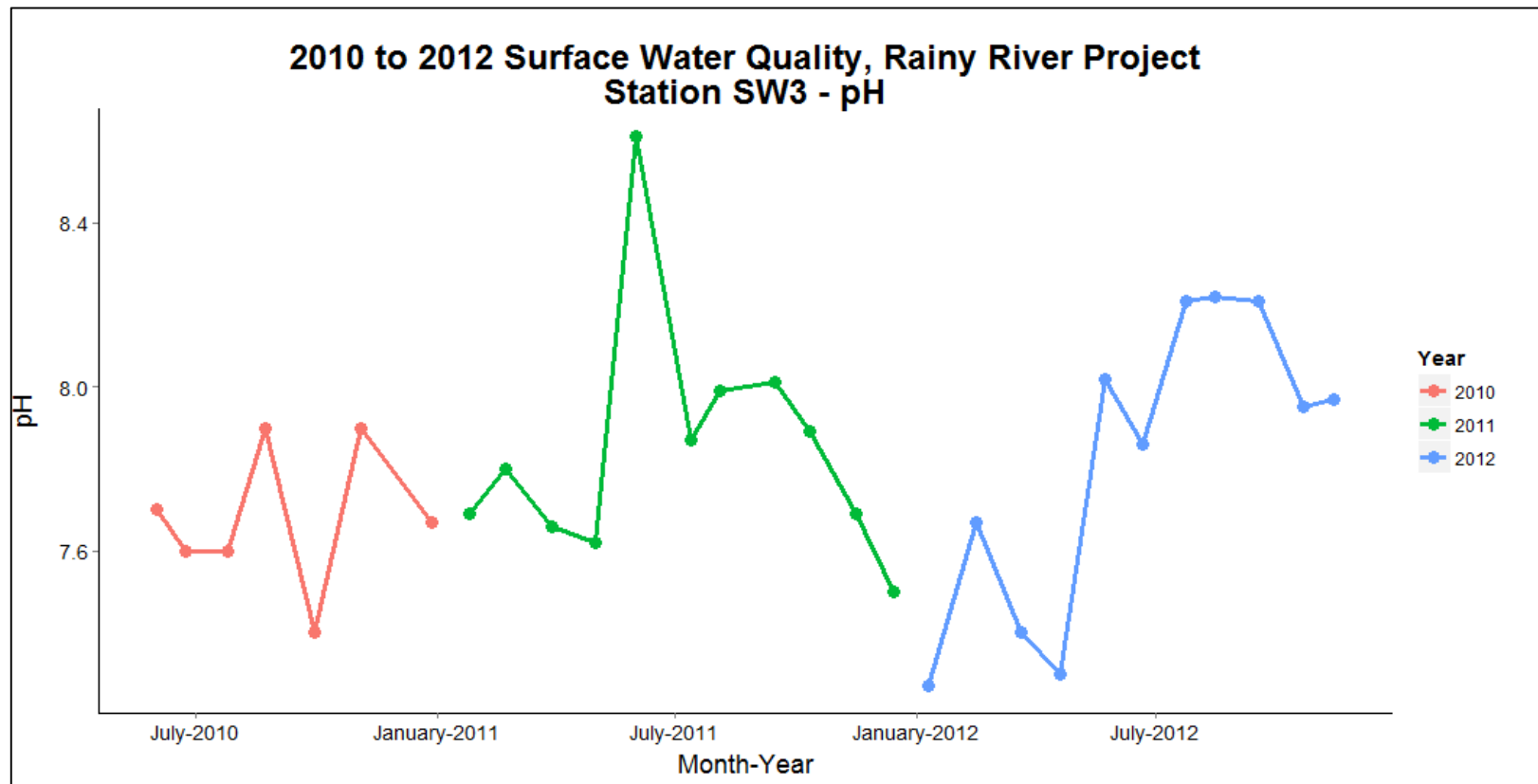


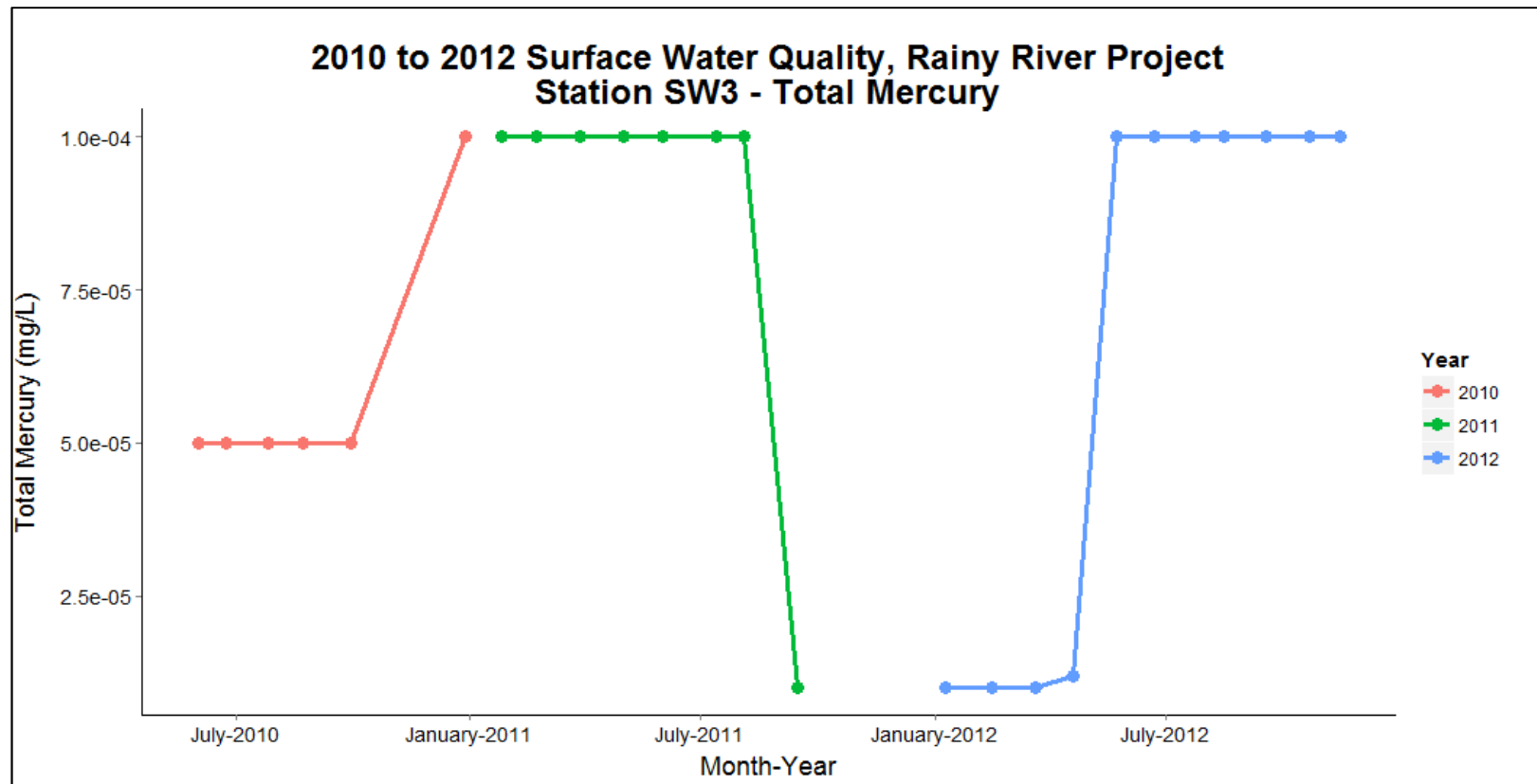


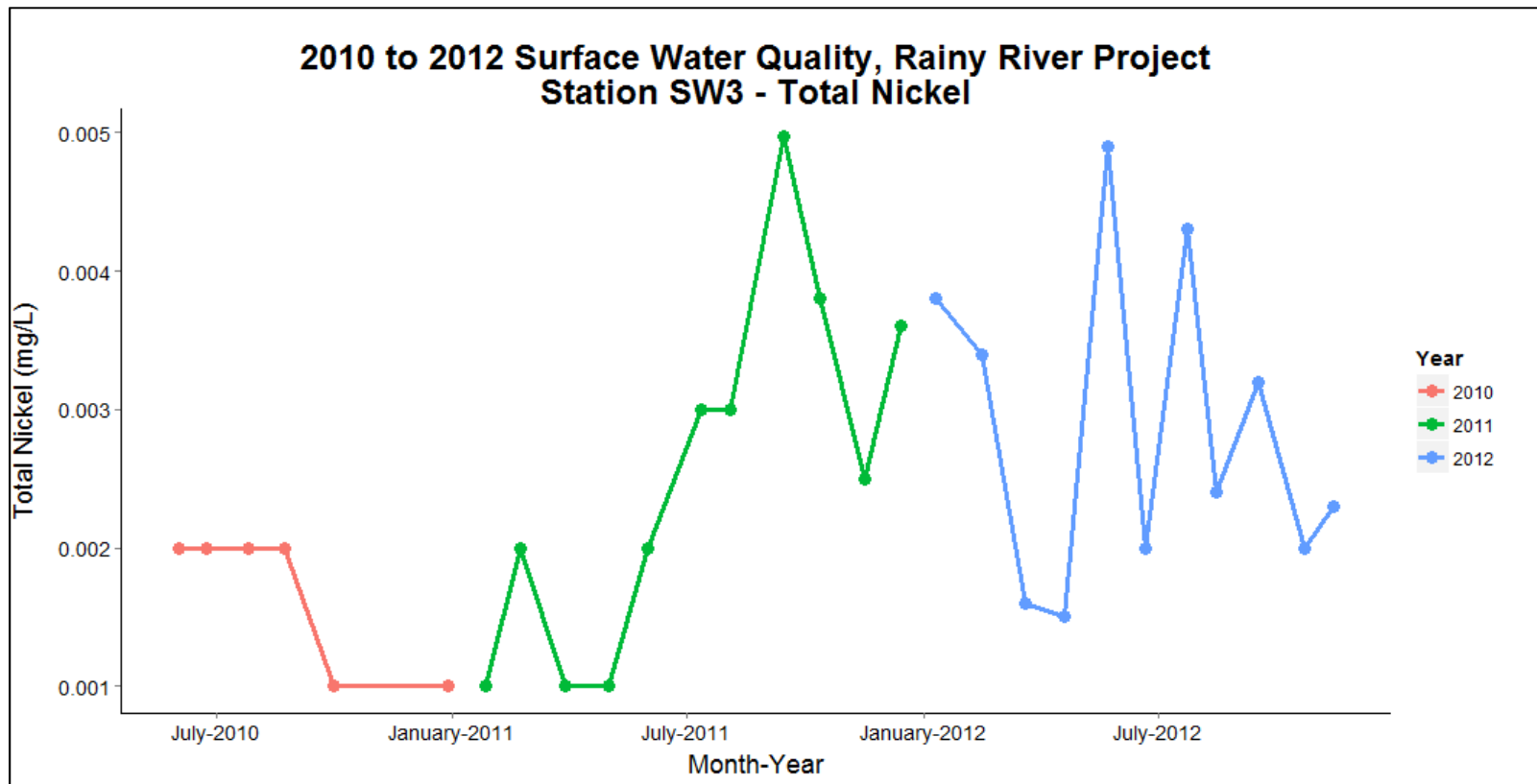












2023 Annual Surface Water Report
Appendix C

Monthly Surface Water Quality, Discharge Rates, Mixing Ratios and
Effluents Water Quality

Table C1: January 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	8.11	0.3	264	139	0.001	0.0007	0.0005	0.0006	0.00015	0.0012	0.0025	3.5	0.147	0.000014	0.0003	0.00031	0.71	0.000005	0.035
	SW10	8.13	0	305	165	0.001	0.0008	0.0008	0.0006	0.0002	0.0017	0.003	3.5	0.221	0.000001	0.0008	0.00035	0.82	0.000005	0.05
	SW21A	7.94	0	390	213	0.001	0.0011	0.0003	0.0001	0.00012	0.0017	0.002	17.5	0.074	0.000002	0.0005	0.00101	1.79	0.000005	0.15
	SW22A	8.14	0.2	406	218	0.001	0.0011	0.0004	0.0001	0.00023	0.0016	0.003	4.5	0.093	0.000001	0.0003	0.00086	1.51	0.000005	0.13
	SW03	8.05	0	405	218	0.001	0.0011	0.0006	0.0008	0.00016	0.002	0.005	6	0.169	0.000008	0.0006	0.00081	1.34	0.000005	0.115
	SW23	7.75	0.5	372	200	0.001	0.0011	0.0008	0.0004	0.00025	0.002	0.0035	12.5	0.180	0.000006	0.0005	0.00063	1.25	0.000005	0.08
	SW24	7.66	0	373	201	0.001	0.0011	0.0008	0.0001	0.00024	0.0021	0.0035	7.5	0.205	0.000010	0.0006	0.00065	1.30	0.000005	0.08
SW15	7.94	0.8	278	158	0.001	0.0012	0.0014	0.0005	0.0004	0.002	0.007	8.5	0.436	0.000016	0.0009	0.00045	1.2	0.000005	0.045	
Clark Creek	SW28A	8.43	0	255	157	0.002	0.00095	0.0006	0.0002	0.00003	0.0014	0.002	1.000	0.0406	0.000001	0.0003	0.00019	0.28	0.000005	0.015
West Creek	SW02	7.93	0.2	117	74.6	0.001	0.0007	0.0004	0.0006	0.00016	0.0006	0.0025	1.000	0.0786	0.000001	0.0004	0.00022	0.62	0.000005	0.01
	SW25	8.76	0	345	186	0.005	0.0008	0.0028	0.0014	0.00015	0.0014	0.012	2.500	0.1010	0.000001	0.0003	0.0002	0.46	0.000005	0.02
	SW26	8.59	0	372	205	0.002	0.0011	0.0019	0.0004	0.00026	0.0018	0.02	5.5	0.1830	0.000001	0.0014	0.00027	0.56	0.000005	0.02
Loslo Creek	SW27	8.64	0.2	416	227	0.003	0.00096	0.0019	0.0002	0.00023	0.0017	0.016	5.5	0.2090	0.000008	0.0009	0.00032	0.59	0.000005	0.04
Tait Creek	SW29																			
Rainy River	SW16	7.77	0.7	55.4	24.8	0.001	0.0004	0.0009	0.0001	0.00009	0.0007	0.002	1.5	0.0586	0.000001	0.0004	0.00004	0.108	0.000005	0.015
	SW17	8.58	0	73.2	33.6	0.001	0.0004	0.0009	0.0001	0.0001	0.0007	0.002	2.5	0.0784	0.000001	0.0003	0.00006	0.17	0.000005	0.015

Table C2: February 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.42	0	318	159	0.001	0.0009	0.0006	0.0010	0.00072	0.0015	0.017	8	0.206	0.000033	0.0006	0.00079	1.37	0.000005	0.055
	SW10	7.38	0	342	178	0.001	0.0011	0.0013	0.0009	0.00148	0.0021	0.024	11.5	0.449	0.000029	0.0023	0.00051	1.22	0.000005	0.045
	SW21A	5.63	1	401	206	0.001	0.00152	0.00065	0.0007	0.0002	0.00182	0.009	8	0.106	0.000015	0.0007	0.00243	3.70	0.000005	0.24
	SW22A	5.61	1	402	217	0.001	0.00148	0.00105	0.0004	0.00088	0.00194	0.013	11	0.157	0.000034	0.00064	0.00208	3.02	0.000005	0.23
	SW03	8.13	0	411	210	0.001	0.0013	0.0008	0.0009	0.00022	0.0019	0.0045	8	0.190	0.000023	0.0007	0.00155	1.83	0.000005	0.18
	SW23	8.36	0	377	0.51	0.002	0.0014	0.0013	0.0012	0.00051	0.0026	0.005	12.5	0.516	0.000027	0.0013	0.00126	2.18	0.000005	0.11
	SW24	8.27	0	376	200	0.001	0.0014	0.0012	0.0013	0.00047	0.0025	0.006	12	0.445	0.000020	0.0017	0.0012	2.12	0.000005	0.1
SW15	8	0.5	298	163	0.001	0.0013	0.0015	0.0009	0.00047	0.0021	0.0135	5	0.452	0.000003	0.0011	0.00047	1.38	0.000005	0.065	
Clark Creek	SW28A	8.28	0	257	149	0.001	0.0012	0.0012	0.0010	0.00048	0.0017	0.005	13.000	0.236	0.000019	0.0008	0.00064	1.07	0.000005	0.035
West Creek	SW02	7.04	0	154	91.8	0.001	0.0009	0.0007	0.0013	0.00845	0.0009	0.0135	9.000	0.1240	0.000045	0.0005	0.00055	0.69	0.000005	0.01
	SW25	7.6	0	281	149	0.001	0.0011	0.0024	0.0007	0.00304	0.0016	0.0165	34.000	0.2020	0.000021	0.0009	0.00022	0.69	0.000005	0.04
	SW26	7.26	0	437	232	0.001	0.0014	0.0033	0.0012	0.00041	0.0016	0.07	3.5	0.1750	0.000012	0.0007	0.00028	0.61	0.000005	0.015
Loslo Creek	SW27	5.81	1	347	189	0.001	0.00109	0.00265	0.0006	0.00024	0.00176	0.0414	1	0.2060	0.000016	0.0008	0.0003	0.64	0.000005	0.03
Tait Creek	SW29	7.96	0	264	145	0.001	0.0008	0.0004	0.0018	0.00009	0.0012	0.003	3	0.0716	0.000012	0.0004	0.00086	0.84	0.000005	0.065
Rainy River	SW16	7.44	0.6	59.4	24.8	0.001	0.0004	0.0011	0.0005	0.00021	0.0008	0.003	2	0.0714	0.000002	0.0005	0.00006	0.132	0.000005	0.01
	SW17	8.28	0	77.8	33.6	0.001	0.0005	0.001	0.0003	0.00009	0.0008	0.003	2	0.0860	0.000014	0.0004	0.00006	0.19	0.000005	0.02

Table C3: March 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.68	1	358	185	0.001	0.00099	0.0007	0.0006	0.00042	0.00142	0.007	8.5	0.178	0.000016	0.0009	0.00098	1.69	0.000005	0.08
	SW10	7.25	0.3	449	226	0.001	0.00109	0.00255	0.0008	0.0009	0.0021	0.007	12.5	0.397	0.000023	0.0011	0.00066	1.58	0.000005	0.072
	SW21A	7.56	0	484	246	0.001	0.00199	0.0007	0.0003	0.00024	0.00214	0.009	16	0.186	0.000030	0.00172	0.003	5.01	0.000005	0.41
	SW22A	7.55	0	480	246	0.001	0.00176	0.00085	0.0007	0.0002	0.00192	0.009	14.5	0.174	0.000011	0.00076	0.00263	3.87	0.000005	0.32
	SW03	7.32	0	479	246	0.001	0.00195	0.00095	0.0006	0.00028	0.00234	0.0072	18.5	0.305	0.000023	0.00102	0.00375	3.75	0.000005	0.356
	SW23	7.45	0	448	243	0.001	0.00177	0.00145	0.0010	0.00054	0.00294	0.0084	19.5	0.480	0.000042	0.0013	0.00202	2.73	0.00002	0.13
	SW24	7.39	0	454	241	0.001	0.00202	0.00235	0.0007	0.00098	0.00406	0.01	39.5	1.170	0.000042	0.0027	0.00247	3.70	0.000005	0.17
SW15	7.36	0	125	59	0.001	0.00063	0.0013	0.0008	0.00012	0.00098	0.0032	3	0.136	8.2E-06	0.00068	0.00013	0.382	0.000005	0.014	
Clark Creek	SW28A																			
West Creek	SW02	7.66	0	166	100	0.001	0.00076	0.00095	0.0007	0.00036	0.0008	0.0126	7.000	0.1230	1.36E-05	0.00054	0.00062	0.89	0.000005	0.014
	SW25																			
	SW26	7.97	0	453	241	0.001	0.00122	0.0039	0.0005	0.00036	0.00202	0.122	7.5	0.3140	2.72E-05	0.00208	0.00031	0.64	0.000005	0.026
Loslo Creek	SW27	7.86	0	434	225	0.001	0.00107	0.003	0.0004	0.00024	0.00186	0.0556	5.5	0.2660	0.000013	0.0008	0.00036	0.65	0.000005	0.02
Tait Creek	SW29	7.27	0	306	170	0.001	0.00075	0.00055	0.0005	0.00014	0.0015	0.005	6.5	0.1330	0.000014	0.00068	0.00087	0.96	0.000005	0.048
Rainy River	SW16	8.62	0	56.8	24.8	0.001	0.00039	0.00115	0.0005	0.00006	0.00066	0.004	2.5	0.0662	6.2E-06	0.00046	0.00005	0.131	0.000005	0.016
	SW17	7.94	0	72.2	30.7	0.001	0.00043	0.00105	0.0006	0.00008	0.00068	0.002	3.5	0.0960	0.000005	0.0005	0.00006	0.18	0.000005	0.006

Table C4: April 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20																			
	SW10	7.47	0.2	193		0.001	0.0008	0.0023	0.0011	0.00088	0.00188	0.008	44.5	0.949	0.000032	0.0019	0.00071	1.26	0.000005	0.266
	SW21A	7.15	0.2	271	125	0.001	0.0009	0.0015	0.0008	0.00074	0.0017	0.005	31.5	0.446	0.000023	0.00862	0.00081	1.42	0.000005	0.14
	SW22A	7.33	0.4	251		0.001	0.00085	0.00215	0.0009	0.00084	0.00172	0.009	13	0.767	0.000033	0.00148	0.00064	1.23	0.000005	0.11
	SW03																			
	SW23	7.08	0.08	472	248	0.001	0.00172	0.0012	0.0008	0.00046	0.00264	0.0046	18.5	0.461	0.000024	0.0012	0.00219	2.99	0.000005	0.196
	SW24																			
SW15																				
Clark Creek	SW28A	7.14	0.4	234		0.001	0.00102	0.00125	0.0009	0.0005	0.00112	0.003	6.000	0.231	2.36E-05	0.00062	0.00056	1.05	0.000005	0.038
West Creek	SW02																			
	SW25	7.59	2	243		0.001	0.00157	0.00525	0.0007	0.00232	0.00448	0.019	98.500	2.8300	0.000059	0.0053	0.00141	3.57	0.00001	0.124
	SW26	7.76	0.9	237		0.001	0.00117	0.00345	0.0006	0.00154	0.00274	0.02	47	1.5300	4.04E-05	0.00284	0.00099	2.04	0.000005	0.088
Loslo Creek	SW27	7.61	0.1	242	115	0.001	0.0009	0.00255	0.0008	0.00096	0.00182	0.0106	13.5	0.9140	0.000035	0.0017	0.00057	1.20	0.000005	0.10
Tait Creek	SW29	7.14	0.7	165	81.9	0.001	0.00049	0.00075	0.0006	0.00012	0.0008	0.002	4.5	0.1310	0.000011	0.00046	0.00031	0.35	0.000005	0.054
Rainy River	SW16	6.73	1	71.4	26.1	0.001	0.00043	0.0018	0.0007	0.00028	0.0008	0.002	8.5	0.155	4.2E-06	0.00064	0.0001	0.254	0.000005	0.01
	SW17	7.35	1	74.4	30.6	0.001	0.00045	0.00115	0.0005	0.00018	0.00072	0.002	2.5	0.1020	0.000006	0.0006	0.00007	0.23	0.000005	0.02

Table C5: May 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.36	5	196	85.9	0.001	0.0005	0.0011	0.0006	0.00015	0.0012	0.003	5	0.254	0.000009	0.0007	0.00014	0.35	0.000005	0.01
	SW10	7.56	6	177	84.7	0.001	0.0007	0.0012	0.0010	0.0002	0.0014	0.004	10	0.319	0.000012	0.0007	0.00025	0.54	0.000005	0.02
	SW21A	7.78	9	314	152	0.001	0.0009	0.0012	0.0004	0.00012	0.0012	0.002	8.5	0.183	0.000008	0.0005	0.00019	0.32	0.000005	0.02
	SW22A	7.67	9	610	243	0.001	0.0008	0.0015	0.0004	0.00011	0.0018	0.006	8.5	0.133	0.000013	0.0004	0.00056	0.26	0.000005	0.02
	SW03	7.61	9	505	203	0.001	0.0009	0.0019	0.0004	0.00019	0.0018	0.004	16	0.259	0.000014	0.0006	0.00051	0.43	0.000005	0.015
	SW23	7.44	8	316	137	0.001	0.0009	0.0016	0.0003	0.00024	0.0016	0.0035	14.5	0.307	0.000014	0.0007	0.0004	0.55	0.000005	0.02
	SW24	7.42	8	427	171	0.001	0.0009	0.0016	0.0006	0.00024	0.0017	0.004	14	0.302	0.000015	0.0008	0.00053	0.56	0.000005	0.01
SW15	7.49	8	243	111	0.001	0.0009	0.0016	0.0005	0.00039	0.0018	0.004	20.5	0.519	0.000017	0.0011	0.00048	0.751	0.000005	0.025	
Clark Creek	SW28A	7.57	7	163	87.9	0.001	0.0008	0.0006	0.0007	0.00007	0.0008	0.001	1.500	0.0568	0.000004	0.0003	0.00012	0.65	0.000005	0.01
West Creek	SW02	7.18	6	91	51.4	0.001	0.0005	0.0005	0.0002	0.00007	0.0005	0.0005	2.500	0.0540	0.000002	0.0003	0.00006	0.13	0.000005	0.005
	SW25	8	11	268	140	0.001	0.0007	0.0013	0.0004	0.0003	0.001	0.006	4.500	0.1200	0.000007	0.0004	0.00013	0.44	0.000005	0.005
	SW26	8.13	9	286	147	0.001	0.0007	0.0012	0.0003	0.00031	0.0009	0.0065	3	0.0924	0.000007	0.0003	0.00011	0.48	0.000005	0.015
Loslo Creek	SW27	7.8	8	313	164	0.001	0.0006	0.0012	0.0002	0.0002	0.001	0.004	4	0.1030	0.000006	0.0004	0.00015	0.37	0.000005	0.01
Tait Creek	SW29	7.32	10	146	82.7	0.001	0.0004	0.0006	0.0002	0.00003	0.0008	0.001	2.5	0.0350	0.000003	0.0003	0.00008	0.10	0.000005	0.005
Rainy River	SW16	7.01	5	73.6	31.9	0.001	0.0006	0.0019	0.0007	0.0004	0.0017	0.004	22.5	0.624	0.000013	0.0014	0.00037	0.835	0.000005	0.015
	SW17	7.19	6	91.6	43.9	0.001	0.0007	0.0018	0.0005	0.00046	0.0019	0.004	24	0.7010	0.000021	0.0015	0.00045	0.96	0.000005	0.03

Table C6: June 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.16	24.6	237	118	0.001	0.00201	0.00086	0.0020	0.00012	0.00195	0.003	3	0.122	0.000010	0.0005	0.00051	0.83	5.7E-06	0.086
	SW10	7.3	24.5	188	101	0.001	0.00196	0.00123	0.0020	0.00023	0.00204	0.003	9	0.301	0.000016	0.0009	0.00032	0.76	6.7E-06	0.063
	SW21A	7.05	21.5	256	133	0.001	0.00309	0.00098	0.0020	7.9E-05	0.00195	0.003	4	0.038	0.000009	0.0005	0.00078	1.39	6.8E-06	0.20
	SW22A	7.35	21.2	690	256	0.0025	0.00226	0.00229	0.0020	9.3E-05	0.00228	0.004	6.6	0.094	0.000017	0.0005	0.00097	0.76	0.000005	0.13
	SW03	7.33	24.2	526	223	0.0017	0.00209	0.00195	0.0020	0.00019	0.00232	0.003	12.4	0.249	0.000014	0.00074	0.00074	0.71	0.000005	0.112
	SW23	7.14	22.6	318	155	0.001	0.0023	0.00258	0.0020	0.00049	0.00273	0.0048	23.7	0.594	0.000026	0.0014	0.00084	1.22	7.6E-06	0.106
	SW24	7.24	22.5	423	188	0.001	0.0022	0.00204	0.0020	0.00044	0.00274	0.0044	21.9	0.562	0.000030	0.0013	0.00093	1.15	7.2E-06	0.094
SW15	7.2	21.6	232	123	0.001	0.00214	0.00384	0.0020	0.00078	0.00349	0.0067	29.5	1.02	3.46E-05	0.00217	0.00088	1.57	8.7E-06	0.069	
Clark Creek	SW28A	7.49	27	149	88.5	0.001	0.00139	0.00067	0.0020	6.7E-05	0.0011	0.003	3.000	0.0531	0.000005	0.0005	0.00015	0.37	5.8E-06	0.05
West Creek	SW02	6.9	19.8	145	86.3	0.001	0.00152	0.0005	0.0020	0.0001	0.0008	0.003	3.000	0.0899	7.3E-06	0.0005	0.0003	0.50	0.000005	0.05
	SW25	7.23	19.8	264	137	0.001	0.00151	0.00133	0.0020	0.00014	0.00131	0.0066	4.000	0.1610	0.000005	0.0005	0.00026	0.50	0.000005	0.05
	SW26	7.37	19.5	276	145	0.001	0.00188	0.00137	0.0020	0.00015	0.00146	0.0087	3.2	0.2170	7.8E-06	0.00051	0.00023	0.61	0.000005	0.05
Loslo Creek	SW27	7.66	19.9	310	161	0.001	0.00182	0.00166	0.0020	0.00014	0.00153	0.0052	3.6	0.1890	0.000009	0.0006	0.00025	0.51	0.000005	0.05
Tait Creek	SW29	6.76	21.7	230	138	0.001	0.00235	0.0006	0.0020	5.5E-05	0.0015	0.003	9.7	0.0327	0.000009	0.0005	0.00128	0.85	0.000005	0.077
Rainy River	SW16	7	20.1	61.7	26.1	0.001	0.00048	0.00447	0.0020	0.00013	0.00084	0.003	7.9	0.126	8.1E-06	0.00053	0.0001	0.212	0.000005	0.05
	SW17	7.17	21	71.7	33	0.001	0.0006	0.00379	0.0020	0.0002	0.00092	0.003	7.7	0.1690	0.000008	0.0005	0.00012	0.29	0.000005	0.05

Table C7: July 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.25	18.78	280	131	0.001	0.00176	0.00127	0.0020	0.00015	0.00179	0.003	7.2	0.223	0.000006	0.0006	0.00058	0.91	0.000005	0.079
	SW10	7.16	18.34	255	131	0.001	0.00244	0.00338	0.0020	0.00024	0.00235	0.003	6.8	0.289	0.000013	0.0008	0.00037	0.79	0.000005	0.097
	SW21A	7.27	22.35	283	151	0.001	0.00219	0.00052	0.0020	5.6E-05	0.00164	0.003	4.4	0.038	0.000005	0.0005	0.00039	0.49	0.000005	0.11
	SW22A	7.28	20.16	288	147	0.001	0.00216	0.0005	0.0020	7.3E-05	0.00174	0.003	3.8	0.093	0.000005	0.0005	0.0004	0.47	0.000005	0.11
	SW03	7.3	18.04	276	143	0.001	0.0028	0.00152	0.0020	0.00035	0.0027	0.0046	10.8	0.399	0.000013	0.00095	0.00057	0.92	0.000005	0.15
	SW23	7.45	19.23	227	134	0.001	0.00335	0.00207	0.0020	0.00071	0.00337	0.0042	13.6	0.643	0.000019	0.0016	0.00089	1.92	0.000005	0.129
	SW24	7.35	18.93	205	117	0.001	0.00323	0.00211	0.0021	0.00084	0.00351	0.0056	13.2	0.851	0.000026	0.0018	0.00096	2.01	0.000005	0.131
	SW15	7.63	23.11	156	95.2	0.001	0.0022	0.00189	0.0020	0.00053	0.00237	0.0035	9	0.527	2.51E-05	0.00108	0.00047	1.21	0.000005	0.072
Clark Creek	SW28A	7.53	15.04	229	130	0.001	0.00141	0.00101	0.0020	0.00005	0.00138	0.003	3.000	0.0391	0.000005	0.0005	0.00023	0.35	0.000005	0.05
West Creek	SW02	7.21	15.84	179	105	0.001	0.00187	0.00062	0.0020	0.00015	0.00077	0.003	6.400	0.0801	0.000005	0.0005	0.00066	0.94	0.000005	0.05
	SW25	7.35	20.63	463	245	0.001	0.00167	0.00124	0.0020	0.00017	0.00172	0.0062	12.200	0.1840	0.000005	0.0005	0.00045	0.66	0.000005	0.058
	SW26	7.49	18	577	302	0.001	0.00193	0.00134	0.0020	0.00029	0.00187	0.0035	13.8	0.4200	0.000005	0.00079	0.00038	0.73	0.000005	0.05
Loslo Creek	SW27	7.24	22.56	457	236	0.001	0.00274	0.0005	0.0020	0.00005	0.00132	0.003	3	0.0237	0.000005	0.0005	0.00032	0.58	0.000005	0.11
Tait Creek	SW29	7.08	17.74	342	191	0.001	0.00288	0.00102	0.0020	0.00044	0.00286	0.004	31.2	0.4700	0.000021	0.00104	0.00207	2.59	0.000005	0.142
Rainy River	SW16	7.59	23.17	76.2	29.2	0.001	0.00062	0.00145	0.0020	0.00027	0.00115	0.003	19.8	0.303	1.21E-05	0.00081	0.00027	0.467	0.000005	0.05
	SW17	7.99	22.7	74.4	32.2	0.001	0.00068	0.00136	0.0020	0.00025	0.00111	0.003	11.8	0.3040	0.000012	0.0008	0.00027	0.46	0.000005	0.05

Table C8: August 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.29	21.9	346	158	0.001	0.00188	0.0008	0.0020	0.0001	0.00162	0.003	6.4	0.110	0.000008	0.0005	0.0005	0.67	0.000005	0.075
	SW10	7.46	21.73	348	178	0.001	0.00259	0.00144	0.0020	0.00013	0.00205	0.003	4.4	0.161	0.000008	0.0006	0.00031	0.46	0.000005	0.077
	SW21A	7.44	26.16	337	167	0.001	0.00278	0.0006	0.0020	0.00013	0.00171	0.003	7	0.116	0.000007	0.0005	0.00045	0.43	0.000005	0.12
	SW22A	7.71	19.73	421	211	0.001	0.00177	0.00086	0.0020	5.5E-05	0.00151	0.003	3.8	0.078	0.000006	0.0005	0.00019	0.21	0.000005	0.07
	SW03	6.95	21.04	331	177	0.001	0.00335	0.00154	0.0020	0.0001	0.00265	0.0039	13.7	0.146	0.000010	0.0005	0.00037	0.62	0.000005	0.184
	SW23	7.08	21.67	295	160	0.001	0.00406	0.0031	0.0020	0.00113	0.00436	0.0057	15.7	1.200	0.000025	0.0025	0.00119	1.96	0.000005	0.149
	SW24	7.3	22.57	297	157	0.001	0.00405	0.00294	0.0028	0.00103	0.00411	0.0054	10.3	1.070	0.000026	0.0022	0.00107	1.75	5.5E-06	0.136
	SW15	7.2	24.45	173	95.8	0.001	0.00302	0.00262	0.0020	0.00072	0.00258	0.003	10.3	0.582	0.00002	0.00119	0.00045	1.13	5.4E-06	0.116
Clark Creek	SW28A	7.75	21.36	187	106	0.003	0.00127	0.00072	0.0020	7.9E-05	0.00123	0.004	3.000	0.0762	0.000008	0.00074	0.00014	0.30	0.000005	0.05
West Creek	SW02	7.25	16.14	203	115	0.001	0.00171	0.0005	0.0020	0.00014	0.00089	0.003	15.100	0.1100	0.000009	0.00064	0.00058	0.88	0.000005	0.05
	SW25	6.95	19.01	392	198	0.001	0.00158	0.00093	0.0020	0.00012	0.00146	0.0039	7.100	0.1840	0.000005	0.0013	0.00058	0.85	0.000005	0.065
	SW26	6.94	20.02	430	214	0.001	0.00207	0.0012	0.0020	0.00026	0.00152	0.0041	13.8	0.4240	0.000008	0.00081	0.00042	0.68	0.000005	0.075
Loslo Creek	SW27	6.93	22.81	413	202	0.001	0.00166	0.00062	0.0020	0.00005	0.00096	0.003	3	0.0309	0.000005	0.0005	0.00015	0.24	0.000005	0.07
Tait Creek	SW29	6.78	23.63	318	187	0.001	0.00193	0.0005	0.0020	7.5E-05	0.00185	0.003	4.7	0.0662	0.000005	0.0005	0.00069	0.89	0.000005	0.077
Rainy River	SW16	7.18	24.38	69.5	30.1	0.001	0.00046	0.00114	0.0020	0.00013	0.00082	0.003	9.3	0.172	0.000008	0.00067	0.00011	0.185	0.000005	0.05
	SW17	7.18	25.32	74.7	33.2	0.001	0.00059	0.00131	0.0020	0.00021	0.0011	0.008	15.7	0.2540	0.000011	0.0009	0.00021	0.34	0.000005	0.05

Table C9: September 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.23	19.63	374	175	0.001	0.00175	0.00299	0.0020	0.00017	0.00165	0.003	8.2	0.136	0.000006	0.0005	0.00044	0.85	0.000005	0.076
	SW10	7.6	20.46	393	198	0.001	0.00203	0.00109	0.0020	0.00015	0.00191	0.003	6	0.122	0.000007	0.0005	0.00032	0.51	0.000005	0.075
	SW21A																			
	SW22A	7.33	17.65	364	187	0.001	0.00365	0.00093	0.0020	0.00012	0.00204	0.003	5.9	0.180	0.000005	0.00084	0.00034	0.61	0.000005	0.20
	SW03	6.68	16.28	367	199	0.001	0.00303	0.00158	0.0020	0.0001	0.00255	0.0031	6.9	0.099	0.000007	0.0005	0.00051	0.52	0.000005	0.167
	SW23	7.47	20.07		170	0.001	0.00448	0.00228	0.0020	0.00072	0.0034	0.0036		0.611	0.000017	0.0013	0.00091	1.20	0.000005	0.125
	SW24	7.45	20.27	311	169	0.001	0.005	0.00249	0.0020	0.00086	0.00387	0.0043	5.7	0.838	0.000015	0.0018	0.00103	1.55	0.000005	0.167
	SW15	7.7	21.6	205	108	0.001	0.00273	0.00312	0.0020	0.00071	0.00279	0.0033	9.7	0.537	1.38E-05	0.00121	0.00047	1.03	0.000005	0.102
Clark Creek	SW28A																			
West Creek	SW02	7.23	15.7	205	120	0.001	0.00132	0.0005	0.0020	6.7E-05	0.00075	0.003	3.000	0.0503	0.000005	0.0005	0.00028	0.59	0.000005	0.05
	SW25	6.93	15.37	796	335	0.001	0.00091	0.002	0.0020	0.0002	0.00148	0.006	11.500	0.3540	0.000014	0.0009	0.00028	0.57	0.000005	0.05
	SW26	7.65	15.36	813	406	0.001	0.0019	0.00131	0.0020	0.00011	0.00155	0.003	4.9	0.2080	0.000005	0.0008	0.00022	0.32	0.000005	0.05
Loslo Creek	SW27	7.21	15.67	491	248	0.001	0.00204	0.0005	0.0020	0.00005	0.00098	0.003	5.5	0.0266	0.000005	0.0005	0.00037	0.44	0.000005	0.11
Tait Creek	SW29																			
Rainy River	SW16	7.87	22.23	87.5	34.6	0.001	0.00064	0.00213	0.0020	0.00042	0.00148	0.013	18.5	0.374	4.89E-05	0.0011	0.00028	0.459	0.000005	0.05
	SW17	7.92	22.3	92.9	37.1	0.001	0.00054	0.00124	0.0020	0.00011	0.00083	0.003	3.3	0.1450	0.000006	0.0007	0.0001	0.17	0.000005	0.05

Table C10: October 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.31	16.2	378	179	0.001	0.00151	0.00051	0.0020	8.2E-05	0.0015	0.003	5.3	0.094	0.000005	0.0006	0.00038	0.51	0.000005	0.065
	SW10	7.36	14.8	381	190	0.001	0.00167	0.0007	0.0020	0.00007	0.00177	0.003	3	0.075	0.000006	0.0005	0.00023	0.34	0.000005	0.055
	SW21A																			
	SW22A	7.14	15.8	479	238	0.001	0.00236	0.00838	0.0020	0.00019	0.0017	0.007	3.9	0.088	0.000005	0.0005	0.00028	0.34	0.000005	0.14
	SW03	7.41	15.4	427	222	0.001	0.00264	0.00598	0.0020	0.0001	0.00272	0.006	3	0.047	0.000010	0.001	0.00048	0.35	0.000005	0.118
	SW23	7.5	17.4	322	174	0.001	0.00459	0.00298	0.0020	0.00069	0.00353	0.006	12.7	0.678	0.000015	0.0015	0.00089	1.40	0.000005	0.128
	SW24	7.46	17	319	173	0.001	0.00448	0.00291	0.0020	0.00064	0.00343	0.006	8.1	0.610	0.000013	0.0013	0.00084	1.28	0.000005	0.136
	SW15	8.12	20	209	105	0.001	0.00215	0.00274	0.0020	0.00059	0.0022	0.003	5.3	0.346	1.06E-05	0.0008	0.0003	0.824	0.000005	0.09
Clark Creek	SW28A	7.31	15.7	543	275	0.001	0.00292	0.00053	0.0020	0.00005	0.00206	0.003	14.100	0.0276	1.27E-05	0.0005	0.00169	1.07	0.000005	0.05
West Creek	SW02	7.31	15.7	209	112	0.001	0.00118	0.0005	0.0020	0.00005	0.00063	0.003	3.000	0.0306	5.3E-06	0.0005	0.00025	0.37	0.000005	0.05
	SW25	7.33	15.6	655	309	0.001	0.00131	0.00105	0.0020	0.00014	0.0017	0.0062	13.300	0.1950	0.000006	0.0005	0.00055	0.69	0.000005	0.053
	SW26	7.46	15.9	786	385	0.001	0.00152	0.00095	0.0020	5.8E-05	0.00117	0.003	4.3	0.0971	0.000005	0.0005	0.00022	0.33	0.000005	0.05
Loslo Creek	SW27	7.02	15.8	505	247	0.001	0.00221	0.0005	0.0020	0.00005	0.00115	0.003	5.9	0.0220	0.000005	0.0005	0.00041	0.34	0.000005	0.13
Tait Creek	SW29																			
Rainy River	SW16	8.21	20.1	92.5	35.1	0.001	0.00064	0.00165	0.0020	0.00038	0.00133	0.003	22.5	0.369	1.59E-05	0.00094	0.00032	0.53	0.000005	0.05
	SW17	8.25	19.5	98.7	40	0.0015	0.00089	0.0026	0.0020	0.00089	0.0027	0.007	45.1	1.0400	0.000025	0.0025	0.00086	1.52	0.000005	0.062

Table C11: November 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	8.15	1.32	432	174	0.001	0.00072	0.00107	0.0020	0.00011	0.00131	0.003	3.5	0.192	0.000006	0.0005	0.00021	0.42	0.000005	0.05
	SW10	8.45	1	359	160	0.001	0.00087	0.00147	0.0020	0.00016	0.00176	0.003	3.5	0.317	0.000005	0.0008	0.00024	0.50	0.000005	0.05
	SW21A	7.66	1.94	499	223	0.001	0.00099	0.00092	0.0020	0.00005	0.00128	0.003	3.6	0.061	0.000005	0.0005	0.00019	0.21	0.000005	0.05
	SW22A	7.63	2.18	1030	370	0.001	0.00107	0.00221	0.0020	0.00005	0.00216	0.003	4	0.054	0.000007	0.0005	0.0013	0.14	0.000005	0.05
	SW03	7.66	1.56	917	322	0.002	0.00097	0.0018	0.0020	8.8E-05	0.00204	0.003	5.4	0.142	0.000007	0.0005	0.00113	0.26	0.000005	0.05
	SW23	8	1.4	697	270	0.0034	0.00095	0.00126	0.0020	0.00015	0.00184	0.003	7.9	0.262	0.000010	0.0006	0.00088	0.42	0.000005	0.05
	SW24	8.15	1.92	967	346	0.0102	0.00101	0.00155	0.0020	0.00013	0.00238	0.003	5.7	0.213	0.000007	0.0005	0.00145	0.31	0.000005	0.05
	SW15	8.2	1.6	517	203	0.0039	0.00113	0.00173	0.0020	0.00038	0.00217	0.0043	40.3	0.581	1.76E-05	0.00122	0.00085	0.874	0.000005	0.05
Clark Creek	SW28A	8.51	1.23	277	154	0.001	0.00058	0.00083	0.0020	0.00005	0.00078	0.003	3.000	0.0238	0.000005	0.0005	0.0001	0.06	0.000005	0.05
West Creek	SW02	7.39	2.22	165	88.3	0.001	0.00089	0.00062	0.0020	0.00021	0.00063	0.0035	4.600	0.1690	9.1E-06	0.0005	0.00048	0.86	0.000005	0.05
	SW25	8.02	2.4	528	244	0.001	0.00084	0.00136	0.0020	0.00013	0.00102	0.01	8.800	0.1560	0.000005	0.0005	0.00021	0.30	0.000005	0.05
	SW26	8.35	2.81	533	248	0.001	0.00082	0.00112	0.0020	6.3E-05	0.00091	0.006	3.8	0.0909	0.000005	0.0005	0.00012	0.16	0.000005	0.05
Loslo Creek	SW27	7.76	2.48	538	244	0.001	0.00078	0.00154	0.0020	6.6E-05	0.00097	0.0038	3.2	0.0927	0.000005	0.0005	0.00014	0.17	0.000005	0.05
Tait Creek	SW29	7.06	1.53	227	119	0.001	0.00057	0.0014	0.0020	0.00005	0.00091	0.003	1.5	0.0561	0.000005	0.0005	0.00015	0.21	0.000005	0.05
Rainy River	SW16	8.1	4.23	87.3	36.5	0.001	0.00054	0.00127	0.0020	0.00012	0.00084	0.003	6.1	0.167	5.2E-06	0.0005	0.00011	0.23	0.000005	0.05
	SW17	7.99	3.9	108	47.8	0.001	0.00067	0.0013	0.0020	0.00017	0.00101	0.003	6.1	0.2310	0.000009	0.0006	0.00016	0.36	0.000005	0.05

Table C12: December 2023 Surface Water Quality for Selected Parameters

Receiver	Parameter	Field pH	Field Temperature	Conductivity	Hardness	Ammonia, Unionized	Arsenic, Total	Copper, Total	Cyanide, Free	Lead, Total	Nickel, Total	Zinc, Total	Total Suspended Solids	Aluminum, Total	Cadmium, Total	Chromium, Total	Cobalt, Total	Iron, Total	Mercury, Total	Phosphorus, Total
	Unit	pH units	°C	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ECA Benchmarks						0.02	0.01	0.008	0.005	0.008	0.025	0.09								
PWQO														0.075	0.0001	0.001	0.0009	0.30	0.0002	
Pinewood River	SW20	7.42	0.34	426	180	0.001	0.00085	0.00114	0.0020	0.00016	0.00192	0.004	3.7	0.159	0.000006	0.0006	0.00036	0.76	0.000005	0.05
	SW10	7.54	0.02	356	165	0.001	0.00096	0.00111	0.0020	0.00015	0.00166	0.003	4.1	0.137	0.000012	0.0007	0.00026	0.57	0.000005	0.05
	SW21A	7.51	-0.16	448	209	0.001	0.00096	0.00075	0.0020	7.4E-05	0.00175	0.003	3	0.073	0.000007	0.0005	0.0006	0.91	0.000005	0.08
	SW22A	7.35	-0.04	453	220	0.001	0.00095	0.00081	0.0020	9.8E-05	0.00166	0.003	3.4	0.103	0.000006	0.0005	0.00053	0.81	0.000005	0.05
	SW03	7.33	0.33	463	218	0.001	0.00099	0.00165	0.0020	0.00022	0.00217	0.0042	6.7	0.307	0.000011	0.00079	0.00055	0.70	0.000005	0.05
	SW23	7.28	0.21	368	180	0.001	0.00105	0.00568	0.0020	0.00035	0.00235	0.0161	11.5	0.460	0.000044	0.0011	0.00054	0.97	0.000005	0.05
	SW24	7.25	-0.2	375	185	0.001	0.00109	0.00238	0.0020	0.00041	0.00256	0.0075	21.5	0.570	0.000020	0.0013	0.00062	1.11	0.000005	0.05
	SW15																			
Clark Creek	SW28A	7.99	0.56	234	130	0.001	0.00073	0.00087	0.0020	0.00005	0.00086	0.003	0.023	0.0234	0.000005	0.0005	0.00011	0.14	0.000005	0.05
West Creek	SW02	6.79	-0.02	160	93.8	0.001	0.00091	0.0005	0.0020	0.00016	0.00058	0.0032	0.080	0.0796	0.000005	0.0005	0.00054	0.93	0.000005	0.05
	SW25	7.62	-0.09	351	179	0.001	0.00106	0.00242	0.0020	0.00048	0.00158	0.0111	0.087	0.4630	0.000010	0.0010	0.00036	0.80	0.000005	0.05
	SW26	8.28	-0.21	413	215	0.001	0.00112	0.00139	0.0020	0.00022	0.00123	0.01	0.463	0.2110	0.000005	0.0005	0.00018	0.45	0.000005	0.05
Loslo Creek	SW27	7.68	0.03	475	243	0.001	0.00126	0.002	0.0020	0.00057	0.00227	0.0119	0.211	0.7810	0.000018	0.0018	0.00078	1.31	0.000005	0.06
Tait Creek	SW29	7.29	0.31	249	135	0.001	0.00066	0.00084	0.0020	0.00006	0.00103	0.003	0.781	0.0879	0.000007	0.0005	0.00028	0.41	0.000005	0.05
Rainy River	SW16																			
	SW17	7.91	0.07	96.3	40.4	0.001	0.00055	0.00133	0.0020	0.00017	0.0009	0.003		0.1570	0.000008	0.0006	0.00014	0.29	0.000005	0.05

Table C13: April 2023 Discharge and Dilution Ratios

Date	Average 24-hr Flow in Pinewood River at H1 Hydrometric Station less discharge (m ³ /day)	Calculated Average 24-hr Flow in Pinewood River at EDL2 (m ³ /day)	EDL1 Daily Discharge (m ³ /day)	EDL2 Daily Discharge (m ³ /day)	EDL1/EDL2 Dilution Ratio* (1 : X)	Sediment Pond 2 Daily Discharge (m ³ /day)	Dilution Ratio* (1 : X)
1-Apr-23	9,583	592,389	-	-	0.00	-	0.0
2-Apr-23	8,010	533,537	-	-	0.00	-	0.0
3-Apr-23	10,565	338,058	-	-	0.00	-	0.0
4-Apr-23	11,567	394,501	-	-	0.00	-	0.0
5-Apr-23	12,281	520,332	-	-	0.00	-	0.0
6-Apr-23	15,523	626,875	-	-	0.00	-	0.0
7-Apr-23	13,304	556,430	-	-	0.00	-	0.0
8-Apr-23	5,084	478,021	-	-	0.00	-	0.0
9-Apr-23	8,901	398,903	-	-	0.00	-	0.0
10-Apr-23	34,913	210,997	-	-	0.00	-	0.0
11-Apr-23	117,940	451,722	-	-	0.00	-	0.0
12-Apr-23	570	609,559	-	-	0.00	-	0.0
13-Apr-23	903,384	588,715	-	-	0.00	-	0.0
14-Apr-23	1,455,629	425,671	10,130	16,996	0.03	19,800	2.2
15-Apr-23	1,179,363	390,140	26,743	21,761	0.03	21,600	1.5
16-Apr-23	997,763	387,067	27,051	21,738	0.04	21,600	1.8
17-Apr-23	912,966	228,020	26,959	21,764	0.05	21,600	2.2
18-Apr-23	711,456	178,742	27,373	23,518	0.06	21,600	2.4
19-Apr-23	279,620	157,358	27,690	24,385	0.07	21,600	3.0
20-Apr-23	452,537	137,395	27,658	24,391	0.19	21,600	7.7
21-Apr-23	423,592	111,033	27,671	24,393	0.12	21,600	4.8
22-Apr-23	332,464	102,820	27,642	24,408	0.12	21,600	5.1
23-Apr-23	285,538	92,017	27,572	24,406	0.16	21,860	6.6
24-Apr-23	242,388	96,736	27,531	24,412	0.18	18,120	6.3
25-Apr-23	219,416	91,486	27,499	24,336	0.21	16,800	6.9
26-Apr-23	175,252	93,191	27,520	24,476	0.24	19,200	8.8
27-Apr-23	191,141	103,955	27,483	24,480	0.30	1,600	0.9
28-Apr-23	244,854	97,444	27,479	24,400	0.27	21,600	11.3
29-Apr-23	257,646	114,035	27,480	24,480	0.21	21,600	8.8
30-Apr-23	266,954	97,263	26,681	24,064	0.20	21,600	8.4

Table C14: May 2023 Discharge and Dilution Ratios

Date	Average 24-hr Flow in Pinewood River at H1 Hydrometric Station less discharge (m ³ /day)	Calculated Average 24-hr Flow in Pinewood River at EDL2 (m ³ /day)	EDL1 Daily Discharge (m ³ /day)	EDL2 Daily Discharge (m ³ /day)	EDL1/EDL2 Dilution Ratio* (1 : X)	Sediment Pond 2 Daily Discharge (m ³ /day)	Dilution Ratio* (1 : X)
1-May-23	252,731	77,892	27,232	24,276	0.19	21,600	8.1
2-May-23	230,289	65,863	27,352	24,453	0.20	21,600	8.5
3-May-23	195,516	59,512	27,517	24,577	0.23	-	0.0
4-May-23	186,488	41,647	27,467	24,588	0.27	-	0.0
5-May-23	212,288	32,558	27,415	24,589	0.28	-	0.0
6-May-23	187,000	31,416	27,410	24,622	0.25	18,600	8.8
7-May-23	159,967	50,146	27,411	24,609	0.28	15,840	8.5
8-May-23	173,274	51,331	27,480	24,600	0.33	17,280	10.8
9-May-23	216,556	85,740	27,480	24,600	0.30	-	0.0
10-May-23	281,623	75,745	27,442	24,733	0.24	-	0.0
11-May-23	269,016	60,264	27,336	24,702	0.18	-	0.0
12-May-23	536,798	504,846	27,294	24,754	0.19	8,400	3.1
13-May-23	1,129,559	313,238	27,277	24,812	0.10	8,400	1.6
14-May-23	949,729	181,162	27,057	21,976	0.04	8,400	0.7
15-May-23	644,634	125,104	26,788	23,995	0.05	17,040	1.8
16-May-23	430,175	86,965	26,887	24,309	0.08	17,040	2.6
17-May-23	304,076	66,402	22,416	18,419	0.09	16,800	3.9
18-May-23	243,230	52,738	25,609	24,192	0.16	15,840	5.2
19-May-23	192,886	41,758	25,433	24,192	0.20	15,840	6.5
20-May-23	167,523	49,555	25,369	24,287	0.26	-	0.0
21-May-23	161,934	28,714	25,424	24,362	0.30	-	0.0
22-May-23	128,546	11,324	20,627	6,586	0.17	-	0.0
23-May-23	120,156	9,705	24,207	256	0.19	-	0.0
24-May-23	102,954	9,534	23,915	-	0.20	-	0.0
25-May-23	92,695	8,753	24,159	20,912	0.44	-	0.0
26-May-23	62,316	9,632	24,120	22,464	0.50	-	0.0
27-May-23	67,867	9,514	23,880	-	0.38	-	0.0
28-May-23	68,198	8,947	23,816	22,556	0.68	-	0.0
29-May-23	35,326	7,418	23,707	1,912	0.38	-	0.0
30-May-23	53,803	5,196	23,705	22,346	1.30	-	0.0
31-May-23	20,845	5,424	20,645	625	0.40	-	0.0

Table C15: June 2023 Discharge and Dilution Ratios

Date	Average 24-hr Flow in Pinewood River at H1 Hydrometric Station less discharge (m ³ /day)	Calculated Average 24-hr Flow in Pinewood River at EDL2 (m ³ /day)	EDL1 Daily Discharge (m ³ /day)	EDL2 Daily Discharge (m ³ /day)	EDL1/EDL2 Dilution Ratio* (1 : X)	Sediment Pond 2 Daily Discharge (m ³ /day)	Dilution Ratio* (1 : X)
1-Jun-23	57,686	12,717	23,908	22,603	0.81	-	0.0
2-Jun-23	40,902	-	20,654	20,444	1.00	-	0.0
3-Jun-23	411,869	-	23,455	22,424	0.11	-	0.0
4-Jun-23	513,976	-	24,882	22,548	0.09	21,600	4.2
5-Jun-23	434,106	-	24,674	22,573	0.11	16,200	3.7
6-Jun-23	321,385	-	24,455	22,582	0.15	16,200	5.0
7-Jun-23	186,179	-	24,360	22,575	0.25	-	0.0
8-Jun-23	140,261	-	24,136	22,573	0.33	-	0.0
9-Jun-23	95,900	-	24,120	22,560	0.49	-	0.0
10-Jun-23	67,991	-	24,120	22,560	0.69	-	0.0
11-Jun-23	56,740	-	24,088	22,546	0.82	-	0.0
12-Jun-23	43,439	-	19,849	19,218	0.90	-	0.0
13-Jun-23	34,477	-	15,737	15,370	0.90	-	0.0
14-Jun-23	29,119	-	14,055	14,152	0.97	-	0.0
15-Jun-23	19,718	-	16,436	-	0.83	-	0.0
16-Jun-23	22,677	-	21,468	-	0.95	-	0.0
17-Jun-23	12,264	-	10,570	-	0.86	-	0.0
18-Jun-23	13,913	-	12,576	-	0.90	-	0.0
19-Jun-23	796	-	749	-	0.94	-	0.0
20-Jun-23	19,234	-	16,669	-	0.87	-	0.0
21-Jun-23	29,540	-	23,939	-	0.81	-	0.0
22-Jun-23	40,178	-	-	-	0.00	-	0.0
23-Jun-23	-	-	-	-	-	-	-
24-Jun-23	-	-	-	-	-	-	-
25-Jun-23	-	-	-	-	-	-	-
26-Jun-23	-	-	-	-	-	-	-
27-Jun-23	-	-	-	-	-	-	-
28-Jun-23	-	-	-	-	-	-	-
29-Jun-23	-	-	-	-	-	-	-
30-Jun-23	-	-	-	-	-	-	-

Table C16: October 2023 Discharge and Dilution Ratios

Date	Average 24-hr Flow in Pinewood River at H1 Hydrometric Station less discharge (m ³ /day)	Calculated Average 24-hr Flow in Pinewood River at EDL2 (m ³ /day)	EDL1 Daily Discharge (m ³ /day)	EDL2 Daily Discharge (m ³ /day)	EDL1/EDL2 Dilution Ratio* (1 : X)	Sediment Pond 2 Daily Discharge (m ³ /day)	Sediment Pond 2 Target dilution ratio (1:X)	Dilution Ratio* (1 : X)
1-Oct-23	-	-	-	-	-	-	-	-
2-Oct-23	-	-	-	-	-	-	-	-
3-Oct-23	-	-	-	-	-	-	-	-
4-Oct-23	-	-	-	-	-	-	-	-
5-Oct-23	-	-	-	-	-	-	-	-
6-Oct-23	-	-	-	-	-	-	-	-
7-Oct-23	-	-	-	-	-	-	-	-
8-Oct-23	-	-	-	-	-	-	-	-
9-Oct-23	-	-	-	-	-	-	-	-
10-Oct-23	-	-	-	-	-	-	-	-
11-Oct-23	-	-	-	-	-	-	-	-
12-Oct-23	-	-	-	-	-	-	-	-
13-Oct-23	-	-	-	-	-	-	-	-
14-Oct-23	-	-	-	-	-	-	-	-
15-Oct-23	-	-	-	-	-	-	-	-
16-Oct-23	-	-	-	-	-	-	-	-
17-Oct-23	-	-	-	-	-	-	-	-
18-Oct-23	-	-	-	-	-	-	-	-
19-Oct-23	3,475	-	-	-	-	-	1	0.0
20-Oct-23	4,395	-	-	-	-	4,320	1	1.0
21-Oct-23	3,209	-	-	-	-	3,180	1	1.0
22-Oct-23	3,195	-	-	-	-	3,168	1	1.0
23-Oct-23	2,589	-	-	-	-	2,556	1	1.0
24-Oct-23	4,576	-	-	-	-	4,560	1	1.0
25-Oct-23	3,515	-	-	-	-	3,492	1	1.0
26-Oct-23	7,215	-	-	-	-	7,212	1	1.0
27-Oct-23	4,854	-	-	-	-	4,848	1	1.0
28-Oct-23	26,321	-	-	-	-	23,712	1	0.9
29-Oct-23	14,335	-	-	-	-	14,328	1	1.0
30-Oct-23	29,872	-	-	-	-	5,928	1	0.2
31-Oct-23	41,166	-	-	-	-	4,100	10	10.0

Table C17: November 2023 Discharge and Dilution Ratios

Date	Average 24-hr Flow in Pinewood River at H1 Hydrometric Station less discharge (m ³ /day)	Calculated Average 24-hr Flow in Pinewood River at EDL2 (m ³ /day)	EDL1 Daily Discharge (m ³ /day)	EDL2 Daily Discharge (m ³ /day)	EDL1/EDL2 Dilution Ratio* (1 : X)	Sediment Pond 2 Daily Discharge (m ³ /day)	Sediment Pond 2 Target dilution ratio (1:X)	Dilution Ratio* (1 : X)
1-Nov-23	38,520	-	6,792	2,228	0.23	3,840	10	10.0
2-Nov-23	21,490	-	20,452	733	0.99	2,136	10	9.9
3-Nov-23	28,489	-	16,200	7,272	0.82	2,556	10	9.0
4-Nov-23	25,782	-	16,161	7,732	0.93	2,556	10	9.9
5-Nov-23	25,361	-	17,335	7,108	0.96	2,448	10	9.7
6-Nov-23	19,245	-	14,631	4,368	0.99	1,915	10	10.0
7-Nov-23	42,742	-	19,277	19,176	0.90	4,080	10	9.5
8-Nov-23	35,056	-	26,136	6,888	0.94	3,400	10	9.7
9-Nov-23	100,120	-	23,296	21,432	0.45	10,008	10	10.0
10-Nov-23	67,820	-	30,216	24,120	0.80	6,768	10	10.0
11-Nov-23	79,737	-	30,072	22,608	0.66	7,968	10	10.0
12-Nov-23	72,355	-	30,096	22,608	0.73	7,224	10	10.0
13-Nov-23	60,769	-	30,068	22,599	0.87	6,072	10	10.0
14-Nov-23	59,729	-	29,857	22,624	0.88	5,952	10	10.0
15-Nov-23	56,264	-	29,899	22,195	0.93	5,592	10	9.9
16-Nov-23	61,205	-	30,180	22,518	0.86	6,096	10	10.0
17-Nov-23	62,755	-	30,166	22,519	0.84	6,240	10	9.9
18-Nov-23	53,669	-	26,680	22,493	0.92	5,328	10	9.9
19-Nov-23	51,139	-	25,200	22,560	0.93	5,088	10	9.95
20-Nov-23	43,188	-	21,302	21,011	0.98	4,272	10	9.89
21-Nov-23	43,233	-	21,130	20,849	0.97	4,320	10	9.99
22-Nov-23	72,207	-	28,011	20,901	0.68	7,200	10	9.97
23-Nov-23	68,064	-	29,040	20,880	0.73	6,792	10	9.98
24-Nov-23	76,700	-	6,711	3,951	0.14	-	-	0.00
25-Nov-23	-	-	-	-	-	-	-	-
26-Nov-23	-	-	-	-	-	-	-	-
27-Nov-23	-	-	-	-	-	-	-	-
28-Nov-23	-	-	-	-	-	-	-	-
29-Nov-23	-	-	-	-	-	-	-	-
30-Nov-23	-	-	-	-	-	-	-	-

Table C18: April 2023 EDL 1 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	4/28/2023	4/26/2023	4/24/2023	4/21/2023	4/19/2023	4/17/2023	4/14/2023	ECA Monthly Limit	April 2023 Average
			EDL1	EDL1	EDL1	EDL1	EDL1	EDL1	EDL1		
Total Suspended Solids	mg/L	30	1.0	1.0	4.0	3.0	0.5	0.5	3.0	15	1.86
Ammonia, Unionized	mg/L	0.080			0.002			0.003		0.04	0.00
Phosphorus, Total	mg/L				0.006			0.003		0.1	0.00
Cyanide, Total	mg/L	0.1	0.0008	0.0008	0.0008	0.0008	0.0010	0.001	0.0018	0.05	0.00
Cyanide, Free	mg/L	0.02	0.0009	0.0005	0.0007	0.0006	0.0004	0.0011	0.0008	0.01	0.00
Arsenic, Total	mg/L	0.034			0.001			0.0012		0.017	0.001
Copper, Total	mg/L	0.028			0.0027			0.0029		0.014	0.003
Lead, Total	mg/L	0.03			0.00002			0.00003		0.015	0.000
Nickel, Total	mg/L	0.094			0.0033			0.0039		0.047	0.004
Zinc, Total	mg/L	0.348			0.015			0.0165		0.174	0.016
Field pH	pH units	6.0-9.5	7.34	7.91	7.28	7.82	7.86	7.39	7.45	6.0-9.5	7.62
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass						Pass		Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass						Pass		Pass	Pass
CBOD5	mg/L				2.0			2.0		25	2.00
Cadmium	mg/L				0.000023			0.000026		0.001	0.000
Cobalt	mg/L				0.0027			0.00205		0.0044	0.0024
<i>E. coli</i>	MPN/100mL				10			10		100	10.00

Table C19: May 2023 EDL 1 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	5/31/2023	5/29/2023	5/26/2023	5/24/2023	5/22/2023	5/19/2023	5/17/2023	5/15/2023	5/12/2023	5/10/2023	5/8/2023	5/5/2023	5/3/2023	5/1/2023	ECA Monthly	May 2023 Average
			EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1		EDL 1
Total Suspended Solids	mg/L	30	6.3	5.5	3.0	4.1	3.0	7.5	3	3.0	3.0	3.0	1.5	0.5	0.5	4	15	3.20
Ammonia, Unionized	mg/L	0.080		0.0065						0.005			0.002			0.003	0.04	0.00
Phosphorus, Total	mg/L			0.0132			0.0157			0.014			0.012			0.006	0.1	0.01
Cyanide, Total	mg/L	0.1	0.0141	0.002	0.0020	0.002	0.0024	0.002	0.002	0.002	0.002	0.0002	0.0008	0.0008	0.0002	0.001	0.05	0.00
Cyanide, Free	mg/L	0.02	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0006	0.0005	0.0009	0.0011	0.0007	0.01	0.00
Arsenic, Total	mg/L	0.034		0.0011			0.00101			0.00098			0.00098			0.0011	0.017	0.00
Copper, Total	mg/L	0.028		0.005			0.00301			0.00274			0.0027			0.0029	0.014	0.00
Lead, Total	mg/L	0.03		0.0005			0.00005			0.00005			0.00005			0.00001	0.015	0.00
Nickel, Total	mg/L	0.094		0.005			0.00283			0.00298			0.003			0.0036	0.047	0.00
Zinc, Total	mg/L	0.348		0.03			0.0085			0.011			0.0135			0.016	0.174	0.02
Field pH	pH units	6.0-9.5	8.28	8.36	8.28	8.18	8.07		7.9	7.79	7.44		7.47		7.76	7.39	6.0-9.5	7.86
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass														Pass	Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass														Pass	Pass	Pass
CBOD5	mg/L			2.0			2.0			2.0			2.0			2.0	25	2.00
Cadmium	mg/L			0.00005			0.0000188			0.0000192			0.000022			0.000027	0.001	0.00
Cobalt	mg/L			0.00144			0.00149			0.00148			0.00163			0.00194	0.0044	0.00
<i>E. coli</i>	MPN/100mL			2			2			1			1			10	100	3.20

Table C20: June 2023 EDL 1 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	6/21/2023	6/20/2023	6/16/2023	6/14/2023	6/12/2023	6/9/2023	6/7/2023	6/5/2023	6/2/2023	ECA Monthly	June 2023 Average
			EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1	EDL 1		EDL 1
Total Suspended Solids	mg/L	30	3	3	3.3	3.3	4.7	3	4	4.1	7.5	15	3.99
Ammonia, Unionized	mg/L	0.080		0.0314			0.0434			0.0246		0.04	0.03
Phosphorus, Total	mg/L			0.0212			0.05			0.0137		0.1	0.03
Cyanide, Total	mg/L	0.1	0.0020	0.002	0.0020	0.0020	0.002	0.0024	0.0032	0.002	0.0020	0.05	0.00
Cyanide, Free	mg/L	0.02	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.01	0.00
Arsenic, Total	mg/L	0.034		0.00133			0.00121			0.00114		0.017	0.00
Copper, Total	mg/L	0.028		0.00392			0.00285			0.00313		0.014	0.00
Lead, Total	mg/L	0.03		0.00005			0.00005			0.00005		0.015	0.00
Nickel, Total	mg/L	0.094		0.00286			0.00257			0.0029		0.047	0.00
Zinc, Total	mg/L	0.348		0.0052			0.003			0.0034		0.174	0.00
Field pH	pH units	6.0-9.5	8.16	7.74	8.05	7.93	8.14	8.27	8.27	8.18	8.21	6.0-9.5	8.11
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass								Pass		Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass								Pass		Pass	Pass
CBOD5	mg/L			2.0			2.0			2.0		25	2.00
Cadmium	mg/L			0.0000127			0.0000115			0.000013		0.001	0.00
Cobalt	mg/L			0.0021			0.00179			0.00164		0.0044	0.00
<i>E. coli</i>	MPN/100mL			1			6			6		100	4.33

Table C21: November 2023 EDL 1 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	11/3/2023	11/6/2023	11/8/2023	11/10/2023	11/13/2023	11/15/2023	11/17/2023	11/20/2023	11/22/2023	11/24/2023	ECA Monthly Limit	November 2023 Average
			EDL1	EDL1	EDL1	EDL1	EDL1	EDL1	EDL1	EDL1	EDL1	EDL1		EDL1
Total Suspended Solids	mg/L	30	4.5	4.7	3.5	3	3	4.7	3	3.2	3	3	15	3.560
Ammonia, Unionized	mg/L	0.080	0.009	0.008			0.047			0.0069			0.04	0.018
Phosphorus, Total	mg/L		0.050	0.050			0.100			0.0134			0.1	0.053
Cyanide, Total	mg/L	0.1	0.002	0.0025	0.002	0.002	0.002	0.002	0.002	0.0024	0.002	0.002	0.05	0.002
Cyanide, Free	mg/L	0.02	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.01	0.002
Arsenic, Total	mg/L	0.034	0.001	0.001			0.001			0.00121			0.017	0.001
Copper, Total	mg/L	0.028	0.00185	0.00194			0.00218			0.00196			0.014	0.002
Lead, Total	mg/L	0.03	0.00005	0.00005			0.0001			0.00005			0.015	0.000
Nickel, Total	mg/L	0.094	0.00321	0.00337			0.00368			0.00356			0.047	0.003
Zinc, Total	mg/L	0.348	0.003	0.003			0.006			0.003			0.174	0.004
Field pH	pH units	6.0-9.5	7.5	7.53	8.08	8.17	8.39	7.55	7.41	7.53	7.65	7.83	6.0-9.5	7.764
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass	Pass										Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass	Pass										Pass	Pass
CBOD5	mg/L		2	2			2			2			25	2.000
Cadmium	mg/L		0.0000105	0.0000116			0.0000103			0.0000083			0.001	0.000
Cobalt	mg/L		0.00288	0.00286			0.00304			0.0029			0.0044	0.003
<i>E. coli</i>	MPN/100mL		10	10			10			10			100	10.000

Table C22: April 2023 EDL 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	4/28/2023	4/26/2023	4/24/2023	4/21/2023	4/19/2023	4/17/2023	4/14/2023	ECA Monthly	April 2023 Average
			EDL2	EDL2	EDL2	EDL2	EDL2	EDL2	EDL2		
Total Suspended Solids	mg/L	30	0.5	0.5	2.5	3.0	0.5	0.5	3.0	15	1.5
Ammonia, Unionized	mg/L	0.080			0.002			0.002		0.04	0.00
Phosphorus, Total	mg/L				0.007			0.006		0.1	0.0
Cyanide, Total	mg/L	0.1	0.0008	0.0010	0.0008	0.0008	0.0014	0.002	0.0008	0.05	0.00
Cyanide, Free	mg/L	0.02	0.0007	0.0002	0.0007	0.0008	0.0003	0.0011	0.0008	0.01	0.0
Arsenic, Total	mg/L	0.034			0.001			0.0012		0.017	0.001
Copper, Total	mg/L	0.028			0.006			0.0032		0.014	0.005
Lead, Total	mg/L	0.03			0.00017			0.00006		0.015	0.000
Nickel, Total	mg/L	0.094			0.0033			0.0042		0.047	0.004
Zinc, Total	mg/L	0.348			0.023			0.0175		0.174	0.020
Field pH	pH units	6.0-9.5	7.34	7.91	7.38	7.82	7.89	7.23	7.45	6.0-9.5	7.6
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass						Pass		Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass						Pass		Pass	Pass
CBOD5	mg/L				2.0			2.0		25	2.0
Cadmium	mg/L				0.000025			0.000024		0.001	0.000
Cobalt	mg/L				0.00213			0.00203		0.0044	0.0021
<i>E. coli</i>	MPN/100mL				10			10		100	10.0

Table C23: May 2023 EDL 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	5/29/2023	5/26/2023	5/24/2023	5/22/2023	5/19/2023	5/17/2023	5/15/2023	5/12/2023	5/10/2023	5/8/2023	5/5/2023	5/3/2023	5/1/2023	ECA Monthly	May 2023 Average
			EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2		
Total Suspended Solids	mg/L	30	4.7	5.4	5.1	4.3	5.3	3	3	3.0	3.0	4	0.5	8.1	4.5	15	4.1
Ammonia, Unionized	mg/L	0.080	0.0067						0.0044			0.007			0.002	0.04	0.0
Phosphorus, Total	mg/L		0.0138			0.0155			0.0143			0.012			0.006	0.1	0.0
Cyanide, Total	mg/L	0.1	0.002	0.0020	0.0020	0.002	0.0020	0.0020	0.002	0.0020	0.0004	0.0008	0.0010	0.0018	0.001	0.05	0.0
Cyanide, Free	mg/L	0.02	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0008	0.0005	0.0002	0.0007	0.0006	0.01	0.0
Arsenic, Total	mg/L	0.034	0.00112			0.0011			0.00099			0.00098			0.0011	0.017	0.0
Copper, Total	mg/L	0.028	0.005			0.00339			0.0032			0.0027			0.0031	0.014	0.0
Lead, Total	mg/L	0.03	0.0005			0.000061			0.00007			0.00007			0.00003	0.015	0.0
Nickel, Total	mg/L	0.094	0.005			0.00288			0.00289			0.003			0.0037	0.047	0.0
Zinc, Total	mg/L	0.348	0.03			0.0104			0.0182			0.015			0.017	0.174	0.0
Field pH	pH units	6.0-9.5	8.33	8.28	8.18	8.08	7.89	7.9	7.72	7.44		7.86		7.76	7.33	6.0-9.5	7.9
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass													Pass	Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass													Pass	Pass	Pass
CBOD5	mg/L		2.0			2.0			2.0			2.0			2	25	2.0
Cadmium	mg/L		0.00005			0.0000203			0.0000223			0.000029			0.000028	0.001	0.0
Cobalt	mg/L		0.00142			0.00149			0.00149			0.00163			0.00197	0.0044	0.0
<i>E. coli</i>	MPN/100mL		1			1			1			0			10	100	2.6

Table C24: June 2023 EDL 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	6/16/2023	6/14/2023	6/12/2023	6/9/2023	6/7/2023	6/5/2023	6/2/2023	ECA Monthly	June 2023 Average
			EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2	EDL 2		
Total Suspended Solids	mg/L	30	3.9	5.5	3.3	3.7	4.4	3.1	4.9	15	4.1
Ammonia, Unionized	mg/L	0.080			0.058			0.0271		0.04	0.0
Phosphorus, Total	mg/L				0.0161			0.0103		0.1	0.0
Cyanide, Total	mg/L	0.1	0.0020	0.0020	0.0022	0.0020	0.0020	0.002	0.0020	0.05	0.0
Cyanide, Free	mg/L	0.02	0.0020	0.0020	0.002	0.0020	0.0020	0.002	0.0020	0.01	0.0
Arsenic, Total	mg/L	0.034			0.00125			0.0012		0.017	0.0
Copper, Total	mg/L	0.028			0.00308			0.00357		0.014	0.0
Lead, Total	mg/L	0.03			0.000055			0.00005		0.015	0.0
Nickel, Total	mg/L	0.094			0.00269			0.00307		0.047	0.0
Zinc, Total	mg/L	0.348			0.004			0.0042		0.174	0.0
Field pH	pH units	6.0-9.5	8.05	7.93	8.23	8.27	8.06	8.19	8.15	6.0-9.5	8.1
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass						Pass		Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass						Pass		Pass	Pass
CBOD5	mg/L				2			2		25	2.0
Cadmium	mg/L				0.0000145			0.0000157		0.001	0.0
Cobalt	mg/L				0.00181			0.00172		0.0044	0.0
<i>E. coli</i>	MPN/100mL				2			1		100	1.5

Table C25: November 2023 EDL 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	11/3/2023	11/6/2023	11/8/2023	11/10/2023	11/13/2023	11/15/2023	11/17/2023	11/20/2023	11/22/2023	11/24/2023	ECA Monthly Limit	November 2023 Average
			EDL2	EDL2	EDL2	EDL2	EDL2	EDL2	EDL2	EDL2	EDL2	EDL2		
Total Suspended Solids	mg/L	30	5.3	4.7	3.1	3.2	3.7	3	3	3	3	3	15	3.500
Ammonia, Unionized	mg/L	0.080	0.010	0.012			0.005			0.008			0.04	0.009
Phosphorus, Total	mg/L		0.050	0.050			0.100			0.0141			0.1	0.054
Cyanide, Total	mg/L	0.1	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.0027	0.002	0.002	0.05	0.002
Cyanide, Free	mg/L	0.02	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.0022	0.002	0.002	0.01	0.002
Arsenic, Total	mg/L	0.034	0.001	0.001			0.001			0.00116			0.017	0.001
Copper, Total	mg/L	0.028	0.00436	0.00193			0.0025			0.00293			0.014	0.003
Lead, Total	mg/L	0.03	0.00819	0.00005			0.000535			0.000777			0.015	0.002
Nickel, Total	mg/L	0.094	0.00341	0.00352			0.00377			0.00349			0.047	0.004
Zinc, Total	mg/L	0.348	0.0097	0.0036			0.0068			0.0063			0.174	0.007
Field pH	pH units	6.0-9.5	7.58	7.66	8.09	8.17	7.4	7.55	7.14	7.61	7.65	7.830	6.0-9.5	7.668
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass	Pass										Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass	Pass										Pass	Pass
CBOD5	mg/L		2	2			2			2			25	2.000
Cadmium	mg/L		0.0000126	0.0000136			0.0000103			0.0000084			0.001	0.000
Cobalt	mg/L		0.00293	0.00291			0.00299			0.00288			0.0044	0.003
<i>E. coli</i>	MPN/100mL		10	10			10			10			100	10.000

Table C26: April 2023 Sediment Pond 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	4/24/2023	4/17/2023	4/14/2023	ECA Monthly Limit	April 2023 Average
			Sed Pond 2	Sed Pond 2	Sed Pond 2		
Total Suspended Solids	mg/L	30	6	4.5	12	15	7.50
Ammonia, Unionized	mg/L	0.080	0.001	0.002	0.001	0.04	0.00
Phosphorus, Total	mg/L		0.021	0.035	0.037	0.1	0.03
Cyanide, Free	mg/L	0.02	0.0002	0.0011	0.0007	0.01	0.00
Cyanide, Total	mg/L	0.1	0.0004	0.0012	0.0008	0.05	0.00
Arsenic, Total	mg/L	0.034	0.0015	0.0015	0.0014	0.017	0.001
Copper, Total	mg/L	0.028	0.0016	0.0024	0.0023	0.014	0.002
Lead, Total	mg/L	0.03	0.00013	0.00037	0.00042	0.015	0.000
Nickel, Total	mg/L	0.094	0.0011	0.0034	0.0015	0.047	0.002
Zinc, Total	mg/L	0.348	0.0035	0.009	0.0055	0.174	0.006
Field pH	pH units	6.0-9.5	7.66	7.93	7.94	6.0-9.5	7.84
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass		Pass		Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass		Pass		Pass	Pass
CBOD5	mg/L		2	2	2		2.0
Cadmium	mg/L		0.00002	0.00003	0.00002	0.001	0.00002
Cobalt	mg/L		0.00023	0.00036	0.00019	0.0044	0.00026
<i>E. coli</i>	MPN/100mL		10	10	10	100	10.0

Table C27: May 2023 Sediment Pond 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	5/15/2023	5/8/2023	5/1/2023	ECA Monthly Limit	May 2023 Average
			Sed Pond 2	Sed Pond 2	Sed Pond 2		
Total Suspended Solids	mg/L	30	6.6	4.5	5	15	5.37
Ammonia, Unionized	mg/L	0.40	0.0015	0.001	0.001	0.2	0.00
Phosphorus, Total	mg/L		0.029	0.032	0.026	0.1	0.03
Cyanide, Free	mg/L	0.02	0.002	0.0001	0.0003	0.01	0.00
Cyanide, Total	mg/L	0.1	0.002	0.0006	0.0006	0.05	0.00
Arsenic, Total	mg/L	0.034	0.00151	0.0014	0.0016	0.017	0.002
Copper, Total	mg/L	0.028	0.00199	0.0015	0.0016	0.014	0.002
Lead, Total	mg/L	0.03	0.00012	0.00008	0.00011	0.015	0.000
Nickel, Total	mg/L	0.094	0.00107	0.0010	0.0011	0.047	0.001
Zinc, Total	mg/L	0.348	0.0052	0.0035	0.0065	0.174	0.005
Field pH	pH units	6.0-9.5	8.61	8.53	7.9	6.0-9.5	8.35
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass			Pass	Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass			Pass	Pass	Pass
CBOD5	mg/L		2.7	2	2.2		2.4
Cadmium	mg/L		0.0000058	0.00001	0.00001	0.001	0.00001
Cobalt	mg/L		0.00016	0.00019	0.00024	0.0044	0.00020
<i>E. coli</i>	MPN/100mL		1	0	10	100	3.7

Table C28: June 2023 Sediment Pond 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	6/5/2023	ECA Monthly Limit	June 2023
			Sed Pond 2		Average
Total Suspended Solids	mg/L	30	3.1	15	3.10
Ammonia, Unionized	mg/L	0.080	0.0011	0.04	0.00
Phosphorus, Total	mg/L		0.0149	0.1	0.01
Cyanide, Free	mg/L	0.02	0.002	0.01	0.00
Cyanide, Total	mg/L	0.1	0.002	0.05	0.00
Arsenic, Total	mg/L	0.034	0.00158	0.017	0.002
Copper, Total	mg/L	0.028	0.00209	0.014	0.002
Lead, Total	mg/L	0.03	0.000112	0.015	0.000
Nickel, Total	mg/L	0.094	0.00112	0.047	0.001
Zinc, Total	mg/L	0.348	0.0039	0.174	0.004
Field pH	pH units	6.0-9.5	8.43	6.0-9.5	8.43
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass	Pass	Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass	Pass	Pass	Pass
CBOD5	mg/L		2	25	2.0
Cadmium	mg/L		0.0000073	0.001	0.00001
Cobalt	mg/L		0.00017	0.0044	0.00017
<i>E. coli</i>	MPN/100mL		8	100	8.0

Table C29: October 2023 Sediment Pond 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	10/30/2023	10/24/2023	10/22/2023	10/20/2023	ECA Monthly	October 2023
			Sed Pond 2	Sed Pond 2	Sed Pond 2	Sed Pond 2		Average
Total Suspended Solids	mg/L	30	4.7	3	4.3	3.5	15	3.875
Ammonia, Unionized	mg/L	0.080	0.001	0.001	0.001	0.001	0.04	0.001
Phosphorus, Total	mg/L		0.0153	0.0148	0.016	0.0154	0.1	0.015
Cyanide, Free	mg/L	0.02	0.002	0.002	0.002	0.002	0.01	0.002
Cyanide, Total	mg/L	0.1	0.002	0.002	0.002	0.002	0.05	0.002
Arsenic, Total	mg/L	0.034	0.00192	0.00197	0.002	0.00204	0.017	0.002
Copper, Total	mg/L	0.028	0.00165	0.00199	0.00529	0.00578	0.014	0.0036775
Lead, Total	mg/L	0.03	0.00005	0.00005	0.000131	0.000058	0.015	0.00007225
Nickel, Total	mg/L	0.094	0.00085	0.00101	0.00082	0.00081	0.047	0.0008725
Zinc, Total	mg/L	0.348	0.0152	0.0132	0.0236	0.0144	0.174	0.0166
Field pH	pH units	6.0-9.5	8.13	8.04	8.26	7.79	6.0-9.5	8.055
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass			pass		Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass			pass		Pass	Pass
CBOD5	mg/L		2	2	2	2	25	2
Cadmium	mg/L		0.000005	0.000005	0.000005	0.000005	0.001	0.000005
Cobalt	mg/L		0.00014	0.00012	0.00011	0.00011	0.0044	0.00012
<i>E. coli</i>	MPN/100mL		10	10	10	10	100	10

Table C30: November 2023 Sediment Pond 2 Effluent Water Quality for Selected Parameters

Parameter	Units	ECA Daily Limit	11/5/2023	11/13/2023	11/20/2023	ECA Monthly Limit	2023 Average
			Sed Pond 2	Sed Pond 2	Sed Pond 2		
Total Suspended Solids	mg/L	30	3	3.5	3.6	15	3.36666667
Ammonia, Unionized	mg/L	0.4	0.001	0.001	0.001	0.2	0.001
Phosphorus, Total	mg/L		0.05	0.05	0.0159	0.1	0.039
Cyanide, Free	mg/L	0.02	0.002	0.002	0.002	0.01	0.002
Cyanide, Total	mg/L	0.1	0.002	0.002	0.002	0.05	0.002
Arsenic, Total	mg/L	0.034	0.00175	0.00184	0.00182	0.017	0.002
Copper, Total	mg/L	0.028	0.00181	0.00112	0.0017	0.014	0.00154333
Lead, Total	mg/L	0.094	0.00005	0.00005	0.00005	0.047	0.00005
Nickel, Total	mg/L	0.03	0.00079	0.00083	0.00102	0.015	0.00088
Zinc, Total	mg/L	0.348	0.003	0.003	0.003	0.174	0.003
Field pH	pH units	6.0-9.5	7.97	8.27	7.79	6.0-9.5	8.01
Acute Toxicity, Rainbow Trout	Pass/Fail	Pass	Pass			Pass	Pass
Acute Toxicity, <i>Daphnia magna</i>	Pass/Fail	Pass	Pass			Pass	Pass
CBOD5	mg/L		2	2	2	25	2
Cadmium	mg/L		0.0000063	0.000005	0.000005	0.001	5.4333E-06
Cobalt	mg/L		0.00013	0.00013	0.00013	0.0044	0.00013
<i>E. coli</i>	MPN/100mL		10	10	10	100	10

2023 Annual Surface Water Report
Appendix D

Surface Water Certificates of Analysis



New Gold Inc. Rainy River Project
ATTN: Garnet Cornell
24 Marr Rd
Barwick ON POW 1A0

Date Received: 13-JAN-23
Report Date: 31-JAN-23 13:08 (MT)
Version: FINAL

Client Phone: 807-234-8200

Certificate of Analysis

Lab Work Order #: L2744989
Project P.O. #: 4500062842
Job Reference: SURFACE WATER
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-1 SW02_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 08:30							
Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	7.93		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	.15		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	176		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	117		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	74.6		0.51	mg/L		19-JAN-23	
pH	7.27		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	1.0	<DL	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	130		13	mg/L		14-JAN-23	R5917619
Turbidity	0.80		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	10.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	63.2		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.064	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	0.38		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	<0.020		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.024	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.03		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	0.10	<DL	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0009	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0012	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0006	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	33.7		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	34.0		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0786		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000030	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00066	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.00836	<DL	0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000102	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0020	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	18.6		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000050	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00040	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000220	<DL	0.00050	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-1 SW02_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 08:30							
Matrix: SURFACE WATER							
Total Metals							
Copper (Cu)-Total	0.00044	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.618		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00016	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0018	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	7.67		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0780		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000075	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00058	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	0.41	<DL	0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00117		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	6.48		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	1.23		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0278		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	0.2	<DL	0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00152	<DL	0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.0000320	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00030	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0025	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000112	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0510		0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000050	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000680	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.00819	<DL	0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	0.000014	<DL	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0025	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	17.5		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00015	<DL	0.0010	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-1 SW02_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 08:30 Matrix: SURFACE WATER							
Dissolved Metals							
Cobalt (Co)-Dissolved	0.000118	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00056	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.439		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00010	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0020	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	7.52		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0483		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000196	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00044	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.005	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	0.43	<DL	0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00113		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000050	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	6.24		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	1.26		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0273		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	0.2	<DL	0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	0.000010	<DL	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000015	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00092	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	0.0106		0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.0000280	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00026	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0018	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000170	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		13-JAN-23	R5918117
Chemical Oxygen Demand	113		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.6	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-2 SW20_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 10:45 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.11		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	.27		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	80.0		2.0	CU		14-JAN-23	R5916959

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-2 SW20_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 10:45							
Matrix: SURFACE WATER							
Physical Tests							
Conductivity (EC)	264		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	139		0.51	mg/L		19-JAN-23	
pH	7.63		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	3.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	196		13	mg/L		14-JAN-23	R5917619
Turbidity	4.79		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	7.6		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	130		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.024	<T	0.0078	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	12.6		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.029		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.024	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.880		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0083		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	3.30	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0006	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.5		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	24.1		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.147		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00067	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0127		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000163	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0080	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000014	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	32.7		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000180		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00034	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000310	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00052	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.714		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00015	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0048	<DL	0.050	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-2 SW20_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 10:45							
Matrix: SURFACE WATER							
Total Metals							
Magnesium (Mg)-Total	14.7		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0982		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000185	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00116	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.035	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	1.26		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00144		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	6.92		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	6.84		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0773		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.6		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00448		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000346	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00075	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0025	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000288	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0120	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000030	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000634	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0115		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000018	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0070	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000020	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	32.2		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00013	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000086	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00044	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.372		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00005	<T	0.000050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-2 SW20_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 10:45 Matrix: SURFACE WATER							
Dissolved Metals							
Lithium (Li)-Dissolved	0.0044	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	14.2		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0209		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000150	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00094	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.020	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	1.29		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00119		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	6.18		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	6.89		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0757		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.4		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00076	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000306	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00038	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0020	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000242	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		13-JAN-23	R5918117
Chemical Oxygen Demand	88		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.8	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-3 SW20_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 10:45 Matrix: SURFACE WATER							
Radiological Parameters							
Radium-226	0.03		0.005	Bq/L		17-JAN-23	R5921117
L2744989-4 SW10_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 11:10 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.13		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	86.7		2.0	CU		14-JAN-23	R5916959

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-4 SW10_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 11:10							
Matrix: SURFACE WATER							
Physical Tests							
Conductivity (EC)	305		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	165		0.51	mg/L		19-JAN-23	
pH	7.72		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	3.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	226		13	mg/L		14-JAN-23	R5917619
Turbidity	7.39		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	7.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	168		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.070	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	11.5		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.028		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.050	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.932		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0156		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	4.65	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0002	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0006	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	24.8		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	24.2		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.221		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000040	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00082	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0161		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000174	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0115	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	39.6		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000265		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00082	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000350	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00080	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.820		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00020	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0062	<DL	0.050	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-4 SW10_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 11:10							
Matrix: SURFACE WATER							
Total Metals							
Magnesium (Mg)-Total	17.2		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.107		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000295	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00172	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.050		0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	1.62		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00162		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	7.18		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000004	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	6.94		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.103		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	2.0		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00005	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00627		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000686	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00100	<T	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0030	<T	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000354	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0128	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000045	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000742	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0143		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000022	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	0.000008	<DL	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0115	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000090	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	38.8		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00019	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000116	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00066	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.385		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00007	<T	0.000050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-4 SW10_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 11:10 Matrix: SURFACE WATER							
Dissolved Metals							
Lithium (Li)-Dissolved	0.0058	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	16.5		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0277		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000290	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00122	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.025	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	1.61		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00120		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000060	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	6.47		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000030	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	6.98		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.101		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.8		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000010	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00112	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000648	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00050	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000294	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		13-JAN-23	R5918117
Chemical Oxygen Demand	96		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.6	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-5 SW03_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 11:50 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.05		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	74.0		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	405		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	218		0.51	mg/L		19-JAN-23	
pH	7.68		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	6.0		3.0	mg/L		14-JAN-23	R5917596

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-5 SW03_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 11:50							
Matrix: SURFACE WATER							
Physical Tests							
Total Dissolved Solids	272		20	mg/L		14-JAN-23	R5917619
Turbidity	7.50		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	14.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	214		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.042	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	18.5		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.036		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.010	<DL	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.04		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.062		0.010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	4.65	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	24.9		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	25.1		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.169		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000085	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00111	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0205		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000174	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0110	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000008	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	51.8		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000190		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00064	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000805	<T	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00064	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	1.34		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00016	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0062	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	22.3		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.855		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000290	<DL	0.0010	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-5 SW03_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 11:50							
Matrix: SURFACE WATER							
Total Metals							
Nickel (Ni)-Total	0.00198	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.115		0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.46		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00207		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	0.000025	<DL	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	7.37		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	9.21		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.120		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	2.2		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00005	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00005	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00606		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000644	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00085	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0050	<T	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000330	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0072	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000080	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000887	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0133		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000018	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	0.000002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0105	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000080	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	51.9		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00014	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000148	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00052	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.463		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00004	<DL	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0058	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	21.3		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0562		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-5 SW03_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 11:50 Matrix: SURFACE WATER							
Dissolved Metals							
Molybdenum (Mo)-Dissolved	0.000286	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00170	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.070		0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	2.37		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00167		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000145	DTSE	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	6.64		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	9.46		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.120		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	2.0		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00086	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000595	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00034	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0016	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000250	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		13-JAN-23	R5918117
Chemical Oxygen Demand	103		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.0		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-6 FB_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Physical Tests							
Color, True	<2.0		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	0.2	<DL	1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	<0.51		0.51	mg/L		19-JAN-23	
pH	5.27		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	<0.5	<W	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	<2	<W	10	mg/L		14-JAN-23	R5917619
Turbidity	<0.10		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	1.0	<DL	2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	<0.2	<W	2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		16-JAN-23	R5917779
Chloride (Cl)	0.19		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-6 FB_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 12:00							
Matrix: SURFACE WATER							
Anions and Nutrients							
Fluoride (F)	<0.020		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	<0.002	<W	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	<0.05	<W	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	<0.0002	<W	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	<0.50		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	<0.000005	<W	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.00004	<DL	0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	<0.0000001	<W	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	<0.0005	<W	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	0.022	<DL	0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00014	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	<0.000005	<W	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	<0.0005	<W	0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	<0.00001	<W	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	<0.0002	<W	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	0.0006	<DL	0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	<0.0002	<W	0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00008	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.005	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	<0.01	<W	0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	0.054	<DL	0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	0.045	<DL	0.10	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-6 FB_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 12:00							
Matrix: SURFACE WATER							
Total Metals							
Strontium (Sr)-Total	0.000035	<DL	0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	<0.2	<W	0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	<0.00001	<W	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	<0.00001	<W	0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	<0.0000005	<W	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00005	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0010	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0004	<DL	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	<0.000005	<W	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.0000010	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.000010	<DL	0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	<0.0005	<W	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	0.014	<DL	0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00022	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	<0.000002	<W	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	<0.0005	<W	0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	<0.0002	<W	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	<0.0005	<W	0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00002	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	<0.01	<W	0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	0.050		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-6 FB_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Dissolved Metals							
Sodium (Na)-Dissolved	0.025	<DL	0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	<0.00001	<W	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000035	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	<0.00002	<W	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	<0.0000005	<W	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00008	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0006	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		13-JAN-23	R5918117
Chemical Oxygen Demand	<10		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.0		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-7 SW25_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 15:00 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.76		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	103		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	345		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	186		0.51	mg/L		19-JAN-23	
pH	7.80		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	2.5	<DL	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	254		20	mg/L		14-JAN-23	R5917619
Turbidity	3.34		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	4.0		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	134		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.128	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	0.005	<DL	0.010	mg/L		17-JAN-23	
Chloride (Cl)	9.03		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.039		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	1.06		0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.14		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-7 SW25_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 15:00							
Matrix: SURFACE WATER							
Anions and Nutrients							
Orthophosphate-Dissolved (as P)	0.0025		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	43.4		0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0018	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0026	<T	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0014	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.1		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	24.7		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.101		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000595	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00084	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0203		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000072	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0115	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	47.7		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000120		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00034	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000200	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00278	<T	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.460		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00015	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0036	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	15.9		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0332		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000900	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00138	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.17		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00186		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	4.83		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	7.58		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.123		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	15.4		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-7 SW25_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 15:00							
Matrix: SURFACE WATER							
Total Metals							
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00054	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00339		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.00114	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00065	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0120		0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000214	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0146	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000585	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000779	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0204		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0115	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	48.5		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00018	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000158	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00258	<T	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.293		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0038	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	15.7		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0256		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000882	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00130	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.010	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	2.13		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00168		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000115	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	4.67		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	7.37		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.123		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	15.2		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-7 SW25_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 15:00 Matrix: SURFACE WATER							
Dissolved Metals							
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.00192		0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00118	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	0.000014	<DL	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.00107	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00046	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0158		0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000224	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		13-JAN-23	R5918117
Chemical Oxygen Demand	99		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.2		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-8 SW26_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 15:25 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.59		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	90.8		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	372		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	205		0.51	mg/L		19-JAN-23	
pH	7.92		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	5.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	268		20	mg/L		14-JAN-23	R5917619
Turbidity	7.13		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	3.2		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	168		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.078	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	0.002	<DL	0.010	mg/L		17-JAN-23	
Chloride (Cl)	10.1		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.044		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.796		0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.920		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0038		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	38.8		0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		18-JAN-23	R5918558

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-8 SW26_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 15:25							
Matrix: SURFACE WATER							
Cyanides							
Cyanide, Total	0.0012	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0004	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.5		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	23.5		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.183		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000300	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00105	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0246		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000165	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0125	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	52.7		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000255		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00140		0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000270	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00186	<T	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.557		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00026	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0052	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	19.2		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0492		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000840	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00178	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.02		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00208		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	5.28		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	6.83		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.124		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	13.6		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00005	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00615		0.0020	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-8 SW26_SW_20230107							
Sampled By: CLIENT on 07-JAN-23 @ 15:25							
Matrix: SURFACE WATER							
Total Metals							
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.00138	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00090	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0200		0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000332	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0100	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000300	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000905	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0244		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	0.000002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0120	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	51.0		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000158	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00164	<T	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.264		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0050	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	18.8		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0368		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000826	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00118	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.005	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	2.01		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00177		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	4.90		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	7.05		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.120		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	13.2		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-8 SW26_SW_20230107 Sampled By: CLIENT on 07-JAN-23 @ 15:25 Matrix: SURFACE WATER							
Dissolved Metals							
Titanium (Ti)-Dissolved	0.00096	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	0.000002	<DL	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.00132	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00046	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0162		0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000222	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	89		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.0		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-9 SW15_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 11:15 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	7.94		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	.83		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	143		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	278		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	158		0.51	mg/L		19-JAN-23	
pH	7.64		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	8.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	228		20	mg/L		14-JAN-23	R5917619
Turbidity	13.5		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	8.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	153		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.040	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	6.43		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.030		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.118	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.14		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0172		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	7.10		0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0005	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	34.1		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-9 SW15_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 11:15							
Matrix: SURFACE WATER							
Organic / Inorganic Carbon							
Total Organic Carbon	34.0		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.436		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000115	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00119	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0169		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000330	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0090	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000016	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	37.3		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000675		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00092	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000445	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00144	<T	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	1.20		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00040	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0056	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	16.7		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0928		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000295	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00200	<T	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.045	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	1.94		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00250		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	8.07		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000006	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	5.61		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0848		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	2.6		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	0.00006	<DL	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	0.000005	<DL	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00011		0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.0144		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000502	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00155	<T	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0070	<T	0.0030	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-9 SW15_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 11:15							
Matrix: SURFACE WATER							
Total Metals							
Zirconium (Zr)-Total	0.000598	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0474		0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000115	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000967	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0140		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	0.000002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0085	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000020	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	36.2		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000196	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00114	<T	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.574		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00012	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0052	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	16.3		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0618		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000290	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00142	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.025	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	1.89		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00148		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	7.27		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	5.74		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0828		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	2.6		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00007	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00338		0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000464	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00064	<DL	0.0010	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-9 SW15_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 11:15 Matrix: SURFACE WATER							
Dissolved Metals							
Zinc (Zn)-Dissolved	0.0036	<T	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000370	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	111		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.0		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-10 SW17_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 11:45 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.58		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	40.5		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	73.2		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	33.6		0.51	mg/L		19-JAN-23	
pH	7.34		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	2.5	<DL	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	60		13	mg/L		14-JAN-23	R5917619
Turbidity	1.62		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	3.6		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	30.2		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.004	<DL	0.0078	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	2.30		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.027		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.096	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.399		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0033		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	3.70	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0002	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	12.4		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	12.0		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0784		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-10 SW17_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 11:45							
Matrix: SURFACE WATER							
Total Metals							
Arsenic (As)-Total	0.00044	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.00950	<DL	0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000041	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0030	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	8.58		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000070	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00032	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000055	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00090	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.171		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00010	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0010	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	2.99		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0102		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000160	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00070	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	0.81		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00195		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	2.22		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	3.20		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0255		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.2		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00202		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.0000820	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00045	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0015	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000134	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0224	<T	0.0050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-10 SW17_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 11:45							
Matrix: SURFACE WATER							
Dissolved Metals							
Antimony (Sb)-Dissolved	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000414	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.00935	<DL	0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0035	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	8.73		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00014	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000018	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00084	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.0735		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0012	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	2.87		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.00102		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000152	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00056	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.005	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	0.82		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00178		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	2.15		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	3.24		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0247		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.2		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00034	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.0000690	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00034	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0008	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000140	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-10 SW17_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 11:45 Matrix: SURFACE WATER							
Aggregate Organics							
Chemical Oxygen Demand	47		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.8	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-11 SW06_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Physical Tests							
Color, True	40.6		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	72.8		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	32.9		0.51	mg/L		19-JAN-23	
pH	7.34		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	0.5	<DL	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	60		13	mg/L		14-JAN-23	R5917619
Turbidity	1.77		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	2.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	30.6		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.014	<T	0.0078	mg/L		16-JAN-23	R5917779
Chloride (Cl)	2.32		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.026		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.098	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.424		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0042		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	3.60	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0001	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0004	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	12.0		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	12.3		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0622		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00043	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.00957	<DL	0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000041	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0025	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	8.50		0.20	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-11 SW06_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 12:00							
Matrix: SURFACE WATER							
Total Metals							
Cesium (Cs)-Total	0.0000070	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00052	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000050	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00090	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.160		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00006	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0008	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	2.96		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0100		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000155	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00082	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	0.80		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00190		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	2.20		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	3.18		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0245		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.4		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00009	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00166	<DL	0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.0000800	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00040	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0015	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000114	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0220	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000409	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.00932	<DL	0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0030	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-11 SW06_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Dissolved Metals							
Calcium (Ca)-Dissolved	8.49		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000020	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00080	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.0725		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0012	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	2.85		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.00102		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000126	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00058	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	0.80		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00180		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	2.13		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	3.19		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0244		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.2		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00036	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.0000730	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00034	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0006	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000130	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	50		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	<0.2	<W	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-12 SSW16_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 13:45 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	7.77		0.10	pH		15-JAN-23	R5916968

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-12 SSW16_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 13:45							
Matrix: SURFACE WATER							
Field Tests							
Temperature, Client Supplied	.65		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	34.6		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	55.4		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	24.8		0.51	mg/L		19-JAN-23	
pH	7.23		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	1.5	<DL	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	46		10	mg/L		14-JAN-23	R5917619
Turbidity	1.15		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	1.0	<DL	2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	22.2		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.002	<DL	0.0078	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	1.88		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.024		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.092	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.384		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0035		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	2.90	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0004	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	11.2		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	11.8		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0586		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00040	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.00795	<DL	0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000052	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0020	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	6.61		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000050	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00040	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000040	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00094	<DL	0.0010	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-12 SSW16_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 13:45							
Matrix: SURFACE WATER							
Total Metals							
Iron (Fe)-Total	0.108		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00009	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0006	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	2.15		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.0064		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000115	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00068	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	0.73		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00185		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	1.90		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000004	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	2.64		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0217		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.2		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00127	<DL	0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.0000650	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00035	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0015	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000116	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0212	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000035	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000363	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.00777	<DL	0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000006	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0025	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	6.51		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00018	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000018	<DL	0.00050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-12 SSW16_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 13:45 Matrix: SURFACE WATER							
Dissolved Metals							
Copper (Cu)-Dissolved	0.00086	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.0510		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0010	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	2.08		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.00074	<DL	0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000118	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00054	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	0.74		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00181		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	<0.000005	<W	0.0000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	1.79		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	2.74		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0205		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.0		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	0.00001	<DL	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.000030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00022	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.0000640	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00032	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0004	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000124	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	52		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.8	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-13 SW23_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 14:55 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	7.75		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	.53		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	72.0		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	372		1.0	uS/cm		17-JAN-23	R5917959

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-13 SW23_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 14:55							
Matrix: SURFACE WATER							
Physical Tests							
Hardness (as CaCO3)	200		0.51	mg/L		19-JAN-23	
pH	7.69		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	12.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	248		20	mg/L		14-JAN-23	R5917619
Turbidity	10.4		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	12.2		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	219		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.052	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	11.5		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.038		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.026	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.983		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0384		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	3.45	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0004	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	24.3		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	24.1		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.180		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000080	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00108	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0188		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000207	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0095	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000006	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	49.9		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000175		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00048	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000630	<T	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00080	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	1.25		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00025	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0054	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	21.0		0.020	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-13 SW23_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 14:55							
Matrix: SURFACE WATER							
Total Metals							
Manganese (Mn)-Total	0.468		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000275	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00198	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.080		0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.11		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00193		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	7.44		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	6.67		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.108		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.8		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	0.000010	<DL	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00008	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00703		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000681	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00095	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0035	<T	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000462	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0094	<T	0.0050	mg/L		18-JAN-23	R5918616
Antimony (Sb)-Dissolved	0.000075	<DL	0.00060	mg/L		18-JAN-23	R5918616
Arsenic (As)-Dissolved	0.000948	<DL	0.0010	mg/L		18-JAN-23	R5918616
Barium (Ba)-Dissolved	0.0153		0.010	mg/L		18-JAN-23	R5918616
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		18-JAN-23	R5918616
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918616
Boron (B)-Dissolved	0.0080	<DL	0.050	mg/L		18-JAN-23	R5918616
Cadmium (Cd)-Dissolved	0.0000090	<DL	0.000017	mg/L		18-JAN-23	R5918616
Calcium (Ca)-Dissolved	47.1		0.20	mg/L		18-JAN-23	R5918616
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918616
Chromium (Cr)-Dissolved	0.00013	<DL	0.0010	mg/L		18-JAN-23	R5918616
Cobalt (Co)-Dissolved	0.000274	<DL	0.00050	mg/L		18-JAN-23	R5918616
Copper (Cu)-Dissolved	0.00068	<DL	0.0010	mg/L		18-JAN-23	R5918616
Iron (Fe)-Dissolved	0.603		0.020	mg/L		18-JAN-23	R5918616
Lead (Pb)-Dissolved	0.00008	<T	0.000050	mg/L		18-JAN-23	R5918616
Lithium (Li)-Dissolved	0.0050	<DL	0.050	mg/L		18-JAN-23	R5918616

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-13 SW23_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 14:55 Matrix: SURFACE WATER							
Dissolved Metals							
Magnesium (Mg)-Dissolved	19.9		0.020	mg/L		18-JAN-23	R5918616
Manganese (Mn)-Dissolved	0.268		0.0010	mg/L		18-JAN-23	R5918616
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000268	<DL	0.0010	mg/L		18-JAN-23	R5918616
Nickel (Ni)-Dissolved	0.00170	<DL	0.0020	mg/L		18-JAN-23	R5918616
Phosphorus (P)-Dissolved	0.045	<DL	0.050	mg/L		18-JAN-23	R5918616
Potassium (K)-Dissolved	1.97		0.50	mg/L		18-JAN-23	R5918616
Rubidium (Rb)-Dissolved	0.00159		0.00020	mg/L		18-JAN-23	R5918616
Selenium (Se)-Dissolved	0.000095	<T	0.000050	mg/L		18-JAN-23	R5918616
Silicon (Si)-Dissolved	6.92		0.050	mg/L		18-JAN-23	R5918616
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		18-JAN-23	R5918616
Sodium (Na)-Dissolved	6.67		0.10	mg/L		18-JAN-23	R5918616
Strontium (Sr)-Dissolved	0.101		0.0010	mg/L		18-JAN-23	R5918616
Sulfur (S)-Dissolved	1.6		0.50	mg/L		18-JAN-23	R5918616
Tellurium (Te)-Dissolved	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918616
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918616
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918616
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918616
Titanium (Ti)-Dissolved	0.00088	<DL	0.0020	mg/L		18-JAN-23	R5918616
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918616
Uranium (U)-Dissolved	0.000637	<DL	0.0050	mg/L		18-JAN-23	R5918616
Vanadium (V)-Dissolved	0.00048	<DL	0.0010	mg/L		18-JAN-23	R5918616
Zinc (Zn)-Dissolved	0.0016	<DL	0.0030	mg/L		18-JAN-23	R5918616
Zirconium (Zr)-Dissolved	0.000304	<DL	0.0010	mg/L		18-JAN-23	R5918616
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	103		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	<0.2	<W	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-14 SW23_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 14:55 Matrix: SURFACE WATER							
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		17-JAN-23	R5921117
L2744989-15 SW24_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 15:05 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	7.66		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	73.0		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	373		1.0	uS/cm		17-JAN-23	R5917959

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-15 SW24_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 15:05							
Matrix: SURFACE WATER							
Physical Tests							
Hardness (as CaCO3)	201		0.51	mg/L		19-JAN-23	
pH	7.69		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	7.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	264		20	mg/L		14-JAN-23	R5917619
Turbidity	10.5		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	12.2		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	221		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.056	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	11.8		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.039		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.074	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.05		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0378		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	3.65	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0001	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.3		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	25.6		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.205		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000075	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00113	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0190		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000217	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0090	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000010	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	49.7		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000255		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00064	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000645	<T	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00084	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	1.30		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00024	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0056	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	20.9		0.020	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-15 SW24_SW_20230107							
Sampled By: CLIENT on 08-JAN-23 @ 15:05							
Matrix: SURFACE WATER							
Total Metals							
Manganese (Mn)-Total	0.466		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000265	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00208	<T	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.080		0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.05		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00195		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	7.67		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	6.60		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.109		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.8		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00007	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00746		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000674	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00105	<T	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0035	<T	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000492	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0104	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000075	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000894	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0151		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000012	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0085	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000070	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	47.8		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00017	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000272	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00070	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.603		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00007	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0052	<DL	0.050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-15 SW24_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 15:05 Matrix: SURFACE WATER							
Dissolved Metals							
Magnesium (Mg)-Dissolved	19.9		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.231		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000274	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00164	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.045	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	1.93		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00151		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000100	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	6.92		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	6.60		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.104		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.6		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00110	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000626	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00046	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000308	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	95		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.4	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2744989-16 SW24_SW_20230107 Sampled By: CLIENT on 08-JAN-23 @ 15:05 Matrix: SURFACE WATER							
Radiological Parameters							
Radium-226	0.005		0.005	Bq/L		17-JAN-23	R5921117
L2744989-17 SW28A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 11:50 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.43		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	121		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	255		1.0	uS/cm		17-JAN-23	R5917959

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-17 SW28A_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 11:50							
Matrix: SURFACE WATER							
Physical Tests							
Hardness (as CaCO3)	157		0.51	mg/L		19-JAN-23	
pH	7.82		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	1.0	<DL	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	200		13	mg/L		14-JAN-23	R5917619
Turbidity	1.45		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	3.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	145		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.082	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	0.002	<DL	0.010	mg/L		17-JAN-23	
Chloride (Cl)	2.56		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.046		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.128	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.45		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0109		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	0.70	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0010	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0002	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	36.4		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	35.3		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0406		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000040	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00095	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0159		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000176	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0070	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	37.0		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000020	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00032	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000190	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00062	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.283		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00003	<DL	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0042	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	16.2		0.020	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-17 SW28A_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 11:50							
Matrix: SURFACE WATER							
Total Metals							
Manganese (Mn)-Total	0.0430		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000365	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00136	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	1.01		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00166		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	4.72		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	1.89		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.0761		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	0.6		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00114	<DL	0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000587	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00040	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0020	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000172	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0184	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000040	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000943	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0157		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000020	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0065	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000145	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	36.5		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00017	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000136	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00058	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.168		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00001	<DL	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0040	<DL	0.050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-17 SW28A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 11:50 Matrix: SURFACE WATER							
Dissolved Metals							
Magnesium (Mg)-Dissolved	15.9		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0217		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000350	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00120	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.010	<DL	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	1.00		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00169		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000145	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	4.68		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	1.96		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.0737		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	0.6		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00056	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000547	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00034	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0012	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000200	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	126		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.0		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
L2744989-18 SW28A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 12:30 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.14		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	.16		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	81.1		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	406		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	218		0.51	mg/L		19-JAN-23	
pH	7.65		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	4.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	282		20	mg/L		14-JAN-23	R5917619
Turbidity	5.10		0.10	NTU		14-JAN-23	R5916963

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-18 SW28A_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 12:30							
Matrix: SURFACE WATER							
Physical Tests							
Anions and Nutrients							
Acidity (as CaCO3)	12.4		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	225		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.036	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	18.1		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.043		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.062	<T	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.00		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.085		0.010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	6.95		0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0010	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	27.8		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	26.0		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0928		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000060	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00108	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0235		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000145	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0100	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	52.1		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000080	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00028	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000860	<T	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00044	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	1.51		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00023	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0064	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	21.8		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.835		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000260	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00156	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.130		0.050	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-18 SW28A_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 12:30							
Matrix: SURFACE WATER							
Total Metals							
Potassium (K)-Total	2.18		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00192		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	7.18		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	9.01		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.122		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	3.0		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00352		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000677	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00065	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0030	<T	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000286	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0088	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000060	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000908	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0190		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	0.000002	<DL	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0100	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000040	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	52.0		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00011	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000360	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00056	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.811		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0060	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	21.5		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.434		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000278	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00162	<DL	0.0020	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-18 SW28A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 12:30 Matrix: SURFACE WATER							
Dissolved Metals							
Phosphorus (P)-Dissolved	0.085		0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	2.11		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00181		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000100	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	6.78		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	9.18		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.117		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	2.8		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	0.00005	<DL	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	0.000002	<DL	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00064	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000657	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00038	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0028	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000244	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	100		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	0.8	<DL	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
L2744989-19 SW22A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 12:30 Matrix: SURFACE WATER							
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		17-JAN-23	R5921117
L2744989-20 SW27_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 14:15 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	8.64		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	.18		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	85.1		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	416		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	227		0.51	mg/L		19-JAN-23	
pH	7.91		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	5.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	282		20	mg/L		14-JAN-23	R5917619
Turbidity	7.41		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-20 SW27_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 14:15							
Matrix: SURFACE WATER							
Anions and Nutrients							
Acidity (as CaCO3)	4.8		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	195		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.084	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	0.003	<DL	0.010	mg/L		17-JAN-23	
Chloride (Cl)	11.1		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	0.049		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.782		0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	0.910		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0079		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	41.8		0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0014	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	0.0002	<DL	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.2		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	22.9		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.209		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000285	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00096	<DL	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0249		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000114	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0130	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000008	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	57.2		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000295		0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00094	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.000320	<DL	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00190	<T	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	0.592		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00023	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0056	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	20.8		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.134		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000825	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00166	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.035	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.27		0.50	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-20 SW27_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 14:15							
Matrix: SURFACE WATER							
Total Metals							
Rubidium (Rb)-Total	0.00215		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	5.62		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	7.87		0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.134		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	14.8		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00005	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00010	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00713		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.00150	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00100	<T	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0160		0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000338	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0098	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000275	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000816	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0227		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0125	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	56.5		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00011	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000180	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00156	<T	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.238		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00005	<T	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0056	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	20.8		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.0972		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000842	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00124	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.010	<DL	0.050	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-20 SW27_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 14:15 Matrix: SURFACE WATER							
Dissolved Metals							
Potassium (K)-Dissolved	2.14		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00172		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000065	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	5.23		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	8.08		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.130		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	14.4		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000025	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00144	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.00144	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00048	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0096	<T	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000274	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	88		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	<0.2	<W	1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
L2744989-21 SW21A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 14:45 Matrix: SURFACE WATER							
Field Tests							
pH, Client Supplied	7.94		0.10	pH		15-JAN-23	R5916968
Temperature, Client Supplied	<0		0	Degree C		15-JAN-23	R5916968
Physical Tests							
Color, True	77.8		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	390		1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	213		0.51	mg/L		19-JAN-23	
pH	7.64		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	17.5		3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	278		20	mg/L		14-JAN-23	R5917619
Turbidity	6.24		0.10	NTU		14-JAN-23	R5916963
Anions and Nutrients							
Acidity (as CaCO3)	16.0		2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	198		2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	0.036	<T	0.0050	mg/L		16-JAN-23	R5917779
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-JAN-23	
Chloride (Cl)	18.9		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-21 SW21A_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 14:45							
Matrix: SURFACE WATER							
Anions and Nutrients							
Fluoride (F)	0.042		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	0.012	<DL	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	1.04		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.083		0.010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	3.55	<T	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	0.0008	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.8		0.50	mg/L	14-JAN-23	19-JAN-23	R5918821
Total Organic Carbon	25.9		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	0.0738		0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	0.000045	<DL	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	0.00105	<T	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.0248		0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	0.0000165	<DL	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	0.0095	<DL	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	0.000002	<DL	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	51.1		0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	0.0000060	<DL	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00048	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	0.00101	<T	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	0.00030	<DL	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	1.79		0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	0.00012	<T	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	0.0062	<DL	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	22.0		0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	0.828		0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	0.000180	<DL	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00166	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.145		0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	2.26		0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	0.00195		0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	7.60		0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	9.62		0.10	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-21 SW21A_SW_20230107							
Sampled By: CLIENT on 09-JAN-23 @ 14:45							
Matrix: SURFACE WATER							
Total Metals							
Strontium (Sr)-Total	0.121		0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	1.6		0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	0.00004	<DL	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	0.00300		0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556
Uranium (U)-Total	0.000549	<DL	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00060	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0020	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	0.000282	<DL	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0072	<T	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	0.000040	<DL	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.000897	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	0.0176		0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0095	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000090	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	49.8		0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00014	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	0.000206	<DL	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	0.00028	<DL	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	0.852		0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	0.00003	<DL	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	0.0060	<DL	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	21.6		0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.143		0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	0.000174	<DL	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00146	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	0.085		0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	2.13		0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	0.00183		0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000135	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	7.17		0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-21 SW21A_SW_20230107 Sampled By: CLIENT on 09-JAN-23 @ 14:45 Matrix: SURFACE WATER							
Dissolved Metals							
Sodium (Na)-Dissolved	9.57		0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	0.115		0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	1.6		0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00068	<DL	0.0020	mg/L		18-JAN-23	R5918577
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	0.000549	<DL	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00036	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0006	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	0.000228	<DL	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	96		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	1.2		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860
L2744989-22 TB_SW_20230107 Sampled By: CLIENT on 12-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Physical Tests							
Color, True	<2.0		2.0	CU		14-JAN-23	R5916959
Conductivity (EC)	<0.2	<W	1.0	uS/cm		17-JAN-23	R5917959
Hardness (as CaCO3)	<0.51		0.51	mg/L		19-JAN-23	
pH	5.25		0.10	pH		17-JAN-23	R5917959
Total Suspended Solids	<0.5	<W	3.0	mg/L		14-JAN-23	R5917596
Total Dissolved Solids	<2	<W	10	mg/L		14-JAN-23	R5917619
Turbidity	<0.10		0.10	NTU		14-JAN-23	R5916957
Anions and Nutrients							
Acidity (as CaCO3)	0.2	<DL	2.0	mg/L		14-JAN-23	R5917157
Alkalinity, Total (as CaCO3)	<0.2	<W	2.0	mg/L		17-JAN-23	R5917959
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		16-JAN-23	R5917779
Chloride (Cl)	0.20		0.10	mg/L	14-JAN-23	13-JAN-23	R5916997
Fluoride (F)	<0.020		0.020	mg/L	14-JAN-23	13-JAN-23	R5916997
Nitrate (as N)	<0.002	<W	0.020	mg/L		13-JAN-23	R5916997
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-JAN-23	R5916997
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	13-JAN-23	18-JAN-23	R5918557
Orthophosphate-Dissolved (as P)	0.0011		0.0010	mg/L	14-JAN-23	17-JAN-23	R5917838
Sulfate (SO4)	0.10	<DL	0.30	mg/L		13-JAN-23	R5916997
Cyanides							
Cyanide, Weak Acid Diss	0.0002	<DL	0.0020	mg/L		18-JAN-23	R5918558
Cyanide, Total	<0.0002	<W	0.0020	mg/L		18-JAN-23	R5918558

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-22 TB_SW_20230107 Sampled By: CLIENT on 12-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Cyanides							
Cyanide, Free	<0.0001	<W	0.0020	mg/L		18-JAN-23	R5918558
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	12-DEC-22	19-JAN-23	R5918821
Total Organic Carbon	<0.50		0.50	mg/L		19-JAN-23	R5918820
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		18-JAN-23	R5918556
Antimony (Sb)-Total	<0.000005	<W	0.00060	mg/L		18-JAN-23	R5918556
Arsenic (As)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Barium (Ba)-Total	0.00003	<DL	0.010	mg/L		18-JAN-23	R5918556
Beryllium (Be)-Total	<0.0000001	<W	0.0010	mg/L		18-JAN-23	R5918556
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918556
Boron (B)-Total	<0.0005	<W	0.050	mg/L		18-JAN-23	R5918556
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		18-JAN-23	R5918556
Calcium (Ca)-Total	0.004	<DL	0.20	mg/L		18-JAN-23	R5918556
Cesium (Cs)-Total	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918556
Chromium (Cr)-Total	0.00016	<DL	0.0010	mg/L		18-JAN-23	R5918556
Cobalt (Co)-Total	<0.000005	<W	0.00050	mg/L		18-JAN-23	R5918556
Copper (Cu)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Iron (Fe)-Total	<0.0005	<W	0.020	mg/L		18-JAN-23	R5918556
Lead (Pb)-Total	<0.00001	<W	0.000050	mg/L		18-JAN-23	R5918556
Lithium (Li)-Total	<0.0002	<W	0.050	mg/L		18-JAN-23	R5918556
Magnesium (Mg)-Total	0.0004	<DL	0.020	mg/L		18-JAN-23	R5918556
Manganese (Mn)-Total	<0.0002	<W	0.0010	mg/L		18-JAN-23	R5918556
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-JAN-23	R5917678
Molybdenum (Mo)-Total	<0.000005	<W	0.0010	mg/L		18-JAN-23	R5918556
Nickel (Ni)-Total	0.00010	<DL	0.0020	mg/L		18-JAN-23	R5918556
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		18-JAN-23	R5918556
Potassium (K)-Total	<0.01	<W	0.50	mg/L		18-JAN-23	R5918556
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		18-JAN-23	R5918556
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		18-JAN-23	R5918556
Silicon (Si)-Total	<0.002	<W	0.10	mg/L		18-JAN-23	R5918556
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		18-JAN-23	R5918556
Sodium (Na)-Total	0.005	<DL	0.10	mg/L		18-JAN-23	R5918556
Strontium (Sr)-Total	0.000005	<DL	0.0010	mg/L		18-JAN-23	R5918556
Sulfur (S)-Total	<0.2	<W	0.50	mg/L		18-JAN-23	R5918556
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918556
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		18-JAN-23	R5918556
Thorium (Th)-Total	<0.00001	<W	0.00010	mg/L		18-JAN-23	R5918556
Tin (Sn)-Total	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918556
Titanium (Ti)-Total	<0.00001	<W	0.0020	mg/L		18-JAN-23	R5918556
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		18-JAN-23	R5918556

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-22 TB_SW_20230107							
Sampled By: CLIENT on 12-JAN-23 @ 12:00							
Matrix: SURFACE WATER							
Total Metals							
Uranium (U)-Total	<0.0000005	<W	0.0050	mg/L		18-JAN-23	R5918556
Vanadium (V)-Total	0.00005	<DL	0.0010	mg/L		18-JAN-23	R5918556
Zinc (Zn)-Total	0.0015	<DL	0.0030	mg/L		18-JAN-23	R5918556
Zirconium (Zr)-Total	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918556
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					17-JAN-23	R5918096
Aluminum (Al)-Dissolved	0.0006	<DL	0.0050	mg/L		18-JAN-23	R5918577
Antimony (Sb)-Dissolved	<0.000005	<W	0.00060	mg/L		18-JAN-23	R5918577
Arsenic (As)-Dissolved	0.0000204	<DL	0.0010	mg/L		18-JAN-23	R5918577
Barium (Ba)-Dissolved	<0.000005	<W	0.010	mg/L		18-JAN-23	R5918577
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		18-JAN-23	R5918577
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Boron (B)-Dissolved	0.0010	<DL	0.050	mg/L		18-JAN-23	R5918577
Cadmium (Cd)-Dissolved	0.0000110	<DL	0.000017	mg/L		18-JAN-23	R5918577
Calcium (Ca)-Dissolved	0.002	<DL	0.20	mg/L		18-JAN-23	R5918577
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-JAN-23	R5918577
Chromium (Cr)-Dissolved	0.00018	<DL	0.0010	mg/L		18-JAN-23	R5918577
Cobalt (Co)-Dissolved	<0.000002	<W	0.00050	mg/L		18-JAN-23	R5918577
Copper (Cu)-Dissolved	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918577
Iron (Fe)-Dissolved	<0.0005	<W	0.020	mg/L		18-JAN-23	R5918577
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		18-JAN-23	R5918577
Lithium (Li)-Dissolved	<0.0002	<W	0.050	mg/L		18-JAN-23	R5918577
Magnesium (Mg)-Dissolved	<0.0005	<W	0.020	mg/L		18-JAN-23	R5918577
Manganese (Mn)-Dissolved	0.00004	<DL	0.0010	mg/L		18-JAN-23	R5918577
Mercury (Hg)-Dissolved	<0.000005	<W	0.000050	mg/L		17-JAN-23	R5917837
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Nickel (Ni)-Dissolved	0.00004	<DL	0.0020	mg/L		18-JAN-23	R5918577
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		18-JAN-23	R5918577
Potassium (K)-Dissolved	0.01	<DL	0.50	mg/L		18-JAN-23	R5918577
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		18-JAN-23	R5918577
Selenium (Se)-Dissolved	0.000125	<T	0.000050	mg/L		18-JAN-23	R5918577
Silicon (Si)-Dissolved	<0.005	<W	0.050	mg/L		18-JAN-23	R5918577
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		18-JAN-23	R5918577
Sodium (Na)-Dissolved	<0.005	<W	0.10	mg/L		18-JAN-23	R5918577
Strontium (Sr)-Dissolved	<0.00002	<W	0.0010	mg/L		18-JAN-23	R5918577
Sulfur (S)-Dissolved	0.2	<DL	0.50	mg/L		18-JAN-23	R5918577
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		18-JAN-23	R5918577
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		18-JAN-23	R5918577
Thorium (Th)-Dissolved	<0.00001	<W	0.00010	mg/L		18-JAN-23	R5918577
Tin (Sn)-Dissolved	0.000030	<DL	0.0010	mg/L		18-JAN-23	R5918577
Titanium (Ti)-Dissolved	0.00004	<DL	0.0020	mg/L		18-JAN-23	R5918577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2744989-22 TB_SW_20230107 Sampled By: CLIENT on 12-JAN-23 @ 12:00 Matrix: SURFACE WATER							
Dissolved Metals							
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		18-JAN-23	R5918577
Uranium (U)-Dissolved	<0.0000005	<W	0.0050	mg/L		18-JAN-23	R5918577
Vanadium (V)-Dissolved	0.00012	<DL	0.0010	mg/L		18-JAN-23	R5918577
Zinc (Zn)-Dissolved	0.0004	<DL	0.0030	mg/L		18-JAN-23	R5918577
Zirconium (Zr)-Dissolved	<0.000002	<W	0.0010	mg/L		18-JAN-23	R5918577
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-JAN-23	R5918541
Chemical Oxygen Demand	<10		10	mg/L	13-JAN-23	18-JAN-23	R5918217
Oil and Grease, Total	2.0		1.0	mg/L	17-JAN-23	17-JAN-23	R5917860

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Aluminum (Al)-Total	DUP-H	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Method Blank	Ammonia, Total (as N)	MB-LOR	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L2744989-1, -10, -11, -12, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2744989-1, -10, -11, -12, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L2744989-1, -10, -11, -12, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2744989-1, -10, -11, -12, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2744989-1, -10, -11, -12, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Total	MS-B	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Total	MS-B	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Total	MS-B	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9
Matrix Spike	Total Organic Carbon	MS-B	L2744989-1, -10, -11, -12, -13, -15, -17, -18, -2, -20, -21, -22, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
DTSE	Dissolved Se concentration exceeds total. Positive bias on D-Se suspected due to signal enhancement from volatile selenium species. Contact ALS if an alternative test to address this interference is needed.
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACY-MISA-TB	Effluent	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-MISA-TB	Effluent	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.			
BOD-TB	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B- BIOCHEMICAL OXYGEN DEMAND
All forms of biochemical oxygen demand (BOD) are determined by diluting and incubating a sample for a specified time period, and measuring the oxygen depletion using a dissolved oxygen meter. Dissolved BOD (SOLUBLE) is determined by filtering the sample through a glass fibre filter prior to dilution. Carbonaceous BOD (CBOD) is determined by adding a nitrification inhibitor to the diluted sample prior to incubation.			
CL-L-IC-N-TB	Water	Chloride in Water by IC (Low Level)	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
CN-FREE-MISA-CFA-WT	Effluent	Free Cyanide by Continuous Flow Analyzer	ASTM D7237-10 (modified)
This analysis is carried out using procedures adapted from ASTM Method 7237 "Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection". Free cyanide is determined by in-line gas diffusion at pH 6 with final determination by colourimetric analysis.			
CN-T-MISA-CFA-WT	Effluent	Total Cyanide by CFA	ISO 14403-2:2012 (modified)
This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by colourimetric analysis.			
Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.			

Reference Information

CN-WAD-MISA-CFA-WT Effluent Weak Acid Dissociable Cyanide by CFA APHA 4500-CN CYANIDE (modified)

This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.

COD-TB Water Chemical Oxygen Demand APHA 5220D

This analysis is carried out using procedures adapted from APHA Method 5220 "Chemical Oxygen Demand (COD)". Chemical oxygen demand is determined using the closed reflux colourimetric method.

COLOUR-TB Water Colour, True APHA 2120 C

True Colour in aqueous matrices is analyzed using colourimetric detection. This is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using a platinum-cobalt standard.

DOC-WT Effluent Dissolved Organic Carbon for MISA APHA 5310 B-Instrumental

EC-MISA-TB Effluent Conductivity (EC) APHA 2510 B-ELECTRODE

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

F-IC-N-TB Water Fluoride in Water by IC EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

HARDNESS-CALC-TB Effluent Hardness (as CaCO₃) CALCULATION

HG-DIS-WT Effluent Mercury (Hg)-Dissolved for MISA SW846 7470A

HG-TOT-WT Effluent Mercury (Hg)-Total for MISA SW846 7470A

MET-D-MISA-TB Effluent Dissolved Metals in Water (MISA) APHA 3030B/6020B (mod)

Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

MET-T-MISA-TB Effluent Total Metals in Water (MISA) EPA 200.2/6020B (mod)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

NH3-MISA-F-TB Effluent Ammonia by Discrete Analyzer catnr 157/158 062217/99321057 (modified)

Ammonia is determined by Flow-injection analysis with fluorescence detection

NH3-UNION-CALC-TB Effluent Un-ionized ammonia Calculation

NO2-MISA-IC-TB Effluent Nitrite in Water by IC EPA 300.1 (mod)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-MISA-IC-TB Effluent Nitrate in Water by IC EPA 300.1 (mod)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT Effluent Oil and Grease, Total for MISA APHA 5520 B-Hexane Gravimetric

PH-CLIENT-TB Water pH Result supplied by Client

PH-MISA-TB Effluent pH APHA 4500-H-ELECTRODE

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

PO4-DO-COL-TB Water Dissolved Orthophosphate APHA 4500-P B, F, G (modified)

Phosphorus in aqueous matrices is analyzed using discrete Analyzer with colourimetric detection.

Reference Information

RADIO-RADIUM226-SR	Water	Radium 226	CANMET 1986
SO4-MISA-IC-TB	Effluent	Sulfate in Water by IC	EPA 300.1 (mod)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
TDS-MISA-TB	Effluent	Total Dissolved Solids	APHA 2540 C (modified)
Aqueous matrices are analyzed using gravimetry and evaporation			
TEMP-CLIENT-TB	Water	Temperature	Result supplied by Client
TKN-F-TB	Water	TKN in Water by Fluorescence	catnr 157/158, 062818/99334821
Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection			
TOC-WT	Water	Total Organic Carbon	APHA 5310B
Sample is injected into a heated reaction chamber which is packed with an oxidative catalyst. The water is vaporized and the organic carbon is oxidized to carbon dioxide. The carbon dioxide is transported in a carrier gas and is measured by a non-dispersive infrared detector.			
TSS-MISA-TB	Effluent	Total Suspended Solids	APHA 2540 D (modified)
Aqueous matrices are analyzed using gravimetry			
TURBIDITY-TB	Water	Turbidity	APHA 2130 B-Nephelometer
Aqueous matrices are analyzed using nephelometry with the light scatter measured at a 90° angle.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SR	Saskatchewan Research Council - Saskatoon, Saskatchewan, Can
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 1 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BOD-TB								
	Water							
Batch	R5918117							
WG3778193-3	DUP	L2744989-1						
Biochemical Oxygen Demand		<2.0	<2.0	RPD-NA	mg/L	N/A	30	13-JAN-23
WG3778193-2	LCS							
Biochemical Oxygen Demand			100.0		%		85-115	13-JAN-23
WG3778193-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	13-JAN-23
Batch	R5918541							
WG3778220-3	DUP	L2744989-8						
Biochemical Oxygen Demand		<2.0	<2.0	RPD-NA	mg/L	N/A	30	14-JAN-23
WG3778220-2	LCS							
Biochemical Oxygen Demand			106.5		%		85-115	14-JAN-23
WG3778220-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	14-JAN-23
CL-L-IC-N-TB								
	Water							
Batch	R5916997							
WG3778233-3	DUP	L2744989-1						
Chloride (Cl)		0.38	0.39		mg/L	2.1	20	13-JAN-23
WG3778233-2	LCS							
Chloride (Cl)			102.3		%		90-110	13-JAN-23
WG3778233-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	13-JAN-23
WG3778233-4	MS	L2744989-2						
Chloride (Cl)			103.4		%		75-125	13-JAN-23
COD-TB								
	Water							
Batch	R5918217							
WG3778202-3	DUP	L2744989-1						
Chemical Oxygen Demand		113	119		mg/L	5.5	20	18-JAN-23
WG3778202-2	LCS							
Chemical Oxygen Demand			109.3		%		85-115	18-JAN-23
WG3778202-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	18-JAN-23
WG3778202-4	MS	L2744989-2						
Chemical Oxygen Demand			97.9		%		75-125	18-JAN-23
COLOUR-TB								
	Water							



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 2 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
COLOUR-TB								
	Water							
Batch	R5916959							
WG3778231-3	DUP	L2744989-1						
Color, True		176	180		CU	2.5	20	14-JAN-23
WG3778231-2	LCS		101.8		%		85-115	14-JAN-23
Color, True								
WG3778231-1	MB		<2.0		CU		2	14-JAN-23
Color, True								
F-IC-N-TB								
	Water							
Batch	R5916997							
WG3778233-3	DUP	L2744989-1						
Fluoride (F)		<0.020	<0.020	RPD-NA	mg/L	N/A	20	13-JAN-23
WG3778233-2	LCS		103.1		%		90-110	13-JAN-23
Fluoride (F)								
WG3778233-1	MB		<0.020		mg/L		0.02	13-JAN-23
Fluoride (F)								
WG3778233-4	MS	L2744989-2	105.0		%		75-125	13-JAN-23
Fluoride (F)								
PO4-DO-COL-TB								
	Water							
Batch	R5917838							
WG3778232-3	DUP	L2744989-1						
Orthophosphate-Dissolved (as P)		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	17-JAN-23
WG3778232-2	LCS		102.2		%		80-120	17-JAN-23
Orthophosphate-Dissolved (as P)								
WG3778232-1	MB		<0.0010		mg/L		0.001	17-JAN-23
Orthophosphate-Dissolved (as P)								
WG3778232-4	MS	L2744989-2	83.2		%		70-130	17-JAN-23
Orthophosphate-Dissolved (as P)								
TKN-F-TB								
	Water							
Batch	R5918557							
WG3778206-3	DUP	L2744989-1						
Total Kjeldahl Nitrogen		1.03	1.02		mg/L	0.1	20	18-JAN-23
WG3778206-2	LCS		115.7		%		75-125	18-JAN-23
Total Kjeldahl Nitrogen								
WG3778206-1	MB		<0.050		mg/L		0.05	18-JAN-23
Total Kjeldahl Nitrogen								
TOC-WT								
	Water							



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 3 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TOC-WT		Water						
Batch	R5918820							
WG3778513-3	DUP	L2744989-1						
Total Organic Carbon		34.0	35.8		mg/L	5.1	20	19-JAN-23
WG3778513-2	LCS							
Total Organic Carbon			101.9		%		80-120	19-JAN-23
WG3778513-1	MB							
Total Organic Carbon			<0.50		mg/L		0.5	19-JAN-23
WG3778513-4	MS	L2744989-1						
Total Organic Carbon			N/A	MS-B	%		-	19-JAN-23
TURBIDITY-TB		Water						
Batch	R5916957							
WG3778234-3	DUP	L2744989-5						
Turbidity		7.50	7.60		NTU	1.3	15	14-JAN-23
WG3778234-2	LCS							
Turbidity			99.5		%		85-115	14-JAN-23
WG3778234-1	MB							
Turbidity			<0.10		NTU		0.1	14-JAN-23
Batch	R5916963							
WG3778243-3	DUP	L2744989-15						
Turbidity		10.5	10.5		NTU	0.0	15	14-JAN-23
WG3778243-2	LCS							
Turbidity			99.0		%		85-115	14-JAN-23
WG3778243-1	MB							
Turbidity			<0.10		NTU		0.1	14-JAN-23
ACY-MISA-TB		Effluent						
Batch	R5917157							
WG3778230-3	DUP	L2744989-1						
Acidity (as CaCO3)		10.4	8.4	J	mg/L	2.1	4	14-JAN-23
WG3778230-2	LCS							
Acidity (as CaCO3)			114.2		%		85-115	14-JAN-23
WG3778230-1	MB							
Acidity (as CaCO3)			1.0		mg/L		3	14-JAN-23
ALK-MISA-TB		Effluent						
Batch	R5917959							
WG3778229-3	DUP	L2744989-1						
Alkalinity, Total (as CaCO3)		63.2	63.6		mg/L	0.6	20	17-JAN-23
Alkalinity, Phenolphthalein		<0.2	<0.2	RPD-NA	mg/L	N/A	25	17-JAN-23
WG3778229-2	LCS							



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 4 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ALK-MISA-TB Effluent								
Batch R5917959								
WG3778229-2	LCS							
Alkalinity, Total (as CaCO3)			102.3		%		85-115	17-JAN-23
WG3778229-1	MB							
Alkalinity, Total (as CaCO3)			<0.2		mg/L		2	17-JAN-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	17-JAN-23
CN-FREE-MISA-CFA-WT Effluent								
Batch R5918558								
WG3778546-3	DUP	L2744989-1						
Cyanide, Free		0.0006	0.0006	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778546-7	DUP	L2744989-22						
Cyanide, Free		<0.0001	0.0003	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778546-2	LCS							
Cyanide, Free			99.5		%		80-120	18-JAN-23
WG3778546-6	LCS							
Cyanide, Free			99.7		%		80-120	18-JAN-23
WG3778546-1	MB							
Cyanide, Free			0.0003		mg/L		0.002	18-JAN-23
WG3778546-5	MB							
Cyanide, Free			<0.0001		mg/L		0.002	18-JAN-23
WG3778546-4	MS	L2744989-1						
Cyanide, Free			104.5		%		75-125	18-JAN-23
WG3778546-8	MS	L2744989-22						
Cyanide, Free			103.4		%		75-125	18-JAN-23
CN-T-MISA-CFA-WT Effluent								
Batch R5918558								
WG3778546-3	DUP	L2744989-1						
Cyanide, Total		0.0012	0.0010	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778546-7	DUP	L2744989-22						
Cyanide, Total		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778546-2	LCS							
Cyanide, Total			95.3		%		80-120	18-JAN-23
WG3778546-6	LCS							
Cyanide, Total			96.9		%		80-120	18-JAN-23
WG3778546-1	MB							
Cyanide, Total			<0.0002		mg/L		0.002	18-JAN-23
WG3778546-5	MB							
Cyanide, Total			<0.0002		mg/L		0.002	18-JAN-23
WG3778546-4	MS	L2744989-1						



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 5 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-T-MISA-CFA-WT								
	Effluent							
Batch	R5918558							
WG3778546-4	MS	L2744989-1						
Cyanide, Total			87.1		%		75-125	18-JAN-23
WG3778546-8	MS	L2744989-22						
Cyanide, Total			96.7		%		75-125	18-JAN-23
CN-WAD-MISA-CFA-WT								
	Effluent							
Batch	R5918558							
WG3778546-3	DUP	L2744989-1						
Cyanide, Weak Acid Diss		0.0009	0.0008	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778546-7	DUP	L2744989-22						
Cyanide, Weak Acid Diss		0.0002	<0.0001	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778546-2	LCS							
Cyanide, Weak Acid Diss			108.0		%		80-120	18-JAN-23
WG3778546-6	LCS							
Cyanide, Weak Acid Diss			108.9		%		80-120	18-JAN-23
WG3778546-1	MB							
Cyanide, Weak Acid Diss			<0.0001		mg/L		0.002	18-JAN-23
WG3778546-5	MB							
Cyanide, Weak Acid Diss			<0.0001		mg/L		0.002	18-JAN-23
WG3778546-4	MS	L2744989-1						
Cyanide, Weak Acid Diss			109.6		%		75-125	18-JAN-23
WG3778546-8	MS	L2744989-22						
Cyanide, Weak Acid Diss			111.4		%		75-125	18-JAN-23
DOC-WT								
	Effluent							
Batch	R5918821							
WG3778607-3	DUP	L2744989-1						
Dissolved Organic Carbon		33.7	36.0		mg/L	6.4	25	19-JAN-23
WG3778607-2	LCS							
Dissolved Organic Carbon			105.4		%		70-130	19-JAN-23
WG3778607-1	MB							
Dissolved Organic Carbon			<0.50		mg/L		0.5	19-JAN-23
EC-MISA-TB								
	Effluent							
Batch	R5917959							
WG3778229-3	DUP	L2744989-1						
Conductivity (EC)		117	115		uS/cm	1.5	10	17-JAN-23
WG3778229-2	LCS							
Conductivity (EC)			98.0		%		90-110	17-JAN-23
WG3778229-1	MB							



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 6 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EC-MISA-TB								
Effluent								
Batch R5917959								
WG3778229-1 MB								
Conductivity (EC)								
			0.6		uS/cm		2	17-JAN-23
HG-DIS-WT								
Effluent								
Batch R5917837								
WG3778399-3 DUP								
Mercury (Hg)-Dissolved								
		L2744989-1	<0.000005	RPD-NA	mg/L	N/A	20	17-JAN-23
WG3778399-2 LCS								
Mercury (Hg)-Dissolved								
			102.0		%		80-120	17-JAN-23
WG3778399-1 MB								
Mercury (Hg)-Dissolved								
			<0.000005		mg/L		0.000005	17-JAN-23
WG3778399-4 MS								
Mercury (Hg)-Dissolved								
		L2744989-2	99.6		%		70-130	17-JAN-23
HG-TOT-WT								
Effluent								
Batch R5917678								
WG3778345-3 DUP								
Mercury (Hg)-Total								
		L2744989-1	<0.000005	RPD-NA	mg/L	N/A	20	17-JAN-23
WG3778345-2 LCS								
Mercury (Hg)-Total								
			103.0		%		80-120	17-JAN-23
WG3778345-1 MB								
Mercury (Hg)-Total								
			<0.000005		mg/L		0.000005	17-JAN-23
WG3778345-4 MS								
Mercury (Hg)-Total								
		L2744989-2	104.7		%		70-130	17-JAN-23
MET-D-MISA-TB								
Effluent								
Batch R5918577								
WG3778465-3 DUP								
Aluminum (Al)-Dissolved								
		L2744989-1	0.0510		mg/L	4.4	20	18-JAN-23
Antimony (Sb)-Dissolved								
			0.000050	RPD-NA	mg/L	N/A	20	18-JAN-23
Arsenic (As)-Dissolved								
			0.000680	RPD-NA	mg/L	N/A	20	18-JAN-23
Barium (Ba)-Dissolved								
			0.00819	RPD-NA	mg/L	N/A	20	18-JAN-23
Beryllium (Be)-Dissolved								
			0.000010	RPD-NA	mg/L	N/A	20	18-JAN-23
Bismuth (Bi)-Dissolved								
			0.000014	RPD-NA	mg/L	N/A	20	18-JAN-23
Boron (B)-Dissolved								
			0.0025	RPD-NA	mg/L	N/A	20	18-JAN-23
Cadmium (Cd)-Dissolved								
			<0.0000005	RPD-NA	mg/L	N/A	20	18-JAN-23
Calcium (Ca)-Dissolved								
			17.5		mg/L	4.1	20	18-JAN-23
Cesium (Cs)-Dissolved								
			0.0000020	RPD-NA	mg/L	N/A	20	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 7 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch R5918577								
WG3778465-3 DUP		L2744989-1						
Chromium (Cr)-Dissolved		0.00015	0.00020	RPD-NA	mg/L	N/A	20	18-JAN-23
Cobalt (Co)-Dissolved		0.000118	0.000118	RPD-NA	mg/L	N/A	20	18-JAN-23
Copper (Cu)-Dissolved		0.00056	0.00054	RPD-NA	mg/L	N/A	20	18-JAN-23
Iron (Fe)-Dissolved		0.439	0.461		mg/L	4.9	20	18-JAN-23
Lead (Pb)-Dissolved		0.00010	0.00009		mg/L	13	20	18-JAN-23
Lithium (Li)-Dissolved		0.0020	0.0024	RPD-NA	mg/L	N/A	20	18-JAN-23
Magnesium (Mg)-Dissolved		7.52	7.48		mg/L	0.6	20	18-JAN-23
Manganese (Mn)-Dissolved		0.0483	0.0479		mg/L	0.8	20	18-JAN-23
Molybdenum (Mo)-Dissolved		0.000196	0.000122	RPD-NA	mg/L	N/A	20	18-JAN-23
Nickel (Ni)-Dissolved		0.00044	0.00044	RPD-NA	mg/L	N/A	20	18-JAN-23
Phosphorus (P)-Dissolved		0.005	<0.005	RPD-NA	mg/L	N/A	20	18-JAN-23
Potassium (K)-Dissolved		0.43	0.42	RPD-NA	mg/L	N/A	20	18-JAN-23
Rubidium (Rb)-Dissolved		0.00113	0.00114		mg/L	1.0	20	18-JAN-23
Selenium (Se)-Dissolved		0.000050	0.000030	RPD-NA	mg/L	N/A	20	18-JAN-23
Silicon (Si)-Dissolved		6.24	6.42		mg/L	2.8	20	18-JAN-23
Silver (Ag)-Dissolved		0.0000010	<0.0000005	RPD-NA	mg/L	N/A	20	18-JAN-23
Sodium (Na)-Dissolved		1.26	1.24		mg/L	0.9	20	18-JAN-23
Strontium (Sr)-Dissolved		0.0273	0.0276		mg/L	1.0	20	18-JAN-23
Sulfur (S)-Dissolved		0.2	0.2	RPD-NA	mg/L	N/A	20	18-JAN-23
Tellurium (Te)-Dissolved		0.00003	<0.00001	RPD-NA	mg/L	N/A	20	18-JAN-23
Thallium (Tl)-Dissolved		0.000010	0.000002	RPD-NA	mg/L	N/A	20	18-JAN-23
Thorium (Th)-Dissolved		0.00002	0.00002	RPD-NA	mg/L	N/A	20	18-JAN-23
Tin (Sn)-Dissolved		0.000015	0.000005	RPD-NA	mg/L	N/A	20	18-JAN-23
Titanium (Ti)-Dissolved		0.00092	0.00094	RPD-NA	mg/L	N/A	20	18-JAN-23
Tungsten (W)-Dissolved		0.0106	0.00473	RPD-NA	mg/L	N/A	20	18-JAN-23
Uranium (U)-Dissolved		0.0000280	0.0000270	RPD-NA	mg/L	N/A	20	18-JAN-23
Vanadium (V)-Dissolved		0.00026	0.00028	RPD-NA	mg/L	N/A	20	18-JAN-23
Zinc (Zn)-Dissolved		0.0018	0.0018	RPD-NA	mg/L	N/A	20	18-JAN-23
Zirconium (Zr)-Dissolved		0.000170	0.000142	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778465-2 LCS								
Aluminum (Al)-Dissolved			104.2		%		80-120	18-JAN-23
Antimony (Sb)-Dissolved			95.3		%		80-120	18-JAN-23
Arsenic (As)-Dissolved			106.0		%		80-120	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 8 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5918577							
WG3778465-2	LCS							
Barium (Ba)-Dissolved			99.3		%		80-120	18-JAN-23
Beryllium (Be)-Dissolved			98.6		%		80-120	18-JAN-23
Bismuth (Bi)-Dissolved			95.7		%		80-120	18-JAN-23
Boron (B)-Dissolved			94.6		%		80-120	18-JAN-23
Cadmium (Cd)-Dissolved			98.0		%		80-120	18-JAN-23
Calcium (Ca)-Dissolved			102.8		%		80-120	18-JAN-23
Cesium (Cs)-Dissolved			96.7		%		80-120	18-JAN-23
Chromium (Cr)-Dissolved			101.0		%		80-120	18-JAN-23
Cobalt (Co)-Dissolved			101.0		%		80-120	18-JAN-23
Copper (Cu)-Dissolved			98.6		%		80-120	18-JAN-23
Iron (Fe)-Dissolved			92.7		%		80-120	18-JAN-23
Lead (Pb)-Dissolved			98.5		%		80-120	18-JAN-23
Lithium (Li)-Dissolved			95.5		%		80-120	18-JAN-23
Magnesium (Mg)-Dissolved			108.4		%		80-120	18-JAN-23
Manganese (Mn)-Dissolved			101.7		%		80-120	18-JAN-23
Molybdenum (Mo)-Dissolved			102.0		%		80-120	18-JAN-23
Nickel (Ni)-Dissolved			100.2		%		80-120	18-JAN-23
Phosphorus (P)-Dissolved			103.9		%		70-130	18-JAN-23
Potassium (K)-Dissolved			106.0		%		80-120	18-JAN-23
Rubidium (Rb)-Dissolved			105.8		%		80-120	18-JAN-23
Selenium (Se)-Dissolved			97.3		%		80-120	18-JAN-23
Silicon (Si)-Dissolved			95.6		%		60-140	18-JAN-23
Silver (Ag)-Dissolved			89.7		%		80-120	18-JAN-23
Sodium (Na)-Dissolved			105.0		%		80-120	18-JAN-23
Strontium (Sr)-Dissolved			97.0		%		80-120	18-JAN-23
Sulfur (S)-Dissolved			95.1		%		80-120	18-JAN-23
Tellurium (Te)-Dissolved			101.1		%		80-120	18-JAN-23
Thallium (Tl)-Dissolved			99.0		%		80-120	18-JAN-23
Thorium (Th)-Dissolved			93.8		%		80-120	18-JAN-23
Tin (Sn)-Dissolved			100.3		%		80-120	18-JAN-23
Titanium (Ti)-Dissolved			100.6		%		80-120	18-JAN-23
Tungsten (W)-Dissolved			97.1		%		80-120	18-JAN-23
Uranium (U)-Dissolved			95.2		%		80-120	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 9 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5918577							
WG3778465-2	LCS							
Vanadium (V)-Dissolved			103.8		%		80-120	18-JAN-23
Zinc (Zn)-Dissolved			104.1		%		80-120	18-JAN-23
Zirconium (Zr)-Dissolved			95.3		%		80-120	18-JAN-23
WG3778465-1	MB							
Aluminum (Al)-Dissolved			0.0006		mg/L		0.005	18-JAN-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0006	18-JAN-23
Arsenic (As)-Dissolved			<0.0000002		mg/L		0.001	18-JAN-23
Barium (Ba)-Dissolved			0.000010		mg/L		0.01	18-JAN-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.001	18-JAN-23
Bismuth (Bi)-Dissolved			<0.000002		mg/L		0.001	18-JAN-23
Boron (B)-Dissolved			<0.0005		mg/L		0.05	18-JAN-23
Cadmium (Cd)-Dissolved			<0.0000005		mg/L		0.000017	18-JAN-23
Calcium (Ca)-Dissolved			0.014		mg/L		0.2	18-JAN-23
Cesium (Cs)-Dissolved			<0.0000005		mg/L		0.00001	18-JAN-23
Chromium (Cr)-Dissolved			<0.00001		mg/L		0.001	18-JAN-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0005	18-JAN-23
Copper (Cu)-Dissolved			0.00002		mg/L		0.001	18-JAN-23
Iron (Fe)-Dissolved			<0.0005		mg/L		0.02	18-JAN-23
Lead (Pb)-Dissolved			<0.00001		mg/L		0.00005	18-JAN-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.05	18-JAN-23
Magnesium (Mg)-Dissolved			0.0005		mg/L		0.02	18-JAN-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.001	18-JAN-23
Molybdenum (Mo)-Dissolved			<0.000002		mg/L		0.001	18-JAN-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.002	18-JAN-23
Phosphorus (P)-Dissolved			<0.005		mg/L		0.05	18-JAN-23
Potassium (K)-Dissolved			<0.01		mg/L		0.5	18-JAN-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	18-JAN-23
Selenium (Se)-Dissolved			<0.000005		mg/L		0.00005	18-JAN-23
Silicon (Si)-Dissolved			<0.005		mg/L		0.05	18-JAN-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.0001	18-JAN-23
Sodium (Na)-Dissolved			0.010		mg/L		0.1	18-JAN-23
Strontium (Sr)-Dissolved			<0.00002		mg/L		0.001	18-JAN-23
Sulfur (S)-Dissolved			<0.2		mg/L		0.5	18-JAN-23
Tellurium (Te)-Dissolved			<0.00001		mg/L		0.001	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 10 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5918577							
WG3778465-1	MB							
Thallium (Tl)-Dissolved			<0.000002		mg/L		0.0003	18-JAN-23
Thorium (Th)-Dissolved			<0.00001		mg/L		0.0001	18-JAN-23
Tin (Sn)-Dissolved			<0.000005		mg/L		0.001	18-JAN-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.002	18-JAN-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.01	18-JAN-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.005	18-JAN-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.001	18-JAN-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.003	18-JAN-23
Zirconium (Zr)-Dissolved			<0.000002		mg/L		0.001	18-JAN-23
WG3778465-4	MS	L2744989-2						
Aluminum (Al)-Dissolved			106.7		%		70-130	18-JAN-23
Antimony (Sb)-Dissolved			95.2		%		70-130	18-JAN-23
Arsenic (As)-Dissolved			106.2		%		70-130	18-JAN-23
Barium (Ba)-Dissolved			102.0		%		70-130	18-JAN-23
Beryllium (Be)-Dissolved			103.0		%		70-130	18-JAN-23
Bismuth (Bi)-Dissolved			88.5		%		70-130	18-JAN-23
Boron (B)-Dissolved			104.5		%		70-130	18-JAN-23
Cadmium (Cd)-Dissolved			103.8		%		70-130	18-JAN-23
Calcium (Ca)-Dissolved			N/A	MS-B	%		-	18-JAN-23
Cesium (Cs)-Dissolved			98.6		%		70-130	18-JAN-23
Chromium (Cr)-Dissolved			104.7		%		70-130	18-JAN-23
Cobalt (Co)-Dissolved			102.7		%		70-130	18-JAN-23
Copper (Cu)-Dissolved			102.4		%		70-130	18-JAN-23
Iron (Fe)-Dissolved			100.8		%		70-130	18-JAN-23
Lead (Pb)-Dissolved			100.2		%		70-130	18-JAN-23
Lithium (Li)-Dissolved			100.1		%		70-130	18-JAN-23
Magnesium (Mg)-Dissolved			N/A	MS-B	%		-	18-JAN-23
Manganese (Mn)-Dissolved			N/A	MS-B	%		-	18-JAN-23
Molybdenum (Mo)-Dissolved			111.1		%		70-130	18-JAN-23
Nickel (Ni)-Dissolved			103.0		%		70-130	18-JAN-23
Phosphorus (P)-Dissolved			110.2		%		70-130	18-JAN-23
Potassium (K)-Dissolved			103.3		%		70-130	18-JAN-23
Rubidium (Rb)-Dissolved			106.7		%		70-130	18-JAN-23
Selenium (Se)-Dissolved			112.3		%		70-130	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 11 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5918577							
WG3778465-4 MS		L2744989-2						
Silicon (Si)-Dissolved			105.8		%		70-130	18-JAN-23
Silver (Ag)-Dissolved			97.5		%		70-130	18-JAN-23
Sodium (Na)-Dissolved			N/A	MS-B	%		-	18-JAN-23
Strontium (Sr)-Dissolved			N/A	MS-B	%		-	18-JAN-23
Sulfur (S)-Dissolved			102.3		%		70-130	18-JAN-23
Tellurium (Te)-Dissolved			112.0		%		70-130	18-JAN-23
Thallium (Tl)-Dissolved			94.9		%		70-130	18-JAN-23
Thorium (Th)-Dissolved			95.2		%		70-130	18-JAN-23
Tin (Sn)-Dissolved			103.9		%		70-130	18-JAN-23
Titanium (Ti)-Dissolved			109.0		%		70-130	18-JAN-23
Tungsten (W)-Dissolved			103.7		%		70-130	18-JAN-23
Uranium (U)-Dissolved			95.1		%		70-130	18-JAN-23
Vanadium (V)-Dissolved			107.0		%		70-130	18-JAN-23
Zinc (Zn)-Dissolved			107.5		%		70-130	18-JAN-23
Zirconium (Zr)-Dissolved			106.6		%		70-130	18-JAN-23
Batch	R5918616							
WG3778601-2 LCS								
Aluminum (Al)-Dissolved			104.2		%		80-120	18-JAN-23
Antimony (Sb)-Dissolved			95.3		%		80-120	18-JAN-23
Arsenic (As)-Dissolved			106.0		%		80-120	18-JAN-23
Barium (Ba)-Dissolved			99.3		%		80-120	18-JAN-23
Beryllium (Be)-Dissolved			98.6		%		80-120	18-JAN-23
Bismuth (Bi)-Dissolved			95.7		%		80-120	18-JAN-23
Boron (B)-Dissolved			94.6		%		80-120	18-JAN-23
Cadmium (Cd)-Dissolved			98.0		%		80-120	18-JAN-23
Calcium (Ca)-Dissolved			102.8		%		80-120	18-JAN-23
Cesium (Cs)-Dissolved			96.7		%		80-120	18-JAN-23
Chromium (Cr)-Dissolved			101.0		%		80-120	18-JAN-23
Cobalt (Co)-Dissolved			101.0		%		80-120	18-JAN-23
Copper (Cu)-Dissolved			98.6		%		80-120	18-JAN-23
Iron (Fe)-Dissolved			92.7		%		80-120	18-JAN-23
Lead (Pb)-Dissolved			98.5		%		80-120	18-JAN-23
Lithium (Li)-Dissolved			95.5		%		80-120	18-JAN-23
Magnesium (Mg)-Dissolved			108.4		%		80-120	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 12 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5918616							
WG3778601-2 LCS								
Manganese (Mn)-Dissolved			101.7		%		80-120	18-JAN-23
Molybdenum (Mo)-Dissolved			102.0		%		80-120	18-JAN-23
Nickel (Ni)-Dissolved			100.2		%		80-120	18-JAN-23
Phosphorus (P)-Dissolved			103.9		%		70-130	18-JAN-23
Potassium (K)-Dissolved			106.0		%		80-120	18-JAN-23
Rubidium (Rb)-Dissolved			105.8		%		80-120	18-JAN-23
Selenium (Se)-Dissolved			97.3		%		80-120	18-JAN-23
Silicon (Si)-Dissolved			95.6		%		60-140	18-JAN-23
Silver (Ag)-Dissolved			89.7		%		80-120	18-JAN-23
Sodium (Na)-Dissolved			105.0		%		80-120	18-JAN-23
Strontium (Sr)-Dissolved			97.0		%		80-120	18-JAN-23
Sulfur (S)-Dissolved			95.1		%		80-120	18-JAN-23
Tellurium (Te)-Dissolved			101.1		%		80-120	18-JAN-23
Thallium (Tl)-Dissolved			99.0		%		80-120	18-JAN-23
Thorium (Th)-Dissolved			93.8		%		80-120	18-JAN-23
Tin (Sn)-Dissolved			100.3		%		80-120	18-JAN-23
Titanium (Ti)-Dissolved			100.6		%		80-120	18-JAN-23
Tungsten (W)-Dissolved			97.1		%		80-120	18-JAN-23
Uranium (U)-Dissolved			95.2		%		80-120	18-JAN-23
Vanadium (V)-Dissolved			103.8		%		80-120	18-JAN-23
Zinc (Zn)-Dissolved			104.1		%		80-120	18-JAN-23
Zirconium (Zr)-Dissolved			95.3		%		80-120	18-JAN-23
WG3778601-1 MB								
Aluminum (Al)-Dissolved			0.0006		mg/L		0.005	18-JAN-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0006	18-JAN-23
Arsenic (As)-Dissolved			<0.0000002		mg/L		0.001	18-JAN-23
Barium (Ba)-Dissolved			0.000010		mg/L		0.01	18-JAN-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.001	18-JAN-23
Bismuth (Bi)-Dissolved			<0.000002		mg/L		0.001	18-JAN-23
Boron (B)-Dissolved			<0.0005		mg/L		0.05	18-JAN-23
Cadmium (Cd)-Dissolved			<0.0000005		mg/L		0.000017	18-JAN-23
Calcium (Ca)-Dissolved			0.014		mg/L		0.2	18-JAN-23
Cesium (Cs)-Dissolved			<0.0000005		mg/L		0.00001	18-JAN-23
Chromium (Cr)-Dissolved			<0.00001		mg/L		0.001	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 13 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch R5918616								
WG3778601-1 MB								
	Cobalt (Co)-Dissolved		<0.00002		mg/L		0.0005	18-JAN-23
	Copper (Cu)-Dissolved		0.00002		mg/L		0.001	18-JAN-23
	Iron (Fe)-Dissolved		<0.0005		mg/L		0.02	18-JAN-23
	Lead (Pb)-Dissolved		<0.00001		mg/L		0.00005	18-JAN-23
	Lithium (Li)-Dissolved		<0.0002		mg/L		0.05	18-JAN-23
	Magnesium (Mg)-Dissolved		0.0005		mg/L		0.02	18-JAN-23
	Manganese (Mn)-Dissolved		<0.00002		mg/L		0.001	18-JAN-23
	Molybdenum (Mo)-Dissolved		<0.00002		mg/L		0.001	18-JAN-23
	Nickel (Ni)-Dissolved		<0.00002		mg/L		0.002	18-JAN-23
	Phosphorus (P)-Dissolved		<0.005		mg/L		0.05	18-JAN-23
	Potassium (K)-Dissolved		<0.01		mg/L		0.5	18-JAN-23
	Rubidium (Rb)-Dissolved		<0.00002		mg/L		0.0002	18-JAN-23
	Selenium (Se)-Dissolved		<0.00005		mg/L		0.00005	18-JAN-23
	Silicon (Si)-Dissolved		<0.005		mg/L		0.05	18-JAN-23
	Silver (Ag)-Dissolved		<0.0000005		mg/L		0.0001	18-JAN-23
	Sodium (Na)-Dissolved		0.010		mg/L		0.1	18-JAN-23
	Strontium (Sr)-Dissolved		<0.00002		mg/L		0.001	18-JAN-23
	Sulfur (S)-Dissolved		<0.2		mg/L		0.5	18-JAN-23
	Tellurium (Te)-Dissolved		<0.00001		mg/L		0.001	18-JAN-23
	Thallium (Tl)-Dissolved		<0.00002		mg/L		0.0003	18-JAN-23
	Thorium (Th)-Dissolved		<0.00001		mg/L		0.0001	18-JAN-23
	Tin (Sn)-Dissolved		<0.00005		mg/L		0.001	18-JAN-23
	Titanium (Ti)-Dissolved		<0.00002		mg/L		0.002	18-JAN-23
	Tungsten (W)-Dissolved		<0.00002		mg/L		0.01	18-JAN-23
	Uranium (U)-Dissolved		<0.0000005		mg/L		0.005	18-JAN-23
	Vanadium (V)-Dissolved		<0.00002		mg/L		0.001	18-JAN-23
	Zinc (Zn)-Dissolved		<0.0002		mg/L		0.003	18-JAN-23
	Zirconium (Zr)-Dissolved		<0.00002		mg/L		0.001	18-JAN-23

MET-T-MISA-TB **Effluent**

Batch R5918556

WG3778418-3 DUP

L2744989-11

Aluminum (Al)-Total	0.0622	0.0804	DUP-H	mg/L	26	20	18-JAN-23
Antimony (Sb)-Total	0.000035	0.000035	RPD-NA	mg/L	N/A	20	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 14 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5918556							
WG3778418-3	DUP	L2744989-11						
Arsenic (As)-Total		0.00043	0.00046	RPD-NA	mg/L	N/A	20	18-JAN-23
Barium (Ba)-Total		0.00957	0.00969	RPD-NA	mg/L	N/A	20	18-JAN-23
Beryllium (Be)-Total		0.0000041	0.0000052	RPD-NA	mg/L	N/A	20	18-JAN-23
Bismuth (Bi)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	18-JAN-23
Boron (B)-Total		0.0025	0.0025	RPD-NA	mg/L	N/A	20	18-JAN-23
Cadmium (Cd)-Total		<0.000001	<0.000001	RPD-NA	mg/L	N/A	20	18-JAN-23
Calcium (Ca)-Total		8.50	8.48		mg/L	0.2	20	18-JAN-23
Cesium (Cs)-Total		0.0000070	0.0000060	RPD-NA	mg/L	N/A	20	18-JAN-23
Chromium (Cr)-Total		0.00052	0.00052	RPD-NA	mg/L	N/A	20	18-JAN-23
Cobalt (Co)-Total		0.000050	0.000055	RPD-NA	mg/L	N/A	20	18-JAN-23
Copper (Cu)-Total		0.00090	0.00090	RPD-NA	mg/L	N/A	20	18-JAN-23
Iron (Fe)-Total		0.160	0.176		mg/L	9.5	20	18-JAN-23
Lead (Pb)-Total		0.00006	0.00007		mg/L	7.6	20	18-JAN-23
Lithium (Li)-Total		0.0008	0.0008	RPD-NA	mg/L	N/A	20	18-JAN-23
Magnesium (Mg)-Total		2.96	2.94		mg/L	0.6	20	18-JAN-23
Manganese (Mn)-Total		0.0100	0.0100		mg/L	0.2	20	18-JAN-23
Molybdenum (Mo)-Total		0.000155	0.000130	RPD-NA	mg/L	N/A	20	18-JAN-23
Nickel (Ni)-Total		0.00082	0.00080	RPD-NA	mg/L	N/A	20	18-JAN-23
Phosphorus (P)-Total		0.010	0.015	RPD-NA	mg/L	N/A	20	18-JAN-23
Potassium (K)-Total		0.80	0.80		mg/L	0.3	20	18-JAN-23
Rubidium (Rb)-Total		0.00190	0.00197		mg/L	3.2	20	18-JAN-23
Selenium (Se)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-JAN-23
Silicon (Si)-Total		2.20	2.21		mg/L	0.4	20	18-JAN-23
Silver (Ag)-Total		<0.000001	<0.000001	RPD-NA	mg/L	N/A	20	18-JAN-23
Sodium (Na)-Total		3.18	3.15		mg/L	1.0	20	18-JAN-23
Strontium (Sr)-Total		0.0245	0.0247		mg/L	1.0	20	18-JAN-23
Sulfur (S)-Total		1.4	1.2		mg/L	7.0	20	18-JAN-23
Tellurium (Te)-Total		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	18-JAN-23
Thallium (Tl)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-JAN-23
Thorium (Th)-Total		0.00002	0.00002	RPD-NA	mg/L	N/A	20	18-JAN-23
Tin (Sn)-Total		0.00009	0.00010	RPD-NA	mg/L	N/A	20	18-JAN-23
Titanium (Ti)-Total		0.00166	0.00182	RPD-NA	mg/L	N/A	20	18-JAN-23
Tungsten (W)-Total		<0.00001	<0.00001		mg/L			18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 15 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5918556							
WG3778418-3	DUP	L2744989-11						
Tungsten (W)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	18-JAN-23
Uranium (U)-Total		0.0000800	0.0000820	RPD-NA	mg/L	N/A	20	18-JAN-23
Vanadium (V)-Total		0.00040	0.00045	RPD-NA	mg/L	N/A	20	18-JAN-23
Zinc (Zn)-Total		0.0015	0.0030	RPD-NA	mg/L	N/A	20	18-JAN-23
Zirconium (Zr)-Total		0.000114	0.000114	RPD-NA	mg/L	N/A	20	18-JAN-23
WG3778418-2	LCS							
Aluminum (Al)-Total			108.9		%		80-120	18-JAN-23
Antimony (Sb)-Total			100.2		%		80-120	18-JAN-23
Arsenic (As)-Total			108.2		%		80-120	18-JAN-23
Barium (Ba)-Total			102.1		%		80-120	18-JAN-23
Beryllium (Be)-Total			100.3		%		80-120	18-JAN-23
Bismuth (Bi)-Total			103.6		%		80-120	18-JAN-23
Boron (B)-Total			97.1		%		80-120	18-JAN-23
Cadmium (Cd)-Total			102.1		%		80-120	18-JAN-23
Calcium (Ca)-Total			101.2		%		80-120	18-JAN-23
Cesium (Cs)-Total			97.0		%		80-120	18-JAN-23
Chromium (Cr)-Total			102.7		%		80-120	18-JAN-23
Cobalt (Co)-Total			103.0		%		80-120	18-JAN-23
Copper (Cu)-Total			100.2		%		80-120	18-JAN-23
Iron (Fe)-Total			114.3		%		80-120	18-JAN-23
Lead (Pb)-Total			103.2		%		80-120	18-JAN-23
Lithium (Li)-Total			99.6		%		80-120	18-JAN-23
Magnesium (Mg)-Total			112.0		%		80-120	18-JAN-23
Manganese (Mn)-Total			105.0		%		80-120	18-JAN-23
Molybdenum (Mo)-Total			103.1		%		80-120	18-JAN-23
Nickel (Ni)-Total			101.5		%		80-120	18-JAN-23
Phosphorus (P)-Total			110.6		%		80-120	18-JAN-23
Potassium (K)-Total			108.5		%		80-120	18-JAN-23
Rubidium (Rb)-Total			105.2		%		80-120	18-JAN-23
Selenium (Se)-Total			102.4		%		80-120	18-JAN-23
Silicon (Si)-Total			104.8		%		80-120	18-JAN-23
Silver (Ag)-Total			93.0		%		80-120	18-JAN-23
Sodium (Na)-Total			104.6		%		80-120	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 16 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5918556							
WG3778418-2 LCS								
Strontium (Sr)-Total			96.5		%		80-120	18-JAN-23
Sulfur (S)-Total			101.5		%		80-120	18-JAN-23
Tellurium (Te)-Total			105.4		%		80-120	18-JAN-23
Thallium (Tl)-Total			101.3		%		80-120	18-JAN-23
Thorium (Th)-Total			99.7		%		80-120	18-JAN-23
Tin (Sn)-Total			104.1		%		80-120	18-JAN-23
Titanium (Ti)-Total			102.8		%		80-120	18-JAN-23
Tungsten (W)-Total			104.1		%		80-120	18-JAN-23
Uranium (U)-Total			102.9		%		80-120	18-JAN-23
Vanadium (V)-Total			105.9		%		80-120	18-JAN-23
Zinc (Zn)-Total			106.9		%		80-120	18-JAN-23
Zirconium (Zr)-Total			95.0		%		80-120	18-JAN-23
WG3778418-6 LCS								
Aluminum (Al)-Total			107.0		%		80-120	18-JAN-23
Antimony (Sb)-Total			104.7		%		80-120	18-JAN-23
Arsenic (As)-Total			109.1		%		80-120	18-JAN-23
Barium (Ba)-Total			102.7		%		80-120	18-JAN-23
Beryllium (Be)-Total			103.1		%		80-120	18-JAN-23
Bismuth (Bi)-Total			101.8		%		80-120	18-JAN-23
Boron (B)-Total			97.8		%		80-120	18-JAN-23
Cadmium (Cd)-Total			104.8		%		80-120	18-JAN-23
Calcium (Ca)-Total			103.9		%		80-120	18-JAN-23
Cesium (Cs)-Total			102.8		%		80-120	18-JAN-23
Chromium (Cr)-Total			101.9		%		80-120	18-JAN-23
Cobalt (Co)-Total			103.0		%		80-120	18-JAN-23
Copper (Cu)-Total			102.1		%		80-120	18-JAN-23
Iron (Fe)-Total			115.2		%		80-120	18-JAN-23
Lead (Pb)-Total			102.4		%		80-120	18-JAN-23
Lithium (Li)-Total			100.8		%		80-120	18-JAN-23
Magnesium (Mg)-Total			114.9		%		80-120	18-JAN-23
Manganese (Mn)-Total			104.2		%		80-120	18-JAN-23
Molybdenum (Mo)-Total			102.9		%		80-120	18-JAN-23
Nickel (Ni)-Total			102.9		%		80-120	18-JAN-23
Phosphorus (P)-Total			109.5		%		80-120	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 17 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5918556							
WG3778418-6	LCS							
Potassium (K)-Total			111.7		%		80-120	18-JAN-23
Rubidium (Rb)-Total			106.1		%		80-120	18-JAN-23
Selenium (Se)-Total			103.8		%		80-120	18-JAN-23
Silicon (Si)-Total			104.0		%		80-120	18-JAN-23
Silver (Ag)-Total			91.8		%		80-120	18-JAN-23
Sodium (Na)-Total			106.4		%		80-120	18-JAN-23
Strontium (Sr)-Total			98.0		%		80-120	18-JAN-23
Sulfur (S)-Total			107.4		%		80-120	18-JAN-23
Tellurium (Te)-Total			106.1		%		80-120	18-JAN-23
Thallium (Tl)-Total			103.2		%		80-120	18-JAN-23
Thorium (Th)-Total			97.6		%		80-120	18-JAN-23
Tin (Sn)-Total			103.2		%		80-120	18-JAN-23
Titanium (Ti)-Total			104.2		%		80-120	18-JAN-23
Tungsten (W)-Total			102.9		%		80-120	18-JAN-23
Uranium (U)-Total			100.9		%		80-120	18-JAN-23
Vanadium (V)-Total			105.0		%		80-120	18-JAN-23
Zinc (Zn)-Total			108.6		%		80-120	18-JAN-23
Zirconium (Zr)-Total			97.4		%		80-120	18-JAN-23
WG3778418-1	MB							
Aluminum (Al)-Total			0.0018		mg/L		0.005	18-JAN-23
Antimony (Sb)-Total			0.000005		mg/L		0.0006	18-JAN-23
Arsenic (As)-Total			<0.00001		mg/L		0.001	18-JAN-23
Barium (Ba)-Total			0.00002		mg/L		0.01	18-JAN-23
Beryllium (Be)-Total			<0.0000001		mg/L		0.001	18-JAN-23
Bismuth (Bi)-Total			<0.00001		mg/L		0.001	18-JAN-23
Boron (B)-Total			0.0010		mg/L		0.05	18-JAN-23
Cadmium (Cd)-Total			<0.000001		mg/L		0.000017	18-JAN-23
Calcium (Ca)-Total			<0.002		mg/L		0.2	18-JAN-23
Cesium (Cs)-Total			<0.0000005		mg/L		0.00001	18-JAN-23
Chromium (Cr)-Total			0.00004		mg/L		0.001	18-JAN-23
Cobalt (Co)-Total			<0.000005		mg/L		0.0005	18-JAN-23
Copper (Cu)-Total			0.00002		mg/L		0.001	18-JAN-23
Iron (Fe)-Total			0.0010		mg/L		0.02	18-JAN-23
Lead (Pb)-Total			<0.00001		mg/L		0.00005	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 18 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5918556							
WG3778418-1 MB								
Lithium (Li)-Total			0.0006		mg/L		0.05	18-JAN-23
Magnesium (Mg)-Total			0.0008		mg/L		0.02	18-JAN-23
Manganese (Mn)-Total			<0.0002		mg/L		0.001	18-JAN-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.001	18-JAN-23
Nickel (Ni)-Total			<0.00002		mg/L		0.002	18-JAN-23
Phosphorus (P)-Total			<0.005		mg/L		0.05	18-JAN-23
Potassium (K)-Total			<0.01		mg/L		0.5	18-JAN-23
Rubidium (Rb)-Total			<0.000002		mg/L		0.0002	18-JAN-23
Selenium (Se)-Total			<0.000005		mg/L		0.00005	18-JAN-23
Silicon (Si)-Total			0.034		mg/L		0.1	18-JAN-23
Silver (Ag)-Total			<0.000001		mg/L		0.0001	18-JAN-23
Sodium (Na)-Total			<0.005		mg/L		0.1	18-JAN-23
Strontium (Sr)-Total			0.000010		mg/L		0.001	18-JAN-23
Sulfur (S)-Total			<0.2		mg/L		0.5	18-JAN-23
Tellurium (Te)-Total			<0.00002		mg/L		0.001	18-JAN-23
Thallium (Tl)-Total			<0.000005		mg/L		0.0003	18-JAN-23
Thorium (Th)-Total			<0.00001		mg/L		0.0001	18-JAN-23
Tin (Sn)-Total			<0.00001		mg/L		0.001	18-JAN-23
Titanium (Ti)-Total			<0.00001		mg/L		0.002	18-JAN-23
Tungsten (W)-Total			<0.00001		mg/L		0.01	18-JAN-23
Uranium (U)-Total			<0.0000005		mg/L		0.005	18-JAN-23
Vanadium (V)-Total			0.00005		mg/L		0.001	18-JAN-23
Zinc (Zn)-Total			0.0005		mg/L		0.003	18-JAN-23
Zirconium (Zr)-Total			<0.000002		mg/L		0.001	18-JAN-23
WG3778418-5 MB								
Aluminum (Al)-Total			0.0022		mg/L		0.005	18-JAN-23
Antimony (Sb)-Total			<0.000005		mg/L		0.0006	18-JAN-23
Arsenic (As)-Total			<0.00001		mg/L		0.001	18-JAN-23
Barium (Ba)-Total			<0.00001		mg/L		0.01	18-JAN-23
Beryllium (Be)-Total			<0.0000001		mg/L		0.001	18-JAN-23
Bismuth (Bi)-Total			<0.00001		mg/L		0.001	18-JAN-23
Boron (B)-Total			0.0010		mg/L		0.05	18-JAN-23
Cadmium (Cd)-Total			<0.000001		mg/L		0.000017	18-JAN-23
Calcium (Ca)-Total			<0.002		mg/L		0.2	18-JAN-23



Environmental

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 19 of 28

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5918556							
WG3778418-5 MB								
Cesium (Cs)-Total			<0.0000005		mg/L		0.00001	18-JAN-23
Chromium (Cr)-Total			0.00010		mg/L		0.001	18-JAN-23
Cobalt (Co)-Total			<0.000005		mg/L		0.0005	18-JAN-23
Copper (Cu)-Total			0.00008		mg/L		0.001	18-JAN-23
Iron (Fe)-Total			0.0030		mg/L		0.02	18-JAN-23
Lead (Pb)-Total			<0.00001		mg/L		0.00005	18-JAN-23
Lithium (Li)-Total			0.0006		mg/L		0.05	18-JAN-23
Magnesium (Mg)-Total			0.0008		mg/L		0.02	18-JAN-23
Manganese (Mn)-Total			<0.0002		mg/L		0.001	18-JAN-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.001	18-JAN-23
Nickel (Ni)-Total			<0.00002		mg/L		0.002	18-JAN-23
Phosphorus (P)-Total			<0.005		mg/L		0.05	18-JAN-23
Potassium (K)-Total			<0.01		mg/L		0.5	18-JAN-23
Rubidium (Rb)-Total			<0.000002		mg/L		0.0002	18-JAN-23
Selenium (Se)-Total			<0.000005		mg/L		0.00005	18-JAN-23
Silicon (Si)-Total			0.030		mg/L		0.1	18-JAN-23
Silver (Ag)-Total			<0.000001		mg/L		0.0001	18-JAN-23
Sodium (Na)-Total			<0.005		mg/L		0.1	18-JAN-23
Strontium (Sr)-Total			0.000005		mg/L		0.001	18-JAN-23
Sulfur (S)-Total			<0.2		mg/L		0.5	18-JAN-23
Tellurium (Te)-Total			<0.00002		mg/L		0.001	18-JAN-23
Thallium (Tl)-Total			<0.000005		mg/L		0.0003	18-JAN-23
Thorium (Th)-Total			<0.00001		mg/L		0.0001	18-JAN-23
Tin (Sn)-Total			<0.00001		mg/L		0.001	18-JAN-23
Titanium (Ti)-Total			<0.00001		mg/L		0.002	18-JAN-23
Tungsten (W)-Total			<0.00001		mg/L		0.01	18-JAN-23
Uranium (U)-Total			<0.0000005		mg/L		0.005	18-JAN-23
Vanadium (V)-Total			<0.00005		mg/L		0.001	18-JAN-23
Zinc (Zn)-Total			<0.0005		mg/L		0.003	18-JAN-23
Zirconium (Zr)-Total			0.000002		mg/L		0.001	18-JAN-23
WG3778418-4 MS		L2744989-12						
Aluminum (Al)-Total			126.4		%		70-130	18-JAN-23
Antimony (Sb)-Total			97.2		%		70-130	18-JAN-23
Arsenic (As)-Total			104.8		%		70-130	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 20 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5918556							
WG3778418-4 MS		L2744989-12						
Barium (Ba)-Total			103.1		%		70-130	18-JAN-23
Beryllium (Be)-Total			108.6		%		70-130	18-JAN-23
Bismuth (Bi)-Total			98.1		%		70-130	18-JAN-23
Boron (B)-Total			105.6		%		70-130	18-JAN-23
Cadmium (Cd)-Total			107.4		%		70-130	18-JAN-23
Calcium (Ca)-Total			N/A	MS-B	%		-	18-JAN-23
Cesium (Cs)-Total			103.1		%		70-130	18-JAN-23
Chromium (Cr)-Total			107.2		%		70-130	18-JAN-23
Cobalt (Co)-Total			105.1		%		70-130	18-JAN-23
Copper (Cu)-Total			106.4		%		70-130	18-JAN-23
Iron (Fe)-Total			102.0		%		70-130	18-JAN-23
Lead (Pb)-Total			103.8		%		70-130	18-JAN-23
Lithium (Li)-Total			103.3		%		70-130	18-JAN-23
Magnesium (Mg)-Total			N/A	MS-B	%		-	18-JAN-23
Manganese (Mn)-Total			107.0		%		70-130	18-JAN-23
Molybdenum (Mo)-Total			113.1		%		70-130	18-JAN-23
Nickel (Ni)-Total			107.2		%		70-130	18-JAN-23
Phosphorus (P)-Total			104.9		%		70-130	18-JAN-23
Potassium (K)-Total			106.6		%		70-130	18-JAN-23
Rubidium (Rb)-Total			105.7		%		70-130	18-JAN-23
Selenium (Se)-Total			105.1		%		70-130	18-JAN-23
Silicon (Si)-Total			97.4		%		70-130	18-JAN-23
Silver (Ag)-Total			98.1		%		70-130	18-JAN-23
Sodium (Na)-Total			N/A	MS-B	%		-	18-JAN-23
Strontium (Sr)-Total			N/A	MS-B	%		-	18-JAN-23
Sulfur (S)-Total			101.0		%		70-130	18-JAN-23
Tellurium (Te)-Total			105.8		%		70-130	18-JAN-23
Thallium (Tl)-Total			96.3		%		70-130	18-JAN-23
Thorium (Th)-Total			98.8		%		70-130	18-JAN-23
Tin (Sn)-Total			105.1		%		70-130	18-JAN-23
Titanium (Ti)-Total			111.6		%		70-130	18-JAN-23
Tungsten (W)-Total			106.9		%		70-130	18-JAN-23
Uranium (U)-Total			100.7		%		70-130	18-JAN-23



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 21 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5918556							
WG3778418-4	MS	L2744989-12						
Vanadium (V)-Total			106.8		%		70-130	18-JAN-23
Zinc (Zn)-Total			108.2		%		70-130	18-JAN-23
Zirconium (Zr)-Total			108.5		%		70-130	18-JAN-23
NH3-MISA-F-TB								
	Effluent							
Batch	R5917779							
WG3778198-3	DUP	L2744989-1						
Ammonia, Total (as N)		0.064	0.062		mg/L	1.1	20	16-JAN-23
WG3778198-2	LCS							
Ammonia, Total (as N)			97.8		%		85-115	16-JAN-23
WG3778198-1	MB							
Ammonia, Total (as N)			0.008	MB-LOR	mg/L		0.005	16-JAN-23
WG3778198-4	MS	L2744989-2						
Ammonia, Total (as N)			104.1		%		75-125	16-JAN-23
NO2-MISA-IC-TB								
	Effluent							
Batch	R5916997							
WG3778233-3	DUP	L2744989-1						
Nitrite (as N)		<0.001	<0.001	RPD-NA	mg/L	N/A	20	13-JAN-23
WG3778233-2	LCS							
Nitrite (as N)			102.9		%		90-110	13-JAN-23
WG3778233-1	MB							
Nitrite (as N)			0.001		mg/L		0.01	13-JAN-23
WG3778233-4	MS	L2744989-2						
Nitrite (as N)			92.3		%		75-125	13-JAN-23
NO3-MISA-IC-TB								
	Effluent							
Batch	R5916997							
WG3778233-3	DUP	L2744989-1						
Nitrate (as N)		0.024	0.028		mg/L	14	20	13-JAN-23
WG3778233-2	LCS							
Nitrate (as N)			101.7		%		90-110	13-JAN-23
WG3778233-1	MB							
Nitrate (as N)			<0.002		mg/L		0.02	13-JAN-23
WG3778233-4	MS	L2744989-2						
Nitrate (as N)			101.8		%		75-125	13-JAN-23
OGG-TOT-WT	Effluent							



Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Page 22 of 28

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
OGG-TOT-WT		Effluent						
Batch	R5917860							
WG3778325-2	LCS							
Oil and Grease, Total			97.8		%		50-150	17-JAN-23
WG3778325-1	MB							
Oil and Grease, Total			0.4		mg/L		1	17-JAN-23
PH-MISA-TB		Effluent						
Batch	R5917959							
WG3778229-3	DUP	L2744989-1						
pH		7.27	7.29	J	pH	0.02	0.2	17-JAN-23
WG3778229-2	LCS							
pH			6.95		pH		6.9-7.1	17-JAN-23
SO4-MISA-IC-TB		Effluent						
Batch	R5916997							
WG3778233-3	DUP	L2744989-1						
Sulfate (SO4)		0.10	0.10	RPD-NA	mg/L	N/A	20	13-JAN-23
WG3778233-2	LCS							
Sulfate (SO4)			103.3		%		90-110	13-JAN-23
WG3778233-1	MB							
Sulfate (SO4)			0.05		mg/L		0.3	13-JAN-23
WG3778233-4	MS	L2744989-2						
Sulfate (SO4)			104.3		%		75-125	13-JAN-23
TDS-MISA-TB		Effluent						
Batch	R5917619							
WG3778221-3	DUP	L2744989-22						
Total Dissolved Solids		<2	<2	RPD-NA	mg/L	N/A	20	14-JAN-23
WG3778221-2	LCS							
Total Dissolved Solids			95.0		%		85-115	14-JAN-23
WG3778221-1	MB							
Total Dissolved Solids			4		mg/L		10	14-JAN-23
TSS-MISA-TB		Effluent						
Batch	R5917596							
WG3778222-3	DUP	L2744989-22						
Total Suspended Solids		<0.5	<0.5	RPD-NA	mg/L	N/A	20	14-JAN-23
WG3778222-2	LCS							
Total Suspended Solids			107.2		%		85-115	14-JAN-23
WG3778222-1	MB							
Total Suspended Solids			<0.5		mg/L		3	14-JAN-23

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 23 of 28

Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
J	Duplicate results and limits are expressed in terms of absolute difference.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Page 24 of 28

Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Colour, True							
	1	07-JAN-23 08:30	14-JAN-23 11:00	3	7	days	EHTR
	2	07-JAN-23 10:45	14-JAN-23 11:00	3	7	days	EHTR
	4	07-JAN-23 11:10	14-JAN-23 11:00	3	7	days	EHTR
	5	07-JAN-23 11:50	14-JAN-23 11:00	3	7	days	EHTR
	6	07-JAN-23 12:00	14-JAN-23 11:00	3	7	days	EHTR
	7	07-JAN-23 15:00	14-JAN-23 11:00	3	7	days	EHTR
	8	07-JAN-23 15:25	14-JAN-23 11:00	3	7	days	EHTR
	9	08-JAN-23 11:15	14-JAN-23 11:00	3	6	days	EHTR
	10	08-JAN-23 11:45	14-JAN-23 11:00	3	6	days	EHTR
	11	08-JAN-23 12:00	14-JAN-23 11:00	3	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 11:00	3	6	days	EHTR
	13	08-JAN-23 14:55	14-JAN-23 11:00	3	6	days	EHTR
	15	08-JAN-23 15:05	14-JAN-23 11:00	3	6	days	EHTR
	17	09-JAN-23 11:50	14-JAN-23 11:00	3	5	days	EHTR
	18	09-JAN-23 12:30	14-JAN-23 11:00	3	5	days	EHTR
	20	09-JAN-23 14:15	14-JAN-23 11:00	3	5	days	EHTR
	21	09-JAN-23 14:45	14-JAN-23 11:00	3	5	days	EHTR
Conductivity (EC)							
	1	07-JAN-23 08:30	14-JAN-23 11:00	4	7	days	EHTR
	2	07-JAN-23 10:45	14-JAN-23 11:00	4	7	days	EHTR
	4	07-JAN-23 11:10	14-JAN-23 11:00	4	7	days	EHTR
	5	07-JAN-23 11:50	14-JAN-23 11:00	4	7	days	EHTR
	6	07-JAN-23 12:00	14-JAN-23 11:00	4	7	days	EHTR
	7	07-JAN-23 15:00	14-JAN-23 11:00	4	7	days	EHTR
	8	07-JAN-23 15:25	14-JAN-23 11:00	4	7	days	EHTR
	9	08-JAN-23 11:15	14-JAN-23 11:00	4	6	days	EHTR
	10	08-JAN-23 11:45	14-JAN-23 11:00	4	6	days	EHTR
	11	08-JAN-23 12:00	14-JAN-23 11:00	4	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 11:00	4	6	days	EHTR
	13	08-JAN-23 14:55	14-JAN-23 11:00	4	6	days	EHTR
	15	08-JAN-23 15:05	14-JAN-23 11:00	4	6	days	EHTR
	17	09-JAN-23 11:50	14-JAN-23 11:00	4	5	days	EHTL
	18	09-JAN-23 12:30	14-JAN-23 11:00	4	5	days	EHTL
	20	09-JAN-23 14:15	14-JAN-23 11:00	4	5	days	EHTL
	21	09-JAN-23 14:45	14-JAN-23 11:00	4	5	days	EHTL
	22	12-JAN-23 12:00	17-JAN-23 11:00	4	5	days	EHT
Turbidity							
	1	07-JAN-23 08:30	14-JAN-23 12:00	3	7	days	EHTR
	2	07-JAN-23 10:45	14-JAN-23 12:00	3	7	days	EHTR
	4	07-JAN-23 11:10	14-JAN-23 12:00	3	7	days	EHTR
	5	07-JAN-23 11:50	14-JAN-23 12:00	3	7	days	EHTR
	6	07-JAN-23 12:00	14-JAN-23 12:00	3	7	days	EHTR
	7	07-JAN-23 15:00	14-JAN-23 12:00	3	7	days	EHTR
	8	07-JAN-23 15:25	14-JAN-23 14:10	3	7	days	EHTR
	9	08-JAN-23 11:15	14-JAN-23 14:10	3	6	days	EHTR
	10	08-JAN-23 11:45	14-JAN-23 14:10	3	6	days	EHTR
	11	08-JAN-23 12:00	14-JAN-23 14:10	3	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 14:10	3	6	days	EHTR
	13	08-JAN-23 14:55	14-JAN-23 14:10	3	6	days	EHTR
	15	08-JAN-23 15:05	14-JAN-23 14:10	3	6	days	EHTR
	17	09-JAN-23 11:50	14-JAN-23 14:10	3	5	days	EHTR
	18	09-JAN-23 12:30	14-JAN-23 14:10	3	5	days	EHTR

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Page 25 of 28

Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Turbidity	20	09-JAN-23 14:15	14-JAN-23 14:10	3	5	days	EHTR
	21	09-JAN-23 14:45	14-JAN-23 14:10	3	5	days	EHTR
pH	1	07-JAN-23 08:30	14-JAN-23 11:00	4	7	days	EHTR
	2	07-JAN-23 10:45	14-JAN-23 11:00	4	7	days	EHTR
	4	07-JAN-23 11:10	14-JAN-23 11:00	4	7	days	EHTR
	5	07-JAN-23 11:50	14-JAN-23 11:00	4	7	days	EHTR
	6	07-JAN-23 12:00	14-JAN-23 11:00	4	7	days	EHTR
	7	07-JAN-23 15:00	14-JAN-23 11:00	4	7	days	EHTR
	8	07-JAN-23 15:25	14-JAN-23 11:00	4	7	days	EHTR
	9	08-JAN-23 11:15	14-JAN-23 11:00	4	6	days	EHTR
	10	08-JAN-23 11:45	14-JAN-23 11:00	4	6	days	EHTR
	11	08-JAN-23 12:00	14-JAN-23 11:00	4	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 11:00	4	6	days	EHTR
	13	08-JAN-23 14:55	14-JAN-23 11:00	4	6	days	EHTR
	15	08-JAN-23 15:05	14-JAN-23 11:00	4	6	days	EHTR
	17	09-JAN-23 11:50	14-JAN-23 11:00	4	5	days	EHTL
	18	09-JAN-23 12:30	14-JAN-23 11:00	4	5	days	EHTL
	20	09-JAN-23 14:15	14-JAN-23 11:00	4	5	days	EHTL
	21	09-JAN-23 14:45	14-JAN-23 11:00	4	5	days	EHTL
	22	12-JAN-23 12:00	17-JAN-23 11:00	4	5	days	EHT
Leachable Anions & Nutrients							
Nitrate in Water by IC	1	07-JAN-23 08:30	13-JAN-23 13:43	5	6	days	EHTR
	2	07-JAN-23 10:45	13-JAN-23 13:43	5	6	days	EHTR
	4	07-JAN-23 11:10	13-JAN-23 13:43	5	6	days	EHTR
	5	07-JAN-23 11:50	13-JAN-23 13:43	5	6	days	EHTR
	6	07-JAN-23 12:00	13-JAN-23 13:43	5	6	days	EHTR
	7	07-JAN-23 15:00	13-JAN-23 13:43	5	6	days	EHTR
	8	07-JAN-23 15:25	13-JAN-23 13:43	5	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 11:00	5	6	days	EHTL
	13	08-JAN-23 14:55	14-JAN-23 11:00	5	6	days	EHTL
	15	08-JAN-23 15:05	14-JAN-23 11:00	5	6	days	EHTL
Nitrite in Water by IC	1	07-JAN-23 08:30	13-JAN-23 13:43	5	6	days	EHTR
	2	07-JAN-23 10:45	13-JAN-23 13:43	5	6	days	EHTR
	4	07-JAN-23 11:10	13-JAN-23 13:43	5	6	days	EHTR
	5	07-JAN-23 11:50	13-JAN-23 13:43	5	6	days	EHTR
	6	07-JAN-23 12:00	13-JAN-23 13:43	5	6	days	EHTR
	7	07-JAN-23 15:00	13-JAN-23 13:43	5	6	days	EHTR
	8	07-JAN-23 15:25	13-JAN-23 13:43	5	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 11:00	5	6	days	EHTL
	13	08-JAN-23 14:55	14-JAN-23 11:00	5	6	days	EHTL
	15	08-JAN-23 15:05	14-JAN-23 11:00	5	6	days	EHTL
Anions and Nutrients							
Filtr./Pres. for Carbons Subcontract	1	07-JAN-23 08:30	14-JAN-23 17:00	3	7	days	EHTR
	2	07-JAN-23 10:45	14-JAN-23 17:00	3	7	days	EHTR
	4	07-JAN-23 11:10	14-JAN-23 17:00	3	7	days	EHTR
	5	07-JAN-23 11:50	14-JAN-23 17:00	3	7	days	EHTR
	6	07-JAN-23 12:00	14-JAN-23 17:00	3	7	days	EHTR

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Page 26 of 28

Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Anions and Nutrients							
Filtr./Pres. for Carbons Subcontract							
	7	07-JAN-23 15:00	14-JAN-23 17:00	3	7	days	EHTR
	8	07-JAN-23 15:25	14-JAN-23 17:00	3	7	days	EHTR
	9	08-JAN-23 11:15	14-JAN-23 17:00	3	6	days	EHTR
	10	08-JAN-23 11:45	14-JAN-23 17:00	3	6	days	EHTR
	11	08-JAN-23 12:00	14-JAN-23 17:00	3	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 17:00	3	6	days	EHTR
	13	08-JAN-23 14:55	14-JAN-23 17:00	3	6	days	EHTR
	15	08-JAN-23 15:05	14-JAN-23 17:00	3	6	days	EHTR
	17	09-JAN-23 11:50	14-JAN-23 17:00	3	5	days	EHTR
	18	09-JAN-23 12:30	14-JAN-23 17:00	3	5	days	EHTR
	20	09-JAN-23 14:15	14-JAN-23 17:00	3	5	days	EHTR
	21	09-JAN-23 14:45	14-JAN-23 17:00	3	5	days	EHTR
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	1	07-JAN-23 08:30	18-JAN-23 00:00	7	11	days	EHTL
	2	07-JAN-23 10:45	18-JAN-23 00:00	7	11	days	EHTL
	4	07-JAN-23 11:10	18-JAN-23 00:00	7	11	days	EHTL
	5	07-JAN-23 11:50	18-JAN-23 00:00	7	11	days	EHT
	6	07-JAN-23 12:00	18-JAN-23 00:00	7	11	days	EHT
	7	07-JAN-23 15:00	18-JAN-23 00:00	7	10	days	EHT
	8	07-JAN-23 15:25	18-JAN-23 00:00	7	10	days	EHT
	9	08-JAN-23 11:15	18-JAN-23 00:00	7	10	days	EHT
	10	08-JAN-23 11:45	18-JAN-23 00:00	7	10	days	EHT
	11	08-JAN-23 12:00	18-JAN-23 00:00	7	10	days	EHT
	12	08-JAN-23 13:45	18-JAN-23 00:00	7	9	days	EHT
	13	08-JAN-23 14:55	18-JAN-23 00:00	7	9	days	EHT
	15	08-JAN-23 15:05	18-JAN-23 00:00	7	9	days	EHT
	17	09-JAN-23 11:50	18-JAN-23 00:00	7	9	days	EHT
	18	09-JAN-23 12:30	18-JAN-23 00:00	7	8	days	EHT
	20	09-JAN-23 14:15	18-JAN-23 00:00	7	8	days	EHT
	21	09-JAN-23 14:45	18-JAN-23 00:00	7	8	days	EHT
Organic / Inorganic Carbon							
Dissolved Organic Carbon for MISA							
	1	07-JAN-23 08:30	19-JAN-23 00:00	3	12	days	EHTR
	1	07-JAN-23 08:30	19-JAN-23 00:00	10	12	days	EHT
	2	07-JAN-23 10:45	19-JAN-23 00:00	3	12	days	EHTR
	2	07-JAN-23 10:45	19-JAN-23 00:00	10	12	days	EHT
	4	07-JAN-23 11:10	19-JAN-23 00:00	3	12	days	EHTR
	4	07-JAN-23 11:10	19-JAN-23 00:00	10	12	days	EHT
	5	07-JAN-23 11:50	19-JAN-23 00:00	3	12	days	EHTR
	5	07-JAN-23 11:50	19-JAN-23 00:00	10	12	days	EHT
	6	07-JAN-23 12:00	19-JAN-23 00:00	3	12	days	EHTR
	6	07-JAN-23 12:00	19-JAN-23 00:00	10	12	days	EHT
	7	07-JAN-23 15:00	19-JAN-23 00:00	3	11	days	EHTR
	7	07-JAN-23 15:00	19-JAN-23 00:00	10	11	days	EHT
	8	07-JAN-23 15:25	19-JAN-23 00:00	3	11	days	EHTR
	8	07-JAN-23 15:25	19-JAN-23 00:00	10	11	days	EHT
	9	08-JAN-23 11:15	19-JAN-23 00:00	3	11	days	EHTR
	9	08-JAN-23 11:15	19-JAN-23 00:00	10	11	days	EHT
	10	08-JAN-23 11:45	19-JAN-23 00:00	3	11	days	EHTR
	10	08-JAN-23 11:45	19-JAN-23 00:00	10	11	days	EHT
	11	08-JAN-23 12:00	19-JAN-23 00:00	3	11	days	EHTR

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Organic / Inorganic Carbon							
Dissolved Organic Carbon for MISA							
	11	08-JAN-23 12:00	19-JAN-23 00:00	10	11	days	EHT
	12	08-JAN-23 13:45	19-JAN-23 00:00	3	10	days	EHTR
	13	08-JAN-23 14:55	19-JAN-23 00:00	3	10	days	EHTR
	15	08-JAN-23 15:05	19-JAN-23 00:00	3	10	days	EHTR
	17	09-JAN-23 11:50	19-JAN-23 00:00	3	10	days	EHTR
	18	09-JAN-23 12:30	19-JAN-23 00:00	3	9	days	EHTR
	20	09-JAN-23 14:15	19-JAN-23 00:00	3	9	days	EHTR
	21	09-JAN-23 14:45	19-JAN-23 00:00	3	9	days	EHTR
Metals							
Dissolved Orthophosphate							
	2	07-JAN-23 10:45	17-JAN-23 13:50	7	10	days	EHTL
	4	07-JAN-23 11:10	17-JAN-23 13:50	7	10	days	EHTL
	5	07-JAN-23 11:50	17-JAN-23 13:50	7	10	days	EHT
	6	07-JAN-23 12:00	17-JAN-23 13:50	7	10	days	EHT
	7	07-JAN-23 15:00	17-JAN-23 13:50	7	10	days	EHT
	8	07-JAN-23 15:25	17-JAN-23 13:50	7	10	days	EHT
	9	08-JAN-23 11:15	17-JAN-23 13:50	7	9	days	EHT
	10	08-JAN-23 11:45	17-JAN-23 13:50	7	9	days	EHT
	11	08-JAN-23 12:00	17-JAN-23 13:50	7	9	days	EHT
	12	08-JAN-23 13:45	17-JAN-23 13:50	7	9	days	EHT
	13	08-JAN-23 14:55	17-JAN-23 13:50	7	9	days	EHT
	15	08-JAN-23 15:05	17-JAN-23 13:50	7	9	days	EHT
	17	09-JAN-23 11:50	17-JAN-23 13:50	7	8	days	EHT
	18	09-JAN-23 12:30	17-JAN-23 13:50	7	8	days	EHT
	20	09-JAN-23 14:15	17-JAN-23 13:50	7	8	days	EHT
	21	09-JAN-23 14:45	17-JAN-23 13:50	7	8	days	EHT
Aggregate Organics							
Biochemical Oxygen Demand (BOD)							
	1	07-JAN-23 08:30	13-JAN-23 11:38	4	6	days	EHTR
	2	07-JAN-23 10:45	13-JAN-23 11:38	4	6	days	EHTR
	4	07-JAN-23 11:10	13-JAN-23 11:38	4	6	days	EHTR
	5	07-JAN-23 11:50	13-JAN-23 11:38	4	6	days	EHTR
	6	07-JAN-23 12:00	13-JAN-23 11:38	4	6	days	EHTR
	7	07-JAN-23 15:00	13-JAN-23 11:38	4	6	days	EHTR
	8	07-JAN-23 15:25	14-JAN-23 10:28	4	7	days	EHTR
	9	08-JAN-23 11:15	14-JAN-23 10:28	4	6	days	EHTR
	10	08-JAN-23 11:45	14-JAN-23 10:28	4	6	days	EHTR
	11	08-JAN-23 12:00	14-JAN-23 10:28	4	6	days	EHTR
	12	08-JAN-23 13:45	14-JAN-23 10:28	4	6	days	EHTR
	13	08-JAN-23 14:55	14-JAN-23 10:28	4	6	days	EHTR
	15	08-JAN-23 15:05	14-JAN-23 10:28	4	6	days	EHTR
	17	09-JAN-23 11:50	14-JAN-23 10:28	4	5	days	EHTL
	18	09-JAN-23 12:30	14-JAN-23 10:28	4	5	days	EHTL
	20	09-JAN-23 14:15	14-JAN-23 10:28	4	5	days	EHTL
	21	09-JAN-23 14:45	14-JAN-23 10:28	4	5	days	EHTL

Legend & Qualifier Definitions:

Quality Control Report

Workorder: L2744989

Report Date: 31-JAN-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Page 28 of 28

Contact: Garnet Cornell

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2744989 were received on 13-JAN-23 11:30.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

SRC Group # 2023-648

Jan 27, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Jan-17-2023

Client P.O.: L2744989

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-648

Jan 27, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023001476	Client PO #:	L2744989
Date Sampled:	Jan 07, 2023	Date Received:	Jan 17, 2023
Sample Matrix:	WATER		
Description:	01/07/2023 SW20_SW_20230107 L2744989-3		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.03	0.005

The temperature of the cooler was 11.8 °C upon receipt.

SRC Group # 2023-648

Jan 27, 2023

ALS, Thunder Bay Analytical

Sample #: **2023001477** Client PO #: **L2744989**
 Date Sampled: **Jan 08, 2023** Date Received: **Jan 17, 2023**
 Sample Matrix: **WATER**
 Description: **01/08/2023 SW23_SW_20230107 L2744989-14**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 11.8 °C upon receipt.

SRC Group # 2023-648

Jan 27, 2023

ALS, Thunder Bay Analytical

Sample #: **2023001478** Client PO #: **L2744989**
 Date Sampled: **Jan 08, 2023** Date Received: **Jan 17, 2023**
 Sample Matrix: **WATER**
 Description: **01/08/2023 SW24_SW_20230107 L2744989-16**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.005	0.005

The temperature of the cooler was 11.8 °C upon receipt.

ALS, Thunder Bay Analytical

Sample #: **2023001479** Client PO #: **L2744989**
 Date Sampled: **Jan 09, 2023** Date Received: **Jan 17, 2023**
 Sample Matrix: **WATER**
 Description: **01/09/2023 SW22A_SW_20230107 L2744989-19**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 11.8 °C upon receipt.

SRC Group # 2023-648

Jan 27, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105



10744080 0050

CHAIN OF CUSTODY RECORD - ALS-449367359

L2744989.

Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 1/10/2023 5:39:00 PM
COC Number: ALS-449367359

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Filtered	Preservatives	SW Kit	Ra-226 Bottle	Number of Containers	Comments
						NG-SW-P-TB	RA226-MIMER-BE						
1 SW02_SW_20230107	4.28	7.93	0.15	01/07/2023 08:30	SW	X						12	
2 SW20_SW_20230107	3.05	8.11	0.27	01/07/2023 10:45	SW	X						12	
3 SW20_SW_20230107	3.05	8.11	0.27	01/07/2023 10:45	SW		X					12	
4 SW10_SW_20230107	1.4	8.13	-0.71	01/07/2023 11:10	SW	X						11	
5 SW03_SW_20230107	1.43	8.05	-0.73	01/07/2023 11:50	SW	X						11	
6 FB_SW_20230107				01/07/2023 12:00	SW	X						11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	1/10/2023 5:39:00 PM	Method of Shipment: Courier	5.9°	Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
		On Ice: yes / no	4.2°	
		Shipped: Air/Ground	5.9°	
Received by: LV	1/13/23 11:30	Lab Name: ALS Thunder Bay	3.6°	
		Lab Phone:	4.8°	

Monistoulin

5 Coolers

+ Ice Pack



Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 1/10/2023 5:39:00 PM
COC Number: ALS-449367359

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
						Filtered	N	N	
						Preservatives			
						NG-SW-P-TB	RA226-MMER-BE		
7 SW25_SW_20230107	9.38	8.76	-0.64	01/07/2023 15:00	SW	X			11
8 SW26_SW_20230107	8.12	8.59	-0.58	01/07/2023 15:25	SW	X			11
9 SW15_SW_20230107	5.05	7.94	0.83	01/08/2023 11:15	SW	X			11
10 SW17_SW_20230107	9.75	8.58	-0.74	01/08/2023 11:45	SW	X			11
11 SW06_SW_20230107				01/08/2023 12:00	SW	X			11
12 SW16_SW_20230107	10.08	7.77	0.65	01/08/2023 13:45	SW	X			11

Signature Shipped by _____ Received by _____	Date/Time 1/10/2023 5:39:00 PM	Shipping Details Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	ATTN	Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com



Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 1/10/2023 5:39:00 PM
 COC Number: ALS-449367359

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
						Filtered	N	N	
						Preservatives			
						NG-SW-P-TB		RA226-MMER-BE	
13 SW23_SW_20230107	3.09	7.75	0.53	01/08/2023 14:55	SW	X			12
14 SW23_SW_20230107	3.09	7.75	0.53	01/08/2023 14:55	SW		X		12
15 SW24_SW_20230107	2.97	7.66	-0.65	01/08/2023 15:05	SW	X			12
16 SW24_SW_20230107	2.97	7.66	-0.65	01/08/2023 15:05	SW		X		12
17 SW28A_SW_20230107	8.93	8.43	-0.35	01/09/2023 11:50	SW	X			11
18 SW22A_SW_20230107	0	8.14	0.16	01/09/2023 12:30	SW	X			12

Signature	Date/Time	Shipping Details		ATTN	Special Instructions:
		Method of Shipment: Courier			
Shipped by	1/10/2023 5:39:00 PM	On Ice: yes / no			Email Invoice to: rainyriver.accounts1@newgold.com
Received by		Shipped: Air/Ground			
		Lab Name: ALS Thunder Bay			
		Lab Phone:			



Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 1/10/2023 5:39:00 PM COC Number: ALS-449367359						Containers		SW Kit	Ra-226 Bottle							Number of Containers	Comments
						Filtered	N	N									
						Preservatives											
						NG-SW-P-TB	RA226-MIMER-BE										
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MIMER-BE										
19 SW22A_SW_20230107	0	8.14	0.16	01/09/2023 12:30	SW		X						12				
20 SW27_SW_20230107	7.1	8.64	0.18	01/09/2023 14:15	SW	X							11				
21 SW21A_SW_20230107	0	7.94	-0.47	01/09/2023 14:45	SW	X							11				
22 TB_SW_20230107				01/12/2023 12:00	SW	X							11				

Sample Receipt Details (ALS use only)

Signature		Data/Time		Shipping Details		ATTN		Special Instructions:	
Shipped by		1/10/2023 5:39:00 PM		Method of Shipment: Courier				Email Invoice to:	
Received by				On Ice: yes / no				rainyriver.accounts1@newgold.com	
				Shipped: Air/Ground				Email Report to:	
				Lab Name: ALS Thunder Bay				rainyriver.labresults@newgold.com	
				Lab Phone:					



Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input checked="" type="checkbox"/> No
Are samples for human consumption / use? Yes <input checked="" type="checkbox"/> No
Samples from a Regulated DW System require an Authorized DW COC form

Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	1/10/2023 5:39:00 PM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS-Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by				



Intake and Login Verification Form

10744080 0050
 Priority Service Requested YES NO

Sample Count 22 # of Bottle Types Multiple

Comments on Samples and Bottles:

Matrix: Water Soil Air Biota Other

Client: Rainy River

Samples Requiring Preservation or Filtering:
DOC, diss metals, diss Hg PIP@ lab

SAMPLE RECEIPT INFORMATION

Mode of Delivery: Courier Drop Off

COURIER Manitoulin

Waybill Number

Shipment Cost Cooler Count 6

Cooling Method None Ice Ice Packs

DRINKING WATER SAMPLE CHECK

Schedule 24 Bottles Correct upon Receipt Yes No

Metals pH Check <2 Yes N/A

Layout Staff Initials SS09 Date and Time of Layout Jun 13, 23 1:55

Login and Verification

Confirmed all as accurate as per COC, Account Notes or PM

CLIENT	OFFICE	CONTACT	QUOTE	PROJECT	PO
Site number matches LSD on COC or Account Notes					<u>Y/N</u>

REPORTS

Recipients match COC or Account Notes	<u>Yes</u>	No
---------------------------------------	------------	----

COMMENTS - Visible By Client

Sample Issues identified	Yes	<u>No</u>
--------------------------	-----	-----------

REMARKS - Internal Communication

Sample Issues/Info Communicated	Yes	<u>No</u>
---------------------------------	-----	-----------

SAMPLE DETAILS

Sample Name and time entered as per COC	<u>Yes</u>	No
---	------------	----

Containers selected in order of COC	<u>Yes</u>	No
-------------------------------------	------------	----

Sales Items from QUOTE ONLY	Yes	No
-----------------------------	-----	----

BOTTLE ALLOCATION VERIFICATION	<u>Yes</u>	No
--------------------------------	------------	----

GUIDELINE ADDED AS REQUIRED	Yes	No
-----------------------------	-----	----

Field Data/Calc Codes removed- not on COC	Yes	No
---	-----	----

Validation

No Issues displayed upon Validation/Committal	Y/N
---	-----

COC and Internal COC created	Y/N
------------------------------	-----

Login Staff Initials	<u>NP3</u>
----------------------	------------



New Gold Inc. Rainy River Project
ATTN: Garnet Cornell
24 Marr Rd
Barwick ON POW 1A0

Date Received: 10-FEB-23
Report Date: 08-JAN-24 09:05 (MT)
Version: FINAL REV. 2

Client Phone: 807-234-8200

Certificate of Analysis

Lab Work Order #: L2746863
Project P.O. #: 4500062842
Job Reference: SURFACE WATER
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-1 SW16_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 10:05							
Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.44		0.10	pH		24-FEB-23	R5929718
Temperature, Client Supplied	.61		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	37.8		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	59.4		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	24.8		0.51	mg/L		14-FEB-23	
pH	7.26		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	2.0	<DL	3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	50		10	mg/L		11-FEB-23	R5925559
Turbidity	1.33		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	19.6		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.012	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	3.04		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.031		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.142	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.471		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0015		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	3.50	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0002	<DL	0.0020	mg/L		17-FEB-23	R5927137
Cyanide, Free	0.0005	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	9.85		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	10.5		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.0714		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000060	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00043	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.00834	<DL	0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000143	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0065	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000016	<DL	0.00038	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	6.94		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000110		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00046	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000060	<DL	0.00050	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-1 SW16_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 10:05							
Matrix: Surface Water							
Total Metals							
Copper (Cu)-Total	0.00108	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.132		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00021	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0010	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	1.96		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.0062		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000225	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00078	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	0.84		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00192		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000110	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	2.04		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	2.72		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0229		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.2		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00221	<DL	0.015	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00003	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.0000810	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00045	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0030	<T	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000146	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0254	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000040	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000378	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.00769	<DL	0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0010	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	6.75		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-1 SW16_SW_20230207 Sampled By: Client on 07-FEB-23 @ 10:05 Matrix: Surface Water							
Dissolved Metals							
Cobalt (Co)-Dissolved	0.000020	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00092	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.0660		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00005	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0006	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	1.94		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.00162		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000082	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00058	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	0.79		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00173		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000100	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	1.94		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	2.77		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0216		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	1.0		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000255	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00046	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000006	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.0000680	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00020	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0040	<T	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000148	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	35		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	<0.2	<W	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-2 SW20_SW_20230207 Sampled By: Client on 07-FEB-23 @ 10:30 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.42		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	83.5		2.0	CU		11-FEB-23	R5925346

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-2 SW20_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 10:30							
Matrix: Surface Water							
Physical Tests							
Conductivity (EC)	318		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	159		0.51	mg/L		14-FEB-23	
pH	7.30		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	8.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	222		20	mg/L		11-FEB-23	R5925559
Turbidity	6.99		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	3.6		2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	154		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.070	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	15.2		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.044		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.030	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.962		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0129		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	5.15		0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0019	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0014	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0010	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	21.0		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	22.6		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.206		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000080	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00092	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0177		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000218	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	0.00001	<DL	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0110	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000033	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	37.0		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000395		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00058	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000785	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00062	<DL	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	1.37		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00072	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0062	<DL	0.050	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-2 SW20_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 10:30							
Matrix: Surface Water							
Total Metals							
Magnesium (Mg)-Total	15.8		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.469		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000155	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00150	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.055		0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	1.66		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00188		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000100	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	7.88		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000008	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	7.37		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0972		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.8		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00005	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00006	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00572		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000424	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00095	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0170		0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000422	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0128	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000060	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000705	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0141		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000018	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0085	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	37.4		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000030	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00019	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000102	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00042	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.527		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-2 SW20_SW_20230207 Sampled By: Client on 07-FEB-23 @ 10:30 Matrix: Surface Water							
Dissolved Metals							
Lithium (Li)-Dissolved	0.0060	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	15.9		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.00388		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000122	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00112	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.030	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	1.68		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00147		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000140	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	7.54		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	7.38		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0973		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	1.6		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00114	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000400	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00032	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0056	<T	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000270	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	131		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.6	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		27-FEB-23	R5930338
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-3 SW17_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:05 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	8.28		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	41.1		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	77.8		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	33.6		0.51	mg/L		14-FEB-23	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-3 SW17_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:05							
Matrix: Surface Water							
Physical Tests							
pH	7.36		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	2.0	<DL	3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	62		13	mg/L		11-FEB-23	R5925559
Turbidity	1.89		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	31.4		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.026	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	2.86		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.034		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.126	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.391		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	4.90	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0008	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0006	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0003	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	12.1		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	12.7		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.0860		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000045	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00046	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0108		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000092	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0030	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000014	<DL	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	9.05		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000110		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00044	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000055	<DL	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00100	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.194		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00009	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0012	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	2.95		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.0100		0.0010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-3 SW17_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:05							
Matrix: Surface Water							
Total Metals							
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000145	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00078	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	1.01		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00205		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000105	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	2.49		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000009	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	3.83		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0278		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.6		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00006	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00226		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.0000910	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00040	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0030	<T	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000170	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0252	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000040	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000436	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0102		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0020	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000080	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	8.76		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00026	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000026	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00092	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.0980		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0010	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	2.86		0.020	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-3 SW17_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:05 Matrix: Surface Water							
Dissolved Metals							
Manganese (Mn)-Dissolved	0.00366		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000132	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00056	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.005	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	0.92		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00187		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000090	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	2.29		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	3.74		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0264		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	1.4		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00060	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.0000835	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000158	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	36		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	<0.2	<W	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-4 SW10_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:05 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.38		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	83.0		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	342		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	178		0.51	mg/L		14-FEB-23	
pH	7.75		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	11.5		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	246		20	mg/L		11-FEB-23	R5925559
Turbidity	13.4		0.10	NTU		11-FEB-23	R5925354

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-4 SW10_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:05							
Matrix: Surface Water							
Physical Tests							
Anions and Nutrients							
Acidity (as CaCO3)	2.2		2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	170		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.102	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	12.7		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.055		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.100	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.07		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0147		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	6.10		0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0013	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0010	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0009	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.3		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	24.3		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.449		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000180	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00108	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0204		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000412	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	0.00001	<DL	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0145	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000029	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	41.7		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000630		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00232		0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000505	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00128	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	1.22		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00148	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0074	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	18.3		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.137		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000300	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00206	<T	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.045	<DL	0.050	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-4 SW10_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:05							
Matrix: Surface Water							
Total Metals							
Potassium (K)-Total	1.88		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00214		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000145	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	8.06		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000022	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	7.26		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.125		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	2.2		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00009	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00008	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.0129		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00002	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000975	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00160	<T	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0240		0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000534	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0160	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000065	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000808	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0167		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000012	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0125	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000060	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	41.9		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000136	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00084	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.470		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00015	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0068	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	17.7		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.0153		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000278	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00140	<DL	0.0020	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-4 SW10_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:05 Matrix: Surface Water							
Dissolved Metals							
Phosphorus (P)-Dissolved	0.025	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	1.77		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00124		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000155	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	7.24		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	7.11		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.122		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	2.2		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00005	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000010	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00222		0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000951	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00050	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0082	<T	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000358	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	70		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.2	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-5 SW28A_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:30 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	8.28		0.10	pH		24-FEB-23	R5929718
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	143		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	257		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	149		0.51	mg/L		14-FEB-23	
pH	7.70		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	13.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	208		13	mg/L		11-FEB-23	R5925559
Turbidity	2.40		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	140		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.072	<T	0.0050	mg/L		14-FEB-23	R5926338

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-5 SW28A_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:30							
Matrix: Surface Water							
Anions and Nutrients							
Ammonia, Un-ionized (as N)	0.001	<DL	0.010	mg/L		15-FEB-23	
Chloride (Cl)	3.46		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.056		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.110	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.52		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0024		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	0.65	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0013	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0014	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0010	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	39.3	DLM	2.5	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	39.0	DLM	2.5	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.236		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000060	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00123	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0143		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000227	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0055	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000019	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	36.0		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000295		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00078	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000640	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00122	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	1.07		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00048	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0046	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	15.2		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.248		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000340	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00166	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.035	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	1.17		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00216		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000170	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	5.85		0.10	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-5 SW28A_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:30							
Matrix: Surface Water							
Total Metals							
Silver (Ag)-Total	0.000007	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	1.84		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0766		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	0.4	<DL	0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00006	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00018	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00933		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00007	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000534	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00095	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0045	<T	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000278	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0222	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000050	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.00111	<T	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0120		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000022	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0050	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000100	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	34.9		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000358	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00062	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.641		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00007	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0042	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	14.9		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.154		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000310	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00126	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.015	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	1.11		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00178		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000190	<T	0.000050	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-5 SW28A_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:30 Matrix: Surface Water							
Dissolved Metals							
Silicon (Si)-Dissolved	5.37		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	1.78		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0726		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	0.4	<DL	0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00005	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000020	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00080	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000519	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00040	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000240	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	105		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.4	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-6 SW15_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:50 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	8		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	.53		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	137		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	298		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	163		0.51	mg/L		14-FEB-23	
pH	7.60		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	5.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	234		13	mg/L		11-FEB-23	R5925559
Turbidity	15.7		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	1.6	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	155		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.038	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	6.59		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.037		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.164	<T	0.020	mg/L		11-FEB-23	R5925356

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-6 SW15_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:50							
Matrix: Surface Water							
Anions and Nutrients							
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.10		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0195		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	5.00		0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0008	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0010	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0009	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	31.9	DLM	2.5	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	33.3	DLM	2.5	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.452		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000095	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00127	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0156		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000395	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	0.00001	<DL	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0090	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000030	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	37.6		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000745		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00112		0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000465	<DL	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00150	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	1.38		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00047	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0058	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	16.3		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.0800		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000315	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00212	<T	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.065		0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	1.80		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00232		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000150	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	8.82		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	5.13		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0898		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.8		0.50	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-6 SW15_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 11:50							
Matrix: Surface Water							
Total Metals							
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00014		0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00007	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.0154		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000591	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00170	<T	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0135		0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000714	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0472		0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000090	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.00105	<T	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0132		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0080	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000235	<T	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	38.5		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00023	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000230	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00116	<T	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.648		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00014	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0058	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	16.3		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.0652		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000320	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00146	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.035	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	1.72		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00132		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000165	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	7.79		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	5.13		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0890		0.0010	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-6 SW15_SW_20230207 Sampled By: Client on 07-FEB-23 @ 11:50 Matrix: Surface Water							
Dissolved Metals							
Sulfur (S)-Dissolved	1.6		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00008	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00490		0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000008	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000550	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00060	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0024	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000592	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	86		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.8	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-7 FB_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:00 Matrix: Surface Water							
Physical Tests							
Color, True	<2.0		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	0.2	<DL	1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	<0.51		0.51	mg/L		14-FEB-23	
pH	5.38		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	<0.5	<W	3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	<2	<W	10	mg/L		11-FEB-23	R5925559
Turbidity	<0.10		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	0.4	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	0.6	<DL	2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		14-FEB-23	R5926338
Chloride (Cl)	<0.10		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	<0.020		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.004	<DL	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	0.25	<DL	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0006	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0005	<DL	0.0020	mg/L		16-FEB-23	R5927137

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-7 FB_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:00							
Matrix: Surface Water							
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	<0.50		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	<0.000005	<W	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	<0.0000001	<W	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	0.014	<DL	0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	<0.0000005	<W	0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00010	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	<0.000005	<W	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	<0.0005	<W	0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	<0.00001	<W	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	<0.0002	<W	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	0.0004	<DL	0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	<0.0002	<W	0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00004	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	<0.005	<W	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	<0.01	<W	0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.000004	<DL	0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	0.070	<DL	0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	0.040	<DL	0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.000020	<DL	0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	<0.2	<W	0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	<0.00001	<W	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00009	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	<0.00001	<W	0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	<0.0000005	<W	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00005	<DL	0.0010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-7 FB_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:00							
Matrix: Surface Water							
Total Metals							
Zinc (Zn)-Total	0.0010	<DL	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	<0.0002	<W	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	<0.000005	<W	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	<0.0000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.000005	<DL	0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0010	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	0.008	<DL	0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	<0.000002	<W	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	<0.0005	<W	0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	<0.0002	<W	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	0.0005	<DL	0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	<0.00002	<W	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	<0.01	<W	0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	0.070		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	0.025	<DL	0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	<0.00001	<W	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000055	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	<0.00002	<W	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	<0.0000005	<W	0.0050	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-7 FB_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:00 Matrix: Surface Water							
Dissolved Metals							
Vanadium (V)-Dissolved	0.00002	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0002	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	<10		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	2.4		1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-8 SW06_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:00 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.44		0.10	pH		24-FEB-23	R5929718
Temperature, Client Supplied	.61		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	35.8		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	56.4		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	23.7		0.51	mg/L		14-FEB-23	
pH	7.24		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	2.5	<DL	3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	48		10	mg/L		11-FEB-23	R5925559
Turbidity	1.43		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	19.2		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.008	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	2.32		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.032		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.142	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.364		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0022		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	3.50	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0008	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0008	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0007	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	10.2		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	10.9		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.0824		0.0050	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-8 SW06_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:00							
Matrix: Surface Water							
Total Metals							
Antimony (Sb)-Total	0.000045	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00043	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.00814	<DL	0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000134	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000017	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	6.51		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000105		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00046	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000055	<DL	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00118	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.136		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00019	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0008	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	2.00		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.0064		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000105	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00070	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	0.81		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00193		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000110	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	2.04		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000004	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	2.73		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0216		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.0		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00007	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00187	<DL	0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00002	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.0000775	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00035	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0025	<DL	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000142	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-8 SW06_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:00							
Matrix: Surface Water							
Dissolved Metals							
Aluminum (Al)-Dissolved	0.0258	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000045	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000404	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.00782	<DL	0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0015	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000080	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	6.26		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000030	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000020	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00094	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.0630		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0010	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	1.95		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.00168		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000164	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00056	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	0.79		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00180		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000095	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	1.93		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	2.71		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0214		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	0.8		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00048	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000008	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.0000715	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0008	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000152	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-8 SW06_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:00 Matrix: Surface Water							
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	26		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.4	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-9 SW26_SW_20230207 Sampled By: Client on 07-FEB-23 @ 23:12 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.26		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	81.8		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	437		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	232		0.51	mg/L		14-FEB-23	
pH	7.96		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	3.5		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	292		20	mg/L		11-FEB-23	R5925559
Turbidity	5.41		0.10	NTU		10-FEB-23	R5925299
Anions and Nutrients							
Acidity (as CaCO3)	<0.2	<W	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	220		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.040	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	12.6		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.095		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.146	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.746		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0037		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	18.8		0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0010	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	20.6		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	21.9		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.175		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000155	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00136	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0277		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000176	<DL	0.0010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-9 SW26_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 23:12							
Matrix: Surface Water							
Total Metals							
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0185	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000012	<DL	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	63.9		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000275		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00066	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000280	<DL	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00328	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.614		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00041	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0110	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	23.0		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.133		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000850	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00160	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	2.10		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00200		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000115	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	6.43		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000005	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	5.57		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.167		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	5.8		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	0.00004	<DL	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00006	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00025	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00597		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00002	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.00200	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00090	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0700		0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000490	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0140	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000115	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.00120	<T	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0268		0.010	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-9 SW26_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 23:12							
Matrix: Surface Water							
Dissolved Metals							
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0165	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000080	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	56.1		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00019	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000204	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00298	<T	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.316		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00007	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0100	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	22.3		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.122		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000680	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00132	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.010	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	2.03		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00172		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000140	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	6.24		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	5.48		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.146		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	5.8		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000045	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00182	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000008	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.00176	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00040	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0640		0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000414	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	61		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.8	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-10 TB_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:00							
Matrix: Surface Water							
Physical Tests							
Color, True	<2.0		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	0.4	<DL	1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	<0.51		0.51	mg/L		14-FEB-23	
pH	5.30		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	<0.5	<W	3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	<2	<W	10	mg/L		11-FEB-23	R5925559
Turbidity	<0.10		0.10	NTU		11-FEB-23	R5925354
Anions and Nutrients							
Acidity (as CaCO3)	0.4	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	0.2	<DL	2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		14-FEB-23	R5926338
Chloride (Cl)	<0.10		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	<0.020		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	<0.002	<W	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	<0.05	<W	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0008	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0006	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0008	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	10-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	<0.50		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	<0.000005	<W	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00002	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000025	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	<0.002	<W	0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	<0.0000005	<W	0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00010	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	<0.000005	<W	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	<0.0005	<W	0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	<0.00001	<W	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	<0.0002	<W	0.050	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-10 TB_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:00							
Matrix: Surface Water							
Total Metals							
Magnesium (Mg)-Total	<0.0002	<W	0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	<0.0002	<W	0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00086	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	<0.005	<W	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	<0.01	<W	0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	<0.002	<W	0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	<0.005	<W	0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	<0.2	<W	0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	<0.00001	<W	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00004	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	<0.00001	<W	0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	<0.0000005	<W	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	<0.00005	<W	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0005	<DL	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0002	<DL	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	<0.000005	<W	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.0000072	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	<0.000005	<W	0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000020	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	<0.002	<W	0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00013	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	<0.000002	<W	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	<0.0005	<W	0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00001	<DL	0.000050	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-10 TB_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:00 Matrix: Surface Water							
Dissolved Metals							
Lithium (Li)-Dissolved	<0.0002	<W	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	<0.0005	<W	0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	<0.00002	<W	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	<0.01	<W	0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	<0.005	<W	0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	<0.00001	<W	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000035	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	<0.00002	<W	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	<0.0000005	<W	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00004	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0002	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	<10		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.8	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-11 SW23_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:35 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	8.36		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	93.2		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	377		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	<0.51		0.51	mg/L		14-FEB-23	
pH	7.64		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	12.5		3.0	mg/L		11-FEB-23	R5925558

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-11 SW23_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:35							
Matrix: Surface Water							
Physical Tests							
Total Dissolved Solids	274		20	mg/L		11-FEB-23	R5925559
Turbidity	18.1		0.10	NTU		10-FEB-23	R5925299
Anions and Nutrients							
Acidity (as CaCO3)	3.2		2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	203		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.110	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	0.002	<DL	0.010	mg/L		15-FEB-23	
Chloride (Cl)	9.18		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.053		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.036	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.25		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0380		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	3.75	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0011	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	26.4		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	28.0		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.516		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000085	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00141	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0226		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000370	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0060	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000027	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	48.2		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000700		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00128		0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.00126	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00130	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	2.18		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00051	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0062	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	20.4		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	1.01		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000220	<DL	0.0010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-11 SW23_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:35							
Matrix: Surface Water							
Total Metals							
Nickel (Ni)-Total	0.00258	<T	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.110		0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	2.17		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00291		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000145	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	9.41		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	5.54		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.110		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.6		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00013		0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00006	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.0180		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000675	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00190	<T	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0050	<T	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000708	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0056	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000005	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000508	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.000525	<DL	0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.00103	<T	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	0.000198	<DL	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.000103	<T	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	0.104	<DL	0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.000252	DTC	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00118		0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000522	<T	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00050	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.0500		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00054	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0028	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	0.0255		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.00054	<DL	0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-11 SW23_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:35 Matrix: Surface Water							
Dissolved Metals							
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00102	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.275	DTC	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	0.10	<DL	0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.000518		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000975	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000990	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	0.050	<DL	0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.00052	<DL	0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	0.4	<DL	0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	0.000098	<DL	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00034	DTC	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000055	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	<0.00002	<W	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000006	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000103	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00260	<T	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0112	DLIS	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000008	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	79		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	3.8		1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Radiological Parameters							
Radium-226	0.008		0.005	Bq/L		27-FEB-23	R5930338
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-12 SW24_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:45 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	8.27		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	95.2		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	376		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	200		0.51	mg/L		14-FEB-23	
pH	7.57		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	12.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	274		20	mg/L		11-FEB-23	R5925559
Turbidity	18.1		0.10	NTU		10-FEB-23	R5925299

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-12 SW24_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:45							
Matrix: Surface Water							
Anions and Nutrients							
Acidity (as CaCO3)	3.0		2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	202		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.098	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	0.001	<DL	0.010	mg/L		15-FEB-23	
Chloride (Cl)	9.58		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.055		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.038	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.29		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0371		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	3.90	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0013	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	27.0		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	28.2		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.445		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000085	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00139	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0221		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000344	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0060	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000020	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	49.4		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000600		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00174		0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.00120	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00118	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	2.12		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00047	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0060	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	20.2		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.972		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000225	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00252	<T	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.100		0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	2.11		0.50	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-12 SW24_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 12:45							
Matrix: Surface Water							
Total Metals							
Rubidium (Rb)-Total	0.00274		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000175	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	9.16		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000010	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	5.43		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.111		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	1.4		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00011		0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00006	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.0153		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000679	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00165	<T	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0060	<T	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000656	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0174	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000070	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.00104	<T	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0136		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000016	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0075	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000060	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	47.3		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00021	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000178	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00086	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.666		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00009	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0056	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	19.9		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.0308		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000190	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00174	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.045	<DL	0.050	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-12 SW24_SW_20230207 Sampled By: Client on 07-FEB-23 @ 12:45 Matrix: Surface Water							
Dissolved Metals							
Potassium (K)-Dissolved	2.04		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00173		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000190	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	8.44		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	5.58		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.110		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	1.4		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000020	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00246		0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000002	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000654	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00048	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0010	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000420	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	85		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.6	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Radiological Parameters							
Radium-226	0.008		0.005	Bq/L		27-FEB-23	R5930338
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-13 SW29_SW_20230207 Sampled By: Client on 07-FEB-23 @ 13:30 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.96		0.10	pH		24-FEB-23	R5929718
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	60.3		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	264		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	145		0.51	mg/L		14-FEB-23	
pH	7.52		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	3.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	184		13	mg/L		11-FEB-23	R5925559
Turbidity	2.23		0.10	NTU		10-FEB-23	R5925299
Anions and Nutrients							
Acidity (as CaCO3)	1.8	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	149		2.0	mg/L		11-FEB-23	R5925355

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-13 SW29_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 13:30							
Matrix: Surface Water							
Anions and Nutrients							
Ammonia, Total (as N)	0.128	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	1.23		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.042		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.048	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.991		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0096		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	0.80	<T	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0016	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0016	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0018	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	21.5		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	23.2		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.0716		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000040	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00083	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0181		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000092	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000012	<DL	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	36.4		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000070	<DL	0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00036	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000855	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00038	<DL	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.836		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00009	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0038	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	15.3		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.531		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000120	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00118	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.065		0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	1.03		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00167		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000140	<T	0.000050	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-13 SW29_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 13:30							
Matrix: Surface Water							
Total Metals							
Silicon (Si)-Total	7.74		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	2.27		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0731		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	0.2	<DL	0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00019	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00261		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000271	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00050	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0025	<DL	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000184	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0078	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000035	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000668	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0156		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0020	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	33.7		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000212	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00026	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.349		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0038	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	14.8		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.208		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000112	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00096	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.030	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	0.96		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00145		0.00020	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-13 SW29_SW_20230207 Sampled By: Client on 07-FEB-23 @ 13:30 Matrix: Surface Water							
Dissolved Metals							
Selenium (Se)-Dissolved	0.000135	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	7.66		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	2.21		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0705		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	0.2	<DL	0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	0.000015	<DL	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00036	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000261	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00024	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000186	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	2.1		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	64		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.6	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-14 SW03_SW_20230207 Sampled By: Client on 07-FEB-23 @ 13:45 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	8.13		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	77.0		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	411		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	210		0.51	mg/L		14-FEB-23	
pH	7.66		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	8.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	286		20	mg/L		11-FEB-23	R5925559
Turbidity	9.63		0.10	NTU		10-FEB-23	R5925299
Anions and Nutrients							
Acidity (as CaCO3)	2.4		2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	206		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.100	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	0.001	<DL	0.010	mg/L		15-FEB-23	
Chloride (Cl)	17.5		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.059		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-14 SW03_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 13:45							
Matrix: Surface Water							
Anions and Nutrients							
Nitrate (as N)	0.020	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.07		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.061		0.010	mg/L	11-FEB-23	15-FEB-23	R5926420
Sulfate (SO4)	5.10		0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0011	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0009	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.9		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	26.4		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.190		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000110	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00125	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0255		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000210	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	0.00002	<DL	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0100	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000023	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	50.1		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000275		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00070	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.00155	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00076	<DL	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	1.83		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00022	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0060	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	20.6		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	2.03		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000250	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00194	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.180		0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	2.43		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00205		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000180	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	8.11		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000004	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	8.41		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.122		0.0010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-14 SW03_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 13:45							
Matrix: Surface Water							
Total Metals							
Sulfur (S)-Total	2.0		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	0.000010	<DL	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00007	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00005	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00693		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000636	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00090	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0045	<T	0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000474	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0074	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000085	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000855	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0126		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0090	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	50.5		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00019	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000168	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00052	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.309		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0064	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	20.5		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.00898		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000192	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00148	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.060		0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	2.45		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00167		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000175	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	7.52		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	8.29		0.10	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-14 SW03_SW_20230207 Sampled By: Client on 07-FEB-23 @ 13:45 Matrix: Surface Water							
Dissolved Metals							
Strontium (Sr)-Dissolved	0.122		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	1.8		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00092	<DL	0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000002	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000593	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00026	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0006	<DL	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000324	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	74		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.2	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-15 SW25_SW_20230207 Sampled By: Client on 07-FEB-23 @ 15:55 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.6		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	115		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	281		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	149		0.51	mg/L		14-FEB-23	
pH	7.79		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	34.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	212		13	mg/L		11-FEB-23	R5925559
Turbidity	17.0		0.10	NTU		10-FEB-23	R5925299
Anions and Nutrients							
Acidity (as CaCO3)	0.6	<DL	2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	135		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.056	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	9.67		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	0.057		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.134	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	<0.001	<W	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	0.947		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	0.0020		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926420

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-15 SW25_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 15:55							
Matrix: Surface Water							
Anions and Nutrients							
Sulfate (SO4)	9.30		0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0012	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Free	0.0007	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	26.2		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	27.3		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.202		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000165	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00113	<T	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0173		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000185	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	0.00003	<DL	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	0.0050	<DL	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000021	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	39.7		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000635		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00088	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000220	<DL	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00236	<T	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.694		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00304	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0038	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	13.6		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.0970		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000350	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00156	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.040	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	1.96		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00172		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000110	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	5.43		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000004	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	3.41		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0778		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	2.8		0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00007	<DL	0.00010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-15 SW25_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 15:55							
Matrix: Surface Water							
Total Metals							
Tin (Sn)-Total	0.00006	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00423		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	0.00003	<DL	0.010	mg/L		13-FEB-23	R5925919
Uranium (U)-Total	0.000786	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00080	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0165		0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000332	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0218	<T	0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000110	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000884	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.0154		0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0065	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000090	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	37.8		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000160		0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00018	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000126	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00182	<T	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.356		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00040	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0038	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	13.3		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.0460		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000334	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00146	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	0.010	<DL	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	1.98		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00160		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000135	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	5.17		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	3.30		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0761		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	2.6		0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-15 SW25_SW_20230207 Sampled By: Client on 07-FEB-23 @ 15:55 Matrix: Surface Water							
Dissolved Metals							
Thorium (Th)-Dissolved	0.00005	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00204		0.0020	mg/L		13-FEB-23	R5925936
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.000720	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00040	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0098	<T	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000276	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	74		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	<0.2	<W	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2746863-16 SW02_SW_20230207 Sampled By: Client on 07-FEB-23 @ 16:25 Matrix: Surface Water							
Field Tests							
pH, Client Supplied	7.04		0.10	pH		12-FEB-23	R5925353
Temperature, Client Supplied	<0		0	Degree C		13-FEB-23	R5925540
Physical Tests							
Color, True	205		2.0	CU		11-FEB-23	R5925346
Conductivity (EC)	154		1.0	uS/cm		11-FEB-23	R5925355
Hardness (as CaCO3)	91.8		0.51	mg/L		14-FEB-23	
pH	7.35		0.10	pH		11-FEB-23	R5925355
Total Suspended Solids	9.0		3.0	mg/L		11-FEB-23	R5925558
Total Dissolved Solids	158		13	mg/L		11-FEB-23	R5925559
Turbidity	3.10		0.10	NTU		10-FEB-23	R5925299
Anions and Nutrients							
Acidity (as CaCO3)	2.4		2.0	mg/L		14-FEB-23	R5926238
Alkalinity, Total (as CaCO3)	84.2		2.0	mg/L		11-FEB-23	R5925355
Ammonia, Total (as N)	0.198	<T	0.0050	mg/L		14-FEB-23	R5926338
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		15-FEB-23	
Chloride (Cl)	0.80		0.10	mg/L	11-FEB-23	11-FEB-23	R5925356
Fluoride (F)	<0.020		0.020	mg/L	11-FEB-23	11-FEB-23	R5925356
Nitrate (as N)	0.034	<T	0.020	mg/L		11-FEB-23	R5925356
Nitrite (as N)	0.001	<DL	0.010	mg/L		11-FEB-23	R5925356
Total Kjeldahl Nitrogen	1.21		0.050	mg/L	11-FEB-23	15-FEB-23	R5926646
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	11-FEB-23	15-FEB-23	R5926496
Sulfate (SO4)	0.25	<DL	0.30	mg/L		11-FEB-23	R5925356
Cyanides							
Cyanide, Weak Acid Diss	0.0015	<DL	0.0020	mg/L		16-FEB-23	R5927137
Cyanide, Total	0.0016	<DL	0.0020	mg/L		16-FEB-23	R5927137

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-16 SW02_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 16:25							
Matrix: Surface Water							
Cyanides							
Cyanide, Free	0.0013	<DL	0.0020	mg/L		16-FEB-23	R5927137
Organic / Inorganic Carbon							
Dissolved Organic Carbon	39.3		0.50	mg/L	11-FEB-23	17-FEB-23	R5927677
Total Organic Carbon	40.1		0.50	mg/L		17-FEB-23	R5927679
Total Metals							
Aluminum (Al)-Total	0.124		0.0050	mg/L		13-FEB-23	R5925919
Antimony (Sb)-Total	0.000085	<DL	0.00060	mg/L		13-FEB-23	R5925919
Arsenic (As)-Total	0.00092	<DL	0.0010	mg/L		13-FEB-23	R5925919
Barium (Ba)-Total	0.0110		0.010	mg/L		13-FEB-23	R5925919
Beryllium (Be)-Total	0.0000118	<DL	0.0010	mg/L		13-FEB-23	R5925919
Bismuth (Bi)-Total	0.00002	<DL	0.0010	mg/L		13-FEB-23	R5925919
Boron (B)-Total	<0.0005	<W	0.050	mg/L		13-FEB-23	R5925919
Cadmium (Cd)-Total	0.000045	<T	0.000017	mg/L		13-FEB-23	R5925919
Calcium (Ca)-Total	21.7		0.20	mg/L		13-FEB-23	R5925919
Cesium (Cs)-Total	0.0000280		0.000010	mg/L		13-FEB-23	R5925919
Chromium (Cr)-Total	0.00050	<DL	0.0010	mg/L		13-FEB-23	R5925919
Cobalt (Co)-Total	0.000550	<T	0.00050	mg/L		13-FEB-23	R5925919
Copper (Cu)-Total	0.00074	<DL	0.0010	mg/L		13-FEB-23	R5925919
Iron (Fe)-Total	0.686		0.020	mg/L		13-FEB-23	R5925919
Lead (Pb)-Total	0.00845	<T	0.000050	mg/L		13-FEB-23	R5925919
Lithium (Li)-Total	0.0028	<DL	0.050	mg/L		13-FEB-23	R5925919
Magnesium (Mg)-Total	9.20		0.020	mg/L		13-FEB-23	R5925919
Manganese (Mn)-Total	0.300		0.0010	mg/L		13-FEB-23	R5925919
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926716
Molybdenum (Mo)-Total	0.000055	<DL	0.0010	mg/L		13-FEB-23	R5925919
Nickel (Ni)-Total	0.00090	<DL	0.0020	mg/L		13-FEB-23	R5925919
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		13-FEB-23	R5925919
Potassium (K)-Total	0.92		0.50	mg/L		13-FEB-23	R5925919
Rubidium (Rb)-Total	0.00281		0.00020	mg/L		13-FEB-23	R5925919
Selenium (Se)-Total	0.000145	<T	0.000050	mg/L		13-FEB-23	R5925919
Silicon (Si)-Total	8.07		0.10	mg/L		13-FEB-23	R5925919
Silver (Ag)-Total	0.000011	<DL	0.00010	mg/L		13-FEB-23	R5925919
Sodium (Na)-Total	1.50		0.10	mg/L		13-FEB-23	R5925919
Strontium (Sr)-Total	0.0364		0.0010	mg/L		13-FEB-23	R5925919
Sulfur (S)-Total	0.2	<DL	0.50	mg/L		13-FEB-23	R5925919
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		13-FEB-23	R5925919
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		13-FEB-23	R5925919
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		13-FEB-23	R5925919
Tin (Sn)-Total	0.00005	<DL	0.0010	mg/L		13-FEB-23	R5925919
Titanium (Ti)-Total	0.00205		0.0020	mg/L		13-FEB-23	R5925919
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		13-FEB-23	R5925919

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-16 SW02_SW_20230207							
Sampled By: Client on 07-FEB-23 @ 16:25							
Matrix: Surface Water							
Total Metals							
Uranium (U)-Total	0.0000415	<DL	0.0050	mg/L		13-FEB-23	R5925919
Vanadium (V)-Total	0.00040	<DL	0.0010	mg/L		13-FEB-23	R5925919
Zinc (Zn)-Total	0.0135		0.0030	mg/L		13-FEB-23	R5925919
Zirconium (Zr)-Total	0.000170	<DL	0.0010	mg/L		13-FEB-23	R5925919
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					13-FEB-23	R5925480
Aluminum (Al)-Dissolved	0.0540		0.0050	mg/L		13-FEB-23	R5925936
Antimony (Sb)-Dissolved	0.000070	<DL	0.00060	mg/L		13-FEB-23	R5925936
Arsenic (As)-Dissolved	0.000862	<DL	0.0010	mg/L		13-FEB-23	R5925936
Barium (Ba)-Dissolved	0.00993	<DL	0.010	mg/L		13-FEB-23	R5925936
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		13-FEB-23	R5925936
Bismuth (Bi)-Dissolved	0.000004	<DL	0.0010	mg/L		13-FEB-23	R5925936
Boron (B)-Dissolved	0.0015	<DL	0.050	mg/L		13-FEB-23	R5925936
Cadmium (Cd)-Dissolved	0.0000100	<DL	0.000017	mg/L		13-FEB-23	R5925936
Calcium (Ca)-Dissolved	21.6		0.20	mg/L		13-FEB-23	R5925936
Cesium (Cs)-Dissolved	0.0000120		0.000010	mg/L		13-FEB-23	R5925936
Chromium (Cr)-Dissolved	0.00023	<DL	0.0010	mg/L		13-FEB-23	R5925936
Cobalt (Co)-Dissolved	0.000220	<DL	0.00050	mg/L		13-FEB-23	R5925936
Copper (Cu)-Dissolved	0.00048	<DL	0.0010	mg/L		13-FEB-23	R5925936
Iron (Fe)-Dissolved	0.491		0.020	mg/L		13-FEB-23	R5925936
Lead (Pb)-Dissolved	0.00088	<T	0.000050	mg/L		13-FEB-23	R5925936
Lithium (Li)-Dissolved	0.0026	<DL	0.050	mg/L		13-FEB-23	R5925936
Magnesium (Mg)-Dissolved	9.21		0.020	mg/L		13-FEB-23	R5925936
Manganese (Mn)-Dissolved	0.0825		0.0010	mg/L		13-FEB-23	R5925936
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		16-FEB-23	R5926717
Molybdenum (Mo)-Dissolved	0.000028	<DL	0.0010	mg/L		13-FEB-23	R5925936
Nickel (Ni)-Dissolved	0.00066	<DL	0.0020	mg/L		13-FEB-23	R5925936
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		13-FEB-23	R5925936
Potassium (K)-Dissolved	0.91		0.50	mg/L		13-FEB-23	R5925936
Rubidium (Rb)-Dissolved	0.00268		0.00020	mg/L		13-FEB-23	R5925936
Selenium (Se)-Dissolved	0.000140	<T	0.000050	mg/L		13-FEB-23	R5925936
Silicon (Si)-Dissolved	7.87		0.050	mg/L		13-FEB-23	R5925936
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		13-FEB-23	R5925936
Sodium (Na)-Dissolved	1.46		0.10	mg/L		13-FEB-23	R5925936
Strontium (Sr)-Dissolved	0.0346		0.0010	mg/L		13-FEB-23	R5925936
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		13-FEB-23	R5925936
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		13-FEB-23	R5925936
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		13-FEB-23	R5925936
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		13-FEB-23	R5925936
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		13-FEB-23	R5925936
Titanium (Ti)-Dissolved	0.00118	<DL	0.0020	mg/L		13-FEB-23	R5925936

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2746863-16 SW02_SW_20230207 Sampled By: Client on 07-FEB-23 @ 16:25 Matrix: Surface Water							
Dissolved Metals							
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		13-FEB-23	R5925936
Uranium (U)-Dissolved	0.0000345	<DL	0.0050	mg/L		13-FEB-23	R5925936
Vanadium (V)-Dissolved	0.00030	<DL	0.0010	mg/L		13-FEB-23	R5925936
Zinc (Zn)-Dissolved	0.0046	<T	0.0030	mg/L		13-FEB-23	R5925936
Zirconium (Zr)-Dissolved	0.000236	<DL	0.0010	mg/L		13-FEB-23	R5925936
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-FEB-23	R5926816
Chemical Oxygen Demand	106		10	mg/L	11-FEB-23	14-FEB-23	R5925996
Oil and Grease, Total	0.6	<DL	1.0	mg/L	21-FEB-23	21-FEB-23	R5927837
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Total	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Total Organic Carbon	MS-B	L2746863-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
DLIS	Detection Limit Adjusted: Insufficient Sample
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACY-MISA-TB	Effluent	Acidity (as CaCO ₃)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-MISA-TB	Effluent	Alkalinity, Total (as CaCO ₃)	APHA 2320 B-Auto-Pot. Titration
This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.			
BOD-TB	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B- BIOCHEMICAL OXYGEN DEMAND
All forms of biochemical oxygen demand (BOD) are determined by diluting and incubating a sample for a specified time period, and measuring the oxygen depletion using a dissolved oxygen meter. Dissolved BOD (SOLUBLE) is determined by filtering the sample through a glass fibre filter prior to dilution. Carbonaceous BOD (CBOD) is determined by adding a nitrification inhibitor to the diluted sample prior to incubation.			
CL-L-IC-N-TB	Water	Chloride in Water by IC (Low Level)	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
CN-FREE-MISA-CFA-WT	Effluent	Free Cyanide by Continuous Flow Analyzer	ASTM D7237-10 (modified)
This analysis is carried out using procedures adapted from ASTM Method 7237 "Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection". Free cyanide is determined by in-line gas diffusion at pH 6 with final determination by colourimetric analysis.			
CN-T-MISA-CFA-WT	Effluent	Total Cyanide by CFA	ISO 14403-2:2012 (modified)
This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by			

Reference Information

colourimetric analysis.

Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.

CN-WAD-MISA-CFA-WT	Effluent	Weak Acid Dissociable Cyanide by CFA	APHA 4500-CN CYANIDE (modified)
--------------------	----------	--------------------------------------	---------------------------------

This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.

COD-TB	Water	Chemical Oxygen Demand	APHA 5220D
--------	-------	------------------------	------------

This analysis is carried out using procedures adapted from APHA Method 5220 "Chemical Oxygen Demand (COD)". Chemical oxygen demand is determined using the closed reflux colourimetric method.

COLOUR-TB	Water	Colour, True	APHA 2120 C
-----------	-------	--------------	-------------

True Colour in aqueous matrices is analyzed using colourimetric detection. This is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using a platinum-cobalt standard.

DOC-WT	Effluent	Dissolved Organic Carbon for MISA	APHA 5310 B-Instrumental
--------	----------	-----------------------------------	--------------------------

EC-MISA-TB	Effluent	Conductivity (EC)	APHA 2510 B-ELECTRODE
------------	----------	-------------------	-----------------------

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

F-IC-N-TB	Water	Fluoride in Water by IC	EPA 300.1 (mod)
-----------	-------	-------------------------	-----------------

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

HARDNESS-CALC-TB	Effluent	Hardness (as CaCO ₃)	CALCULATION
------------------	----------	----------------------------------	-------------

HG-DIS-WT	Effluent	Mercury (Hg)-Dissolved for MISA	SW846 7470A
-----------	----------	---------------------------------	-------------

HG-TOT-WT	Effluent	Mercury (Hg)-Total for MISA	SW846 7470A
-----------	----------	-----------------------------	-------------

MET-D-MISA-TB	Effluent	Dissolved Metals in Water (MISA)	APHA 3030B/6020B (mod)
---------------	----------	----------------------------------	------------------------

Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

MET-T-MISA-TB	Effluent	Total Metals in Water (MISA)	EPA 200.2/6020B (mod)
---------------	----------	------------------------------	-----------------------

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

NH3-MISA-F-TB	Effluent	Ammonia by Discrete Analyzer	catnr 157/158 062217/99321057 (modified)
---------------	----------	------------------------------	--

Ammonia is determined by Flow-injection analysis with fluorescence detection

NH3-UNION-CALC-TB	Effluent	Un-ionized ammonia	Calculation
-------------------	----------	--------------------	-------------

NO2-MISA-IC-TB	Effluent	Nitrite in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-MISA-IC-TB	Effluent	Nitrate in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT	Effluent	Oil and Grease, Total for MISA	APHA 5520 B-Hexane Gravimetric
------------	----------	--------------------------------	--------------------------------

PH-CLIENT-TB	Water	pH	Result supplied by Client
--------------	-------	----	---------------------------

PH-MISA-TB	Effluent	pH	APHA 4500-H-ELECTRODE
------------	----------	----	-----------------------

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH

Reference Information

electrode

PO4-DO-COL-TB Water Dissolved Orthophosphate APHA 4500-P B, F, G (modified)

Phosphorus in aqueous matrices is analyzed using discrete Analyzer with colourimetric detection.

RADIO-RADIUM226-SR Water Radium 226 CANMET 1986

SO4-MISA-IC-TB Effluent Sulfate in Water by IC EPA 300.1 (mod)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

TDS-MISA-TB Effluent Total Dissolved Solids APHA 2540 C (modified)

Aqueous matrices are analyzed using gravimetry and evaporation

TEMP-CLIENT-TB Water Temperature Result supplied by Client

TKN-F-TB Water TKN in Water by Fluorescence catnr 157/158, 062818/99334821

Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection

TOC-WT Water Total Organic Carbon APHA 5310B

Sample is injected into a heated reaction chamber which is packed with an oxidative catalyst. The water is vaporized and the organic carbon is oxidized to carbon dioxide. The carbon dioxide is transported in a carrier gas and is measured by a non-dispersive infrared detector.

TSS-MISA-TB Effluent Total Suspended Solids APHA 2540 D (modified)

Aqueous matrices are analyzed using gravimetry

TURBIDITY-TB Water Turbidity APHA 2130 B-Nephelometer

Aqueous matrices are analyzed using nephelometry with the light scatter measured at a 90° angle.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SR	Saskatchewan Research Council - Saskatoon, Saskatchewan, Can
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 1 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BOD-TB								
	Water							
Batch	R5926816							
WG3779885-3	DUP	L2746863-1						
Biochemical Oxygen Demand		<2.0	<2.0	RPD-NA	mg/L	N/A	30	11-FEB-23
WG3779885-2	LCS							
Biochemical Oxygen Demand			103.7		%		85-115	11-FEB-23
WG3779885-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	11-FEB-23
CL-L-IC-N-TB								
	Water							
Batch	R5925356							
WG3779897-2	LCS							
Chloride (Cl)			106.0		%		90-110	11-FEB-23
WG3779897-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	11-FEB-23
COD-TB								
	Water							
Batch	R5925996							
WG3779904-3	DUP	L2746707-1						
Chemical Oxygen Demand		75	69		mg/L	7.9	20	14-FEB-23
WG3779904-2	LCS							
Chemical Oxygen Demand			97.5		%		85-115	14-FEB-23
WG3779904-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	14-FEB-23
WG3779904-4	MS	L2746707-2						
Chemical Oxygen Demand			92.7		%		75-125	14-FEB-23
COLOUR-TB								
	Water							
Batch	R5925346							
WG3779895-3	DUP	L2746863-1						
Color, True		37.8	37.5		CU	0.7	20	11-FEB-23
WG3779895-2	LCS							
Color, True			98.8		%		85-115	11-FEB-23
WG3779895-1	MB							
Color, True			<2.0		CU		2	11-FEB-23
F-IC-N-TB								
	Water							
Batch	R5925356							
WG3779897-2	LCS							
Fluoride (F)			101.1		%		90-110	11-FEB-23
WG3779897-1	MB							
Fluoride (F)			<0.020		mg/L		0.02	11-FEB-23
PO4-DO-COL-TB								
	Water							



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 2 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PO4-DO-COL-TB								
	Water							
Batch	R5926420							
WG3779896-3	DUP	L2746863-1						
Orthophosphate-Dissolved (as P)		0.0015	0.0012	J	mg/L	0.0003	0.002	15-FEB-23
WG3779896-2	LCS							
Orthophosphate-Dissolved (as P)			101.1		%		80-120	15-FEB-23
WG3779896-1	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	15-FEB-23
WG3779896-4	MS	L2746863-2						
Orthophosphate-Dissolved (as P)			88.5		%		70-130	15-FEB-23
TKN-F-TB								
	Water							
Batch	R5926646							
WG3779905-3	DUP	L2746863-1						
Total Kjeldahl Nitrogen		0.471	0.473		mg/L	0.4	20	15-FEB-23
WG3779905-2	LCS							
Total Kjeldahl Nitrogen			105.3		%		75-125	15-FEB-23
WG3779905-1	MB							
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	15-FEB-23
TOC-WT								
	Water							
Batch	R5927679							
WG3780068-3	DUP	L2746863-1						
Total Organic Carbon		10.5	11.3		mg/L	6.6	20	17-FEB-23
WG3780068-2	LCS							
Total Organic Carbon			105.2		%		80-120	17-FEB-23
WG3780068-1	MB							
Total Organic Carbon			<0.50		mg/L		0.5	17-FEB-23
WG3780068-4	MS	L2746863-1						
Total Organic Carbon			N/A	MS-B	%		-	17-FEB-23
TURBIDITY-TB								
	Water							
Batch	R5925299							
WG3779876-3	DUP	L2746863-14						
Turbidity		9.63	9.75		NTU	1.2	15	10-FEB-23
WG3779876-2	LCS							
Turbidity			94.0		%		85-115	10-FEB-23
WG3779876-1	MB							
Turbidity			<0.10		NTU		0.1	10-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 3 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TURBIDITY-TB								
	Water							
Batch	R5925354							
WG3779890-3	DUP	L2746863-3						
Turbidity		1.89	1.86		NTU	1.6	15	11-FEB-23
WG3779890-2	LCS							
Turbidity			95.0		%		85-115	11-FEB-23
WG3779890-1	MB							
Turbidity			<0.10		NTU		0.1	11-FEB-23
ACY-MISA-TB								
	Effluent							
Batch	R5926238							
WG3779894-2	LCS							
Acidity (as CaCO3)			98.2		%		85-115	14-FEB-23
WG3779894-1	MB							
Acidity (as CaCO3)			2.4		mg/L		3	14-FEB-23
ALK-MISA-TB								
	Effluent							
Batch	R5925355							
WG3779893-2	LCS							
Alkalinity, Total (as CaCO3)			99.5		%		85-115	11-FEB-23
WG3779893-1	MB							
Alkalinity, Total (as CaCO3)			<0.2		mg/L		2	11-FEB-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	11-FEB-23
CN-FREE-MISA-CFA-WT								
	Effluent							
Batch	R5927137							
WG3780051-3	DUP	L2746863-1						
Cyanide, Free		0.0005	0.0008	RPD-NA	mg/L	N/A	20	16-FEB-23
WG3780051-2	LCS							
Cyanide, Free			99.3		%		80-120	16-FEB-23
WG3780051-1	MB							
Cyanide, Free			0.0001		mg/L		0.002	16-FEB-23
WG3780051-4	MS	L2746863-1						
Cyanide, Free			98.4		%		75-125	16-FEB-23
CN-T-MISA-CFA-WT								
	Effluent							
Batch	R5927137							
WG3780051-3	DUP	L2746863-1						
Cyanide, Total		0.0002	0.0004	RPD-NA	mg/L	N/A	20	17-FEB-23
WG3780051-2	LCS							
Cyanide, Total			85.5		%		80-120	16-FEB-23
WG3780051-1	MB							
Cyanide, Total			<0.0002		mg/L		0.002	16-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 4 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-T-MISA-CFA-WT Effluent								
Batch	R5927137							
WG3780051-4	MS	L2746863-1						
Cyanide, Total			83.5		%		75-125	17-FEB-23
CN-WAD-MISA-CFA-WT Effluent								
Batch	R5927137							
WG3780051-3	DUP	L2746863-1						
Cyanide, Weak Acid Diss		0.0007	0.0006	RPD-NA	mg/L	N/A	20	16-FEB-23
WG3780051-2	LCS							
Cyanide, Weak Acid Diss			107.4		%		80-120	16-FEB-23
WG3780051-1	MB							
Cyanide, Weak Acid Diss			<0.0001		mg/L		0.002	16-FEB-23
WG3780051-4	MS	L2746863-1						
Cyanide, Weak Acid Diss			101.5		%		75-125	16-FEB-23
DOC-WT Effluent								
Batch	R5927677							
WG3780058-3	DUP	L2746863-1						
Dissolved Organic Carbon		9.85	10.4		mg/L	5.5	25	17-FEB-23
WG3780058-2	LCS							
Dissolved Organic Carbon			101.2		%		70-130	17-FEB-23
WG3780058-1	MB							
Dissolved Organic Carbon			<0.50		mg/L		0.5	17-FEB-23
EC-MISA-TB Effluent								
Batch	R5925355							
WG3779893-2	LCS							
Conductivity (EC)			94.6		%		90-110	11-FEB-23
WG3779893-1	MB							
Conductivity (EC)			<0.2		uS/cm		2	11-FEB-23
HG-DIS-WT Effluent								
Batch	R5926717							
WG3780097-3	DUP	L2746863-1						
Mercury (Hg)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	16-FEB-23
WG3780097-2	LCS							
Mercury (Hg)-Dissolved			95.8		%		80-120	16-FEB-23
WG3780097-1	MB							
Mercury (Hg)-Dissolved			<0.000005		mg/L		0.000005	16-FEB-23
WG3780097-4	MS	L2746863-2						
Mercury (Hg)-Dissolved			102.7		%		70-130	16-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 5 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-TOT-WT		Effluent						
Batch	R5926716							
WG3780096-3	DUP	L2746863-1						
Mercury (Hg)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	16-FEB-23
WG3780096-2	LCS							
Mercury (Hg)-Total			95.3		%		80-120	16-FEB-23
WG3780096-1	MB							
Mercury (Hg)-Total			<0.000005		mg/L		0.000005	16-FEB-23
WG3780096-4	MS	L2746863-2						
Mercury (Hg)-Total			100.1		%		70-130	16-FEB-23
MET-D-MISA-TB		Effluent						
Batch	R5925936							
WG3779929-3	DUP	L2746863-15						
Aluminum (Al)-Dissolved		0.0218	0.0240		mg/L	9.9	20	13-FEB-23
Antimony (Sb)-Dissolved		0.000110	0.000110	RPD-NA	mg/L	N/A	20	13-FEB-23
Arsenic (As)-Dissolved		0.000884	0.000860	RPD-NA	mg/L	N/A	20	13-FEB-23
Barium (Ba)-Dissolved		0.0154	0.0155		mg/L	0.6	20	13-FEB-23
Beryllium (Be)-Dissolved		0.000008	0.000004	RPD-NA	mg/L	N/A	20	13-FEB-23
Bismuth (Bi)-Dissolved		<0.000002	0.000002	RPD-NA	mg/L	N/A	20	13-FEB-23
Boron (B)-Dissolved		0.0065	0.0065	RPD-NA	mg/L	N/A	20	13-FEB-23
Cadmium (Cd)-Dissolved		0.0000090	0.0000100	RPD-NA	mg/L	N/A	20	13-FEB-23
Calcium (Ca)-Dissolved		37.8	38.4		mg/L	1.6	20	13-FEB-23
Cesium (Cs)-Dissolved		0.0000160	0.0000170		mg/L	6.0	20	13-FEB-23
Chromium (Cr)-Dissolved		0.00018	0.00019	RPD-NA	mg/L	N/A	20	13-FEB-23
Cobalt (Co)-Dissolved		0.000126	0.000132	RPD-NA	mg/L	N/A	20	13-FEB-23
Copper (Cu)-Dissolved		0.00182	0.00182		mg/L	0.5	20	13-FEB-23
Iron (Fe)-Dissolved		0.356	0.370		mg/L	4.1	20	13-FEB-23
Lead (Pb)-Dissolved		0.00040	0.00043		mg/L	5.7	20	13-FEB-23
Lithium (Li)-Dissolved		0.0038	0.0036	RPD-NA	mg/L	N/A	20	13-FEB-23
Magnesium (Mg)-Dissolved		13.3	13.3		mg/L	0.3	20	13-FEB-23
Manganese (Mn)-Dissolved		0.0460	0.0463		mg/L	0.7	20	13-FEB-23
Molybdenum (Mo)-Dissolved		0.000334	0.000346	RPD-NA	mg/L	N/A	20	13-FEB-23
Nickel (Ni)-Dissolved		0.00146	0.00134	RPD-NA	mg/L	N/A	20	13-FEB-23
Phosphorus (P)-Dissolved		0.010	0.010	RPD-NA	mg/L	N/A	20	13-FEB-23
Potassium (K)-Dissolved		1.98	1.97		mg/L	0.7	20	13-FEB-23
Rubidium (Rb)-Dissolved		0.00160	0.00166		mg/L	4.1	20	13-FEB-23
Selenium (Se)-Dissolved		0.000135	0.000155		mg/L	11	20	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 6 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5925936							
WG3779929-3	DUP	L2746863-15						
Silicon (Si)-Dissolved		5.17	5.26		mg/L	1.6	20	13-FEB-23
Silver (Ag)-Dissolved		0.0000020	0.0000020	RPD-NA	mg/L	N/A	20	13-FEB-23
Sodium (Na)-Dissolved		3.30	3.31		mg/L	0.3	20	13-FEB-23
Strontium (Sr)-Dissolved		0.0761	0.0778		mg/L	2.3	20	13-FEB-23
Sulfur (S)-Dissolved		2.6	2.6		mg/L	0.7	20	13-FEB-23
Tellurium (Te)-Dissolved		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	13-FEB-23
Thallium (Tl)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	13-FEB-23
Thorium (Th)-Dissolved		0.00005	0.00005	RPD-NA	mg/L	N/A	20	13-FEB-23
Tin (Sn)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	13-FEB-23
Titanium (Ti)-Dissolved		0.00204	0.00210		mg/L	2.6	20	13-FEB-23
Tungsten (W)-Dissolved		0.000004	0.000004	RPD-NA	mg/L	N/A	20	13-FEB-23
Uranium (U)-Dissolved		0.000720	0.000735	RPD-NA	mg/L	N/A	20	13-FEB-23
Vanadium (V)-Dissolved		0.00040	0.00044	RPD-NA	mg/L	N/A	20	13-FEB-23
Zinc (Zn)-Dissolved		0.0098	0.0098		mg/L	0.5	20	13-FEB-23
Zirconium (Zr)-Dissolved		0.000276	0.000290	RPD-NA	mg/L	N/A	20	13-FEB-23
WG3779929-2	LCS							
Aluminum (Al)-Dissolved			98.9		%		80-120	13-FEB-23
Antimony (Sb)-Dissolved			101.5		%		80-120	13-FEB-23
Arsenic (As)-Dissolved			104.2		%		80-120	13-FEB-23
Barium (Ba)-Dissolved			101.0		%		80-120	13-FEB-23
Beryllium (Be)-Dissolved			98.7		%		80-120	13-FEB-23
Bismuth (Bi)-Dissolved			99.5		%		80-120	13-FEB-23
Boron (B)-Dissolved			93.9		%		80-120	13-FEB-23
Cadmium (Cd)-Dissolved			99.8		%		80-120	13-FEB-23
Calcium (Ca)-Dissolved			98.4		%		80-120	13-FEB-23
Cesium (Cs)-Dissolved			100.9		%		80-120	13-FEB-23
Chromium (Cr)-Dissolved			101.1		%		80-120	13-FEB-23
Cobalt (Co)-Dissolved			100.5		%		80-120	13-FEB-23
Copper (Cu)-Dissolved			97.9		%		80-120	13-FEB-23
Iron (Fe)-Dissolved			100.6		%		80-120	13-FEB-23
Lead (Pb)-Dissolved			102.1		%		80-120	13-FEB-23
Lithium (Li)-Dissolved			104.1		%		80-120	13-FEB-23
Magnesium (Mg)-Dissolved			102.8		%		80-120	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 7 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5925936							
WG3779929-2	LCS							
Manganese (Mn)-Dissolved			99.1		%		80-120	13-FEB-23
Molybdenum (Mo)-Dissolved			99.3		%		80-120	13-FEB-23
Nickel (Ni)-Dissolved			97.3		%		80-120	13-FEB-23
Phosphorus (P)-Dissolved			110.2		%		70-130	13-FEB-23
Potassium (K)-Dissolved			104.1		%		80-120	13-FEB-23
Rubidium (Rb)-Dissolved			101.8		%		80-120	13-FEB-23
Selenium (Se)-Dissolved			97.2		%		80-120	13-FEB-23
Silicon (Si)-Dissolved			100.0		%		60-140	13-FEB-23
Silver (Ag)-Dissolved			94.0		%		80-120	13-FEB-23
Sodium (Na)-Dissolved			98.1		%		80-120	13-FEB-23
Strontium (Sr)-Dissolved			99.5		%		80-120	13-FEB-23
Sulfur (S)-Dissolved			88.6		%		80-120	13-FEB-23
Tellurium (Te)-Dissolved			100.6		%		80-120	13-FEB-23
Thallium (Tl)-Dissolved			103.1		%		80-120	13-FEB-23
Thorium (Th)-Dissolved			99.1		%		80-120	13-FEB-23
Tin (Sn)-Dissolved			99.4		%		80-120	13-FEB-23
Titanium (Ti)-Dissolved			97.6		%		80-120	13-FEB-23
Tungsten (W)-Dissolved			104.2		%		80-120	13-FEB-23
Uranium (U)-Dissolved			99.4		%		80-120	13-FEB-23
Vanadium (V)-Dissolved			100.3		%		80-120	13-FEB-23
Zinc (Zn)-Dissolved			98.3		%		80-120	13-FEB-23
Zirconium (Zr)-Dissolved			98.7		%		80-120	13-FEB-23
WG3779929-1	MB							
Aluminum (Al)-Dissolved			<0.0002		mg/L		0.005	13-FEB-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0006	13-FEB-23
Arsenic (As)-Dissolved			0.0000020		mg/L		0.001	13-FEB-23
Barium (Ba)-Dissolved			<0.000005		mg/L		0.01	13-FEB-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.001	13-FEB-23
Bismuth (Bi)-Dissolved			<0.000002		mg/L		0.001	13-FEB-23
Boron (B)-Dissolved			<0.0005		mg/L		0.05	13-FEB-23
Cadmium (Cd)-Dissolved			<0.0000005		mg/L		0.000017	13-FEB-23
Calcium (Ca)-Dissolved			0.008		mg/L		0.2	13-FEB-23
Cesium (Cs)-Dissolved			0.0000010		mg/L		0.00001	13-FEB-23
Chromium (Cr)-Dissolved			<0.00001		mg/L		0.001	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 8 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5925936							
WG3779929-1	MB							
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0005	13-FEB-23
Copper (Cu)-Dissolved			<0.00002		mg/L		0.001	13-FEB-23
Iron (Fe)-Dissolved			<0.0005		mg/L		0.02	13-FEB-23
Lead (Pb)-Dissolved			<0.00001		mg/L		0.00005	13-FEB-23
Lithium (Li)-Dissolved			0.0002		mg/L		0.05	13-FEB-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.02	13-FEB-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.001	13-FEB-23
Molybdenum (Mo)-Dissolved			<0.000002		mg/L		0.001	13-FEB-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.002	13-FEB-23
Phosphorus (P)-Dissolved			<0.005		mg/L		0.05	13-FEB-23
Potassium (K)-Dissolved			<0.01		mg/L		0.5	13-FEB-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	13-FEB-23
Selenium (Se)-Dissolved			<0.000005		mg/L		0.00005	13-FEB-23
Silicon (Si)-Dissolved			<0.005		mg/L		0.05	13-FEB-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.0001	13-FEB-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.1	13-FEB-23
Strontium (Sr)-Dissolved			<0.00002		mg/L		0.001	13-FEB-23
Sulfur (S)-Dissolved			<0.2		mg/L		0.5	13-FEB-23
Tellurium (Te)-Dissolved			0.00002		mg/L		0.001	13-FEB-23
Thallium (Tl)-Dissolved			<0.000002		mg/L		0.0003	13-FEB-23
Thorium (Th)-Dissolved			<0.00001		mg/L		0.0001	13-FEB-23
Tin (Sn)-Dissolved			<0.000005		mg/L		0.001	13-FEB-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.002	13-FEB-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.01	13-FEB-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.005	13-FEB-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.001	13-FEB-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.003	13-FEB-23
Zirconium (Zr)-Dissolved			<0.000002		mg/L		0.001	13-FEB-23
WG3779929-4	MS	L2746863-16						
Aluminum (Al)-Dissolved			98.4		%		70-130	13-FEB-23
Antimony (Sb)-Dissolved			106.2		%		70-130	13-FEB-23
Arsenic (As)-Dissolved			103.2		%		70-130	13-FEB-23
Barium (Ba)-Dissolved			105.6		%		70-130	13-FEB-23
Beryllium (Be)-Dissolved			91.7		%		70-130	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 9 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5925936							
WG3779929-4 MS		L2746863-16						
Bismuth (Bi)-Dissolved			101.5		%		70-130	13-FEB-23
Boron (B)-Dissolved			105.4		%		70-130	13-FEB-23
Cadmium (Cd)-Dissolved			103.4		%		70-130	13-FEB-23
Calcium (Ca)-Dissolved			N/A	MS-B	%		-	13-FEB-23
Cesium (Cs)-Dissolved			101.0		%		70-130	13-FEB-23
Chromium (Cr)-Dissolved			103.2		%		70-130	13-FEB-23
Cobalt (Co)-Dissolved			101.3		%		70-130	13-FEB-23
Copper (Cu)-Dissolved			99.6		%		70-130	13-FEB-23
Iron (Fe)-Dissolved			97.0		%		70-130	13-FEB-23
Lead (Pb)-Dissolved			103.0		%		70-130	13-FEB-23
Lithium (Li)-Dissolved			105.3		%		70-130	13-FEB-23
Magnesium (Mg)-Dissolved			N/A	MS-B	%		-	13-FEB-23
Manganese (Mn)-Dissolved			N/A	MS-B	%		-	13-FEB-23
Molybdenum (Mo)-Dissolved			105.6		%		70-130	13-FEB-23
Nickel (Ni)-Dissolved			98.2		%		70-130	13-FEB-23
Phosphorus (P)-Dissolved			103.7		%		70-130	13-FEB-23
Potassium (K)-Dissolved			102.3		%		70-130	13-FEB-23
Rubidium (Rb)-Dissolved			101.3		%		70-130	13-FEB-23
Selenium (Se)-Dissolved			105.5		%		70-130	13-FEB-23
Silicon (Si)-Dissolved			93.9		%		70-130	13-FEB-23
Silver (Ag)-Dissolved			101.5		%		70-130	13-FEB-23
Sodium (Na)-Dissolved			93.9		%		70-130	13-FEB-23
Strontium (Sr)-Dissolved			N/A	MS-B	%		-	13-FEB-23
Sulfur (S)-Dissolved			96.1		%		70-130	13-FEB-23
Tellurium (Te)-Dissolved			110.4		%		70-130	13-FEB-23
Thallium (Tl)-Dissolved			103.5		%		70-130	13-FEB-23
Thorium (Th)-Dissolved			102.7		%		70-130	13-FEB-23
Tin (Sn)-Dissolved			101.7		%		70-130	13-FEB-23
Titanium (Ti)-Dissolved			100.8		%		70-130	13-FEB-23
Tungsten (W)-Dissolved			106.8		%		70-130	13-FEB-23
Uranium (U)-Dissolved			99.99		%		70-130	13-FEB-23
Vanadium (V)-Dissolved			100.9		%		70-130	13-FEB-23
Zinc (Zn)-Dissolved			104.7		%		70-130	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 10 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5925936							
WG3779929-4 MS		L2746863-16						
Zirconium (Zr)-Dissolved			102.6		%		70-130	13-FEB-23
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-3 DUP		L2746863-12						
Aluminum (Al)-Total		0.445	0.467		mg/L	4.9	20	13-FEB-23
Antimony (Sb)-Total		0.000085	0.000085	RPD-NA	mg/L	N/A	20	13-FEB-23
Arsenic (As)-Total		0.00139	0.00145		mg/L	3.7	20	13-FEB-23
Barium (Ba)-Total		0.0221	0.0221		mg/L	0.0	20	13-FEB-23
Beryllium (Be)-Total		0.0000344	0.0000344	RPD-NA	mg/L	N/A	20	13-FEB-23
Bismuth (Bi)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	13-FEB-23
Boron (B)-Total		0.0060	0.0060	RPD-NA	mg/L	N/A	20	13-FEB-23
Cadmium (Cd)-Total		0.000020	0.000021		mg/L	4.9	20	13-FEB-23
Calcium (Ca)-Total		49.4	48.6		mg/L	1.6	20	13-FEB-23
Cesium (Cs)-Total		0.0000600	0.0000620		mg/L	3.4	20	13-FEB-23
Chromium (Cr)-Total		0.00174	0.00116	J	mg/L	0.0006	0.002	13-FEB-23
Cobalt (Co)-Total		0.00120	0.00124		mg/L	3.1	20	13-FEB-23
Copper (Cu)-Total		0.00118	0.00120		mg/L	2.3	20	13-FEB-23
Iron (Fe)-Total		2.12	2.15		mg/L	1.6	20	13-FEB-23
Lead (Pb)-Total		0.00047	0.00046		mg/L	3.2	20	13-FEB-23
Lithium (Li)-Total		0.0060	0.0060	RPD-NA	mg/L	N/A	20	13-FEB-23
Magnesium (Mg)-Total		20.2	20.3		mg/L	0.6	20	13-FEB-23
Manganese (Mn)-Total		0.972	0.974		mg/L	0.2	20	13-FEB-23
Molybdenum (Mo)-Total		0.000225	0.000220	RPD-NA	mg/L	N/A	20	13-FEB-23
Nickel (Ni)-Total		0.00252	0.00252		mg/L	0.1	20	13-FEB-23
Phosphorus (P)-Total		0.100	0.100		mg/L	0.5	20	13-FEB-23
Potassium (K)-Total		2.11	2.19		mg/L	3.8	20	13-FEB-23
Rubidium (Rb)-Total		0.00274	0.00274		mg/L	0.2	20	13-FEB-23
Selenium (Se)-Total		0.000175	0.000190		mg/L	6.8	20	13-FEB-23
Silicon (Si)-Total		9.16	9.33		mg/L	1.8	20	13-FEB-23
Silver (Ag)-Total		0.000010	0.000003	RPD-NA	mg/L	N/A	20	13-FEB-23
Sodium (Na)-Total		5.43	5.45		mg/L	0.4	20	13-FEB-23
Strontium (Sr)-Total		0.111	0.111		mg/L	0.0	20	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 11 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-3	DUP	L2746863-12						
Sulfur (S)-Total		1.4	1.6		mg/L	3.9	20	13-FEB-23
Tellurium (Te)-Total		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	13-FEB-23
Thallium (Tl)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	13-FEB-23
Thorium (Th)-Total		0.00011	0.00012		mg/L	5.4	20	13-FEB-23
Tin (Sn)-Total		0.00006	0.00006	RPD-NA	mg/L	N/A	20	13-FEB-23
Titanium (Ti)-Total		0.0153	0.0163		mg/L	6.2	20	13-FEB-23
Tungsten (W)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	13-FEB-23
Uranium (U)-Total		0.000679	0.000673	RPD-NA	mg/L	N/A	20	13-FEB-23
Vanadium (V)-Total		0.00165	0.00170		mg/L	2.7	20	13-FEB-23
Zinc (Zn)-Total		0.0060	0.0060		mg/L	1.0	20	13-FEB-23
Zirconium (Zr)-Total		0.000656	0.000692	RPD-NA	mg/L	N/A	20	13-FEB-23
WG3779915-7	DUP	L2746863-15						
Aluminum (Al)-Total		0.202	0.238		mg/L	16	20	13-FEB-23
Antimony (Sb)-Total		0.000165	0.000160	RPD-NA	mg/L	N/A	20	13-FEB-23
Arsenic (As)-Total		0.00113	0.00114		mg/L	0.6	20	13-FEB-23
Barium (Ba)-Total		0.0173	0.0172		mg/L	0.6	20	13-FEB-23
Beryllium (Be)-Total		0.0000185	0.0000218	RPD-NA	mg/L	N/A	20	13-FEB-23
Bismuth (Bi)-Total		0.00003	0.00002	RPD-NA	mg/L	N/A	20	13-FEB-23
Boron (B)-Total		0.0050	0.0050	RPD-NA	mg/L	N/A	20	13-FEB-23
Cadmium (Cd)-Total		0.000021	0.000026	J	mg/L	0.000005	0.000034	13-FEB-23
Calcium (Ca)-Total		39.7	39.0		mg/L	1.6	20	13-FEB-23
Cesium (Cs)-Total		0.0000635	0.0000705		mg/L	10	20	13-FEB-23
Chromium (Cr)-Total		0.00088	0.00092	RPD-NA	mg/L	N/A	20	13-FEB-23
Cobalt (Co)-Total		0.000220	0.000235	RPD-NA	mg/L	N/A	20	13-FEB-23
Copper (Cu)-Total		0.00236	0.00246		mg/L	3.6	20	13-FEB-23
Iron (Fe)-Total		0.694	0.713		mg/L	2.7	20	13-FEB-23
Lead (Pb)-Total		0.00304	0.00303		mg/L	0.3	20	13-FEB-23
Lithium (Li)-Total		0.0038	0.0038	RPD-NA	mg/L	N/A	20	13-FEB-23
Magnesium (Mg)-Total		13.6	13.6		mg/L	0.0	20	13-FEB-23
Manganese (Mn)-Total		0.0970	0.0976		mg/L	0.7	20	13-FEB-23
Molybdenum (Mo)-Total		0.000350	0.000375	RPD-NA	mg/L	N/A	20	13-FEB-23
Nickel (Ni)-Total		0.00156	0.00164	RPD-NA	mg/L	N/A	20	13-FEB-23
Phosphorus (P)-Total		0.040	0.040	RPD-NA	mg/L	N/A	20	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 12 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-7	DUP	L2746863-15						
Potassium (K)-Total		1.96	1.94		mg/L	1.3	20	13-FEB-23
Rubidium (Rb)-Total		0.00172	0.00184		mg/L	6.9	20	13-FEB-23
Selenium (Se)-Total		0.000110	0.000135		mg/L	20	20	13-FEB-23
Silicon (Si)-Total		5.43	5.46		mg/L	0.5	20	13-FEB-23
Silver (Ag)-Total		0.000004	0.000011	RPD-NA	mg/L	N/A	20	13-FEB-23
Sodium (Na)-Total		3.41	3.36		mg/L	1.6	20	13-FEB-23
Strontium (Sr)-Total		0.0778	0.0789		mg/L	1.5	20	13-FEB-23
Sulfur (S)-Total		2.8	2.8		mg/L	1.3	20	13-FEB-23
Tellurium (Te)-Total		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	13-FEB-23
Thallium (Tl)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	13-FEB-23
Thorium (Th)-Total		0.00007	0.00007	RPD-NA	mg/L	N/A	20	13-FEB-23
Tin (Sn)-Total		0.00006	0.00005	RPD-NA	mg/L	N/A	20	13-FEB-23
Titanium (Ti)-Total		0.00423	0.00481		mg/L	13	20	13-FEB-23
Tungsten (W)-Total		0.00003	0.00002	RPD-NA	mg/L	N/A	20	13-FEB-23
Uranium (U)-Total		0.000786	0.000786	RPD-NA	mg/L	N/A	20	13-FEB-23
Vanadium (V)-Total		0.00080	0.00085	RPD-NA	mg/L	N/A	20	13-FEB-23
Zinc (Zn)-Total		0.0165	0.0175		mg/L	5.4	20	13-FEB-23
Zirconium (Zr)-Total		0.000332	0.000346	RPD-NA	mg/L	N/A	20	13-FEB-23
WG3779915-2	LCS							
Aluminum (Al)-Total			102.1		%		80-120	13-FEB-23
Antimony (Sb)-Total			105.0		%		80-120	13-FEB-23
Arsenic (As)-Total			106.4		%		80-120	13-FEB-23
Barium (Ba)-Total			105.3		%		80-120	13-FEB-23
Beryllium (Be)-Total			96.0		%		80-120	13-FEB-23
Bismuth (Bi)-Total			103.2		%		80-120	13-FEB-23
Boron (B)-Total			91.2		%		80-120	13-FEB-23
Cadmium (Cd)-Total			101.3		%		80-120	13-FEB-23
Calcium (Ca)-Total			97.9		%		80-120	13-FEB-23
Cesium (Cs)-Total			101.1		%		80-120	13-FEB-23
Chromium (Cr)-Total			102.5		%		80-120	13-FEB-23
Cobalt (Co)-Total			101.4		%		80-120	13-FEB-23
Copper (Cu)-Total			99.1		%		80-120	13-FEB-23
Iron (Fe)-Total			103.3		%		80-120	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 13 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-2	LCS							
Lead (Pb)-Total			103.1		%		80-120	13-FEB-23
Lithium (Li)-Total			102.2		%		80-120	13-FEB-23
Magnesium (Mg)-Total			99.1		%		80-120	13-FEB-23
Manganese (Mn)-Total			102.5		%		80-120	13-FEB-23
Molybdenum (Mo)-Total			102.3		%		80-120	13-FEB-23
Nickel (Ni)-Total			99.8		%		80-120	13-FEB-23
Phosphorus (P)-Total			110.5		%		80-120	13-FEB-23
Potassium (K)-Total			106.5		%		80-120	13-FEB-23
Rubidium (Rb)-Total			102.7		%		80-120	13-FEB-23
Selenium (Se)-Total			101.0		%		80-120	13-FEB-23
Silicon (Si)-Total			106.5		%		80-120	13-FEB-23
Silver (Ag)-Total			94.1		%		80-120	13-FEB-23
Sodium (Na)-Total			99.7		%		80-120	13-FEB-23
Strontium (Sr)-Total			100.0		%		80-120	13-FEB-23
Sulfur (S)-Total			89.4		%		80-120	13-FEB-23
Tellurium (Te)-Total			100.9		%		80-120	13-FEB-23
Thallium (Tl)-Total			105.0		%		80-120	13-FEB-23
Thorium (Th)-Total			103.0		%		80-120	13-FEB-23
Tin (Sn)-Total			102.6		%		80-120	13-FEB-23
Titanium (Ti)-Total			98.5		%		80-120	13-FEB-23
Tungsten (W)-Total			106.1		%		80-120	13-FEB-23
Uranium (U)-Total			101.4		%		80-120	13-FEB-23
Vanadium (V)-Total			101.7		%		80-120	13-FEB-23
Zinc (Zn)-Total			99.4		%		80-120	13-FEB-23
Zirconium (Zr)-Total			99.97		%		80-120	13-FEB-23
WG3779915-6	LCS							
Aluminum (Al)-Total			102.4		%		80-120	13-FEB-23
Antimony (Sb)-Total			106.8		%		80-120	13-FEB-23
Arsenic (As)-Total			106.3		%		80-120	13-FEB-23
Barium (Ba)-Total			102.0		%		80-120	13-FEB-23
Beryllium (Be)-Total			107.8		%		80-120	13-FEB-23
Bismuth (Bi)-Total			105.2		%		80-120	13-FEB-23
Boron (B)-Total			99.0		%		80-120	13-FEB-23
Cadmium (Cd)-Total			96.8		%		80-120	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 14 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-6	LCS							
Calcium (Ca)-Total			101.0		%		80-120	13-FEB-23
Cesium (Cs)-Total			103.3		%		80-120	13-FEB-23
Chromium (Cr)-Total			101.7		%		80-120	13-FEB-23
Cobalt (Co)-Total			100.5		%		80-120	13-FEB-23
Copper (Cu)-Total			99.1		%		80-120	13-FEB-23
Iron (Fe)-Total			100.5		%		80-120	13-FEB-23
Lead (Pb)-Total			103.8		%		80-120	13-FEB-23
Lithium (Li)-Total			99.4		%		80-120	13-FEB-23
Magnesium (Mg)-Total			104.1		%		80-120	13-FEB-23
Manganese (Mn)-Total			100.7		%		80-120	13-FEB-23
Molybdenum (Mo)-Total			102.2		%		80-120	13-FEB-23
Nickel (Ni)-Total			98.6		%		80-120	13-FEB-23
Phosphorus (P)-Total			109.9		%		80-120	13-FEB-23
Potassium (K)-Total			105.8		%		80-120	13-FEB-23
Rubidium (Rb)-Total			101.8		%		80-120	13-FEB-23
Selenium (Se)-Total			97.6		%		80-120	13-FEB-23
Silicon (Si)-Total			104.1		%		80-120	13-FEB-23
Silver (Ag)-Total			96.2		%		80-120	13-FEB-23
Sodium (Na)-Total			99.8		%		80-120	13-FEB-23
Strontium (Sr)-Total			100.7		%		80-120	13-FEB-23
Sulfur (S)-Total			92.1		%		80-120	13-FEB-23
Tellurium (Te)-Total			103.1		%		80-120	13-FEB-23
Thallium (Tl)-Total			104.7		%		80-120	13-FEB-23
Thorium (Th)-Total			103.5		%		80-120	13-FEB-23
Tin (Sn)-Total			98.0		%		80-120	13-FEB-23
Titanium (Ti)-Total			96.9		%		80-120	13-FEB-23
Tungsten (W)-Total			105.0		%		80-120	13-FEB-23
Uranium (U)-Total			100.4		%		80-120	13-FEB-23
Vanadium (V)-Total			101.2		%		80-120	13-FEB-23
Zinc (Zn)-Total			101.4		%		80-120	13-FEB-23
Zirconium (Zr)-Total			102.3		%		80-120	13-FEB-23
WG3779915-1	MB							
Aluminum (Al)-Total			0.0006		mg/L		0.005	13-FEB-23
Antimony (Sb)-Total			<0.000005		mg/L		0.0006	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 15 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-1	MB							
Arsenic (As)-Total			0.00004		mg/L		0.001	13-FEB-23
Barium (Ba)-Total			<0.00001		mg/L		0.01	13-FEB-23
Beryllium (Be)-Total			<0.0000001		mg/L		0.001	13-FEB-23
Bismuth (Bi)-Total			<0.00001		mg/L		0.001	13-FEB-23
Boron (B)-Total			0.0035		mg/L		0.05	13-FEB-23
Cadmium (Cd)-Total			<0.000001		mg/L		0.000017	13-FEB-23
Calcium (Ca)-Total			0.004		mg/L		0.2	13-FEB-23
Cesium (Cs)-Total			0.0000010		mg/L		0.00001	13-FEB-23
Chromium (Cr)-Total			0.00006		mg/L		0.001	13-FEB-23
Cobalt (Co)-Total			<0.000005		mg/L		0.0005	13-FEB-23
Copper (Cu)-Total			<0.00002		mg/L		0.001	13-FEB-23
Iron (Fe)-Total			<0.0005		mg/L		0.02	13-FEB-23
Lead (Pb)-Total			<0.00001		mg/L		0.00005	13-FEB-23
Lithium (Li)-Total			0.0004		mg/L		0.05	13-FEB-23
Magnesium (Mg)-Total			0.0002		mg/L		0.02	13-FEB-23
Manganese (Mn)-Total			<0.0002		mg/L		0.001	13-FEB-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.001	13-FEB-23
Nickel (Ni)-Total			<0.00002		mg/L		0.002	13-FEB-23
Phosphorus (P)-Total			<0.005		mg/L		0.05	13-FEB-23
Potassium (K)-Total			<0.01		mg/L		0.5	13-FEB-23
Rubidium (Rb)-Total			<0.000002		mg/L		0.0002	13-FEB-23
Selenium (Se)-Total			<0.000005		mg/L		0.00005	13-FEB-23
Silicon (Si)-Total			0.026		mg/L		0.1	13-FEB-23
Silver (Ag)-Total			0.000001		mg/L		0.0001	13-FEB-23
Sodium (Na)-Total			<0.005		mg/L		0.1	13-FEB-23
Strontium (Sr)-Total			<0.000005		mg/L		0.001	13-FEB-23
Sulfur (S)-Total			<0.2		mg/L		0.5	13-FEB-23
Tellurium (Te)-Total			<0.00002		mg/L		0.001	13-FEB-23
Thallium (Tl)-Total			<0.000005		mg/L		0.0003	13-FEB-23
Thorium (Th)-Total			<0.00001		mg/L		0.0001	13-FEB-23
Tin (Sn)-Total			<0.00001		mg/L		0.001	13-FEB-23
Titanium (Ti)-Total			0.00002		mg/L		0.002	13-FEB-23
Tungsten (W)-Total			<0.00001		mg/L		0.01	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 16 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5925919							
WG3779915-1 MB								
Uranium (U)-Total			<0.0000005		mg/L		0.005	13-FEB-23
Vanadium (V)-Total			0.00015		mg/L		0.001	13-FEB-23
Zinc (Zn)-Total			<0.0005		mg/L		0.003	13-FEB-23
Zirconium (Zr)-Total			<0.000002		mg/L		0.001	13-FEB-23
WG3779915-5 MB								
Aluminum (Al)-Total			0.0008		mg/L		0.005	13-FEB-23
Antimony (Sb)-Total			<0.000005		mg/L		0.0006	13-FEB-23
Arsenic (As)-Total			0.00003		mg/L		0.001	13-FEB-23
Barium (Ba)-Total			0.00001		mg/L		0.01	13-FEB-23
Beryllium (Be)-Total			<0.0000001		mg/L		0.001	13-FEB-23
Bismuth (Bi)-Total			<0.00001		mg/L		0.001	13-FEB-23
Boron (B)-Total			0.0040		mg/L		0.05	13-FEB-23
Cadmium (Cd)-Total			0.000002		mg/L		0.000017	13-FEB-23
Calcium (Ca)-Total			0.004		mg/L		0.2	13-FEB-23
Cesium (Cs)-Total			0.0000010		mg/L		0.00001	13-FEB-23
Chromium (Cr)-Total			0.00010		mg/L		0.001	13-FEB-23
Cobalt (Co)-Total			<0.000005		mg/L		0.0005	13-FEB-23
Copper (Cu)-Total			0.00004		mg/L		0.001	13-FEB-23
Iron (Fe)-Total			0.0015		mg/L		0.02	13-FEB-23
Lead (Pb)-Total			<0.00001		mg/L		0.00005	13-FEB-23
Lithium (Li)-Total			<0.0002		mg/L		0.05	13-FEB-23
Magnesium (Mg)-Total			0.0008		mg/L		0.02	13-FEB-23
Manganese (Mn)-Total			<0.0002		mg/L		0.001	13-FEB-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.001	13-FEB-23
Nickel (Ni)-Total			<0.00002		mg/L		0.002	13-FEB-23
Phosphorus (P)-Total			0.005		mg/L		0.05	13-FEB-23
Potassium (K)-Total			<0.01		mg/L		0.5	13-FEB-23
Rubidium (Rb)-Total			0.000004		mg/L		0.0002	13-FEB-23
Selenium (Se)-Total			<0.000005		mg/L		0.00005	13-FEB-23
Silicon (Si)-Total			0.024		mg/L		0.1	13-FEB-23
Silver (Ag)-Total			0.000001		mg/L		0.0001	13-FEB-23
Sodium (Na)-Total			0.010		mg/L		0.1	13-FEB-23
Strontium (Sr)-Total			0.000015		mg/L		0.001	13-FEB-23
Sulfur (S)-Total			<0.2		mg/L		0.5	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 17 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5925919							
WG3779915-5 MB								
Tellurium (Te)-Total			<0.00002		mg/L		0.001	13-FEB-23
Thallium (Tl)-Total			<0.000005		mg/L		0.0003	13-FEB-23
Thorium (Th)-Total			<0.00001		mg/L		0.0001	13-FEB-23
Tin (Sn)-Total			<0.00001		mg/L		0.001	13-FEB-23
Titanium (Ti)-Total			0.00005		mg/L		0.002	13-FEB-23
Tungsten (W)-Total			<0.00001		mg/L		0.01	13-FEB-23
Uranium (U)-Total			<0.0000005		mg/L		0.005	13-FEB-23
Vanadium (V)-Total			0.00015		mg/L		0.001	13-FEB-23
Zinc (Zn)-Total			<0.0005		mg/L		0.003	13-FEB-23
Zirconium (Zr)-Total			<0.000002		mg/L		0.001	13-FEB-23
WG3779915-4 MS		L2746863-13						
Antimony (Sb)-Total			107.8		%		70-130	13-FEB-23
Arsenic (As)-Total			105.9		%		70-130	13-FEB-23
Barium (Ba)-Total			107.0		%		70-130	13-FEB-23
Beryllium (Be)-Total			106.3		%		70-130	13-FEB-23
Bismuth (Bi)-Total			109.5		%		70-130	13-FEB-23
Boron (B)-Total			113.0		%		70-130	13-FEB-23
Cadmium (Cd)-Total			101.5		%		70-130	13-FEB-23
Calcium (Ca)-Total			N/A	MS-B	%		-	13-FEB-23
Cesium (Cs)-Total			107.8		%		70-130	13-FEB-23
Chromium (Cr)-Total			110.1		%		70-130	13-FEB-23
Cobalt (Co)-Total			106.5		%		70-130	13-FEB-23
Copper (Cu)-Total			105.1		%		70-130	13-FEB-23
Iron (Fe)-Total			108.4		%		70-130	13-FEB-23
Lead (Pb)-Total			106.2		%		70-130	13-FEB-23
Lithium (Li)-Total			105.5		%		70-130	13-FEB-23
Magnesium (Mg)-Total			N/A	MS-B	%		-	13-FEB-23
Manganese (Mn)-Total			N/A	MS-B	%		-	13-FEB-23
Molybdenum (Mo)-Total			107.1		%		70-130	13-FEB-23
Nickel (Ni)-Total			104.5		%		70-130	13-FEB-23
Phosphorus (P)-Total			109.9		%		70-130	13-FEB-23
Potassium (K)-Total			108.2		%		70-130	13-FEB-23
Rubidium (Rb)-Total			106.4		%		70-130	13-FEB-23
Selenium (Se)-Total			105.6		%		70-130	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 18 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5925919							
WG3779915-4 MS		L2746863-13						
Silicon (Si)-Total			103.2		%		70-130	13-FEB-23
Silver (Ag)-Total			107.6		%		70-130	13-FEB-23
Sodium (Na)-Total			N/A	MS-B	%		-	13-FEB-23
Strontium (Sr)-Total			N/A	MS-B	%		-	13-FEB-23
Sulfur (S)-Total			103.9		%		70-130	13-FEB-23
Tellurium (Te)-Total			101.2		%		70-130	13-FEB-23
Thallium (Tl)-Total			107.8		%		70-130	13-FEB-23
Thorium (Th)-Total			109.2		%		70-130	13-FEB-23
Tin (Sn)-Total			97.8		%		70-130	13-FEB-23
Titanium (Ti)-Total			104.3		%		70-130	13-FEB-23
Tungsten (W)-Total			105.9		%		70-130	13-FEB-23
Uranium (U)-Total			108.5		%		70-130	13-FEB-23
Vanadium (V)-Total			106.6		%		70-130	13-FEB-23
Zinc (Zn)-Total			102.5		%		70-130	13-FEB-23
Zirconium (Zr)-Total			106.5		%		70-130	13-FEB-23
WG3779915-8 MS		L2746863-16						
Antimony (Sb)-Total			109.6		%		70-130	13-FEB-23
Arsenic (As)-Total			106.7		%		70-130	13-FEB-23
Barium (Ba)-Total			107.4		%		70-130	13-FEB-23
Beryllium (Be)-Total			111.6		%		70-130	13-FEB-23
Bismuth (Bi)-Total			113.5		%		70-130	13-FEB-23
Boron (B)-Total			119.6		%		70-130	13-FEB-23
Cadmium (Cd)-Total			104.9		%		70-130	13-FEB-23
Calcium (Ca)-Total			N/A	MS-B	%		-	13-FEB-23
Cesium (Cs)-Total			108.6		%		70-130	13-FEB-23
Chromium (Cr)-Total			107.8		%		70-130	13-FEB-23
Cobalt (Co)-Total			105.6		%		70-130	13-FEB-23
Copper (Cu)-Total			105.9		%		70-130	13-FEB-23
Iron (Fe)-Total			105.4		%		70-130	13-FEB-23
Lead (Pb)-Total			80.8		%		70-130	13-FEB-23
Lithium (Li)-Total			108.2		%		70-130	13-FEB-23
Magnesium (Mg)-Total			N/A	MS-B	%		-	13-FEB-23
Manganese (Mn)-Total			N/A	MS-B	%		-	13-FEB-23
Molybdenum (Mo)-Total			113.0		%		70-130	13-FEB-23



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 20 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NO2-MISA-IC-TB	Effluent							
Batch	R5925356							
WG3779897-1 MB								
Nitrite (as N)			<0.001		mg/L		0.01	11-FEB-23
NO3-MISA-IC-TB	Effluent							
Batch	R5925356							
WG3779897-2 LCS								
Nitrate (as N)			105.3		%		90-110	11-FEB-23
WG3779897-1 MB								
Nitrate (as N)			<0.002		mg/L		0.02	11-FEB-23
OGG-TOT-WT	Effluent							
Batch	R5927837							
WG3780281-2 LCS								
Oil and Grease, Total			94.0		%		50-150	21-FEB-23
WG3780281-1 MB								
Oil and Grease, Total			<0.2		mg/L		1	21-FEB-23
PH-MISA-TB	Effluent							
Batch	R5925355							
WG3779893-2 LCS								
pH			6.94		pH		6.9-7.1	11-FEB-23
SO4-MISA-IC-TB	Effluent							
Batch	R5925356							
WG3779897-2 LCS								
Sulfate (SO4)			107.6		%		90-110	11-FEB-23
WG3779897-1 MB								
Sulfate (SO4)			<0.05		mg/L		0.3	11-FEB-23
TDS-MISA-TB	Effluent							
Batch	R5925559							
WG3779886-3 DUP		L2746863-16						
Total Dissolved Solids		158	166		mg/L	4.5	20	11-FEB-23
WG3779886-2 LCS								
Total Dissolved Solids			98.4		%		85-115	11-FEB-23
WG3779886-1 MB								
Total Dissolved Solids			<2		mg/L		10	11-FEB-23
TSS-MISA-TB	Effluent							



Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Page 21 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TSS-MISA-TB								
	Effluent							
Batch	R5925558							
WG3779887-3	DUP	L2746863-16						
Total Suspended Solids		9.0	9.0		mg/L	2.2	20	11-FEB-23
WG3779887-2	LCS							
Total Suspended Solids			98.3		%		85-115	11-FEB-23
WG3779887-1	MB							
Total Suspended Solids			<0.5		mg/L		3	11-FEB-23

Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 22 of 25

Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Page 23 of 25

Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Colour, True							
	1	07-FEB-23 10:05	11-FEB-23 13:00	3	4	days	EHTR
	2	07-FEB-23 10:30	11-FEB-23 13:00	3	4	days	EHTR
	3	07-FEB-23 11:05	11-FEB-23 13:00	3	4	days	EHTR
	4	07-FEB-23 11:05	11-FEB-23 13:00	3	4	days	EHTR
	5	07-FEB-23 11:30	11-FEB-23 13:00	3	4	days	EHTL
	6	07-FEB-23 11:50	11-FEB-23 13:00	3	4	days	EHTL
	7	07-FEB-23 12:00	11-FEB-23 13:00	3	4	days	EHTL
	8	07-FEB-23 12:00	11-FEB-23 13:00	3	4	days	EHTL
	9	07-FEB-23 23:12	11-FEB-23 13:00	3	4	days	EHTL
	10	07-FEB-23 12:00	11-FEB-23 13:00	3	4	days	EHTL
	11	07-FEB-23 12:35	11-FEB-23 13:00	3	4	days	EHTL
	12	07-FEB-23 12:45	11-FEB-23 13:00	3	4	days	EHTL
	13	07-FEB-23 13:30	11-FEB-23 13:00	3	4	days	EHTL
	14	07-FEB-23 13:45	11-FEB-23 13:00	3	4	days	EHTL
	15	07-FEB-23 15:55	11-FEB-23 13:00	3	4	days	EHTL
	16	07-FEB-23 16:25	11-FEB-23 13:00	3	4	days	EHTL
Turbidity							
	1	07-FEB-23 10:05	11-FEB-23 11:10	3	4	days	EHTR
	2	07-FEB-23 10:30	11-FEB-23 11:10	3	4	days	EHTR
	3	07-FEB-23 11:05	11-FEB-23 11:10	3	4	days	EHTR
	4	07-FEB-23 11:05	11-FEB-23 11:10	3	4	days	EHTR
	5	07-FEB-23 11:30	11-FEB-23 11:10	3	4	days	EHTL
	6	07-FEB-23 11:50	11-FEB-23 11:10	3	4	days	EHTL
	7	07-FEB-23 12:00	11-FEB-23 11:10	3	4	days	EHTL
	8	07-FEB-23 12:00	11-FEB-23 11:10	3	4	days	EHTL
	10	07-FEB-23 12:00	11-FEB-23 11:10	3	4	days	EHTL
Anions and Nutrients							
Filtr./Pres. for Carbons Subcontract							
	1	07-FEB-23 10:05	11-FEB-23 16:00	3	4	days	EHTR
	2	07-FEB-23 10:30	11-FEB-23 16:00	3	4	days	EHTR
	3	07-FEB-23 11:05	11-FEB-23 16:00	3	4	days	EHTR
	4	07-FEB-23 11:05	11-FEB-23 16:00	3	4	days	EHTR
	5	07-FEB-23 11:30	11-FEB-23 16:00	3	4	days	EHTL
	6	07-FEB-23 11:50	11-FEB-23 16:00	3	4	days	EHTL
	7	07-FEB-23 12:00	11-FEB-23 16:00	3	4	days	EHTL
	8	07-FEB-23 12:00	11-FEB-23 16:00	3	4	days	EHTL
	9	07-FEB-23 23:12	11-FEB-23 16:00	3	4	days	EHTL
	11	07-FEB-23 12:35	11-FEB-23 16:00	3	4	days	EHTL
	12	07-FEB-23 12:45	11-FEB-23 16:00	3	4	days	EHTL
	13	07-FEB-23 13:30	11-FEB-23 16:00	3	4	days	EHTL
	14	07-FEB-23 13:45	11-FEB-23 16:00	3	4	days	EHTL
	15	07-FEB-23 15:55	11-FEB-23 16:00	3	4	days	EHTL
	16	07-FEB-23 16:25	11-FEB-23 16:00	3	4	days	EHTL
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	1	07-FEB-23 10:05	16-FEB-23 00:00	7	9	days	EHT
	2	07-FEB-23 10:30	16-FEB-23 00:00	7	9	days	EHT
	3	07-FEB-23 11:05	16-FEB-23 00:00	7	9	days	EHT
	4	07-FEB-23 11:05	16-FEB-23 00:00	7	9	days	EHT
	5	07-FEB-23 11:30	16-FEB-23 00:00	7	9	days	EHT
	6	07-FEB-23 11:50	16-FEB-23 00:00	7	9	days	EHT

Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	7	07-FEB-23 12:00	16-FEB-23 00:00	7	9	days	EHT
	8	07-FEB-23 12:00	16-FEB-23 00:00	7	9	days	EHT
	9	07-FEB-23 23:12	16-FEB-23 00:00	7	8	days	EHT
	10	07-FEB-23 12:00	16-FEB-23 00:00	7	9	days	EHT
	11	07-FEB-23 12:35	16-FEB-23 00:00	7	8	days	EHT
	12	07-FEB-23 12:45	16-FEB-23 00:00	7	8	days	EHT
	13	07-FEB-23 13:30	16-FEB-23 00:00	7	8	days	EHT
	14	07-FEB-23 13:45	16-FEB-23 00:00	7	8	days	EHT
	15	07-FEB-23 15:55	16-FEB-23 00:00	7	8	days	EHT
	16	07-FEB-23 16:25	16-FEB-23 00:00	7	8	days	EHT
Organic / Inorganic Carbon							
Dissolved Organic Carbon for MISA							
	1	07-FEB-23 10:05	15-FEB-23 00:00	3	8	days	EHTR
	2	07-FEB-23 10:30	15-FEB-23 00:00	3	8	days	EHTR
	3	07-FEB-23 11:05	15-FEB-23 00:00	3	8	days	EHTR
	4	07-FEB-23 11:05	15-FEB-23 00:00	3	8	days	EHTR
	5	07-FEB-23 11:30	15-FEB-23 00:00	3	8	days	EHTL
	6	07-FEB-23 11:50	15-FEB-23 00:00	3	8	days	EHTL
	7	07-FEB-23 12:00	15-FEB-23 00:00	3	8	days	EHTL
	8	07-FEB-23 12:00	15-FEB-23 00:00	3	8	days	EHTL
	9	07-FEB-23 23:12	15-FEB-23 00:00	3	7	days	EHTL
	11	07-FEB-23 12:35	15-FEB-23 00:00	3	7	days	EHTL
	12	07-FEB-23 12:45	15-FEB-23 00:00	3	7	days	EHTL
	13	07-FEB-23 13:30	15-FEB-23 00:00	3	7	days	EHTL
	14	07-FEB-23 13:45	15-FEB-23 00:00	3	7	days	EHTL
	15	07-FEB-23 15:55	15-FEB-23 00:00	3	7	days	EHTL
	16	07-FEB-23 16:25	15-FEB-23 00:00	3	7	days	EHTL
Metals							
Dissolved Orthophosphate							
	1	07-FEB-23 10:05	15-FEB-23 12:32	7	8	days	EHT
	2	07-FEB-23 10:30	15-FEB-23 12:32	7	8	days	EHT
	3	07-FEB-23 11:05	15-FEB-23 12:32	7	8	days	EHT
	4	07-FEB-23 11:05	15-FEB-23 12:32	7	8	days	EHT
	5	07-FEB-23 11:30	15-FEB-23 12:32	7	8	days	EHT
	6	07-FEB-23 11:50	15-FEB-23 12:32	7	8	days	EHT
	7	07-FEB-23 12:00	15-FEB-23 12:32	7	8	days	EHT
	8	07-FEB-23 12:00	15-FEB-23 12:32	7	8	days	EHT
	9	07-FEB-23 23:12	15-FEB-23 12:32	7	8	days	EHT
	10	07-FEB-23 12:00	15-FEB-23 12:32	7	8	days	EHT
	11	07-FEB-23 12:35	15-FEB-23 12:32	7	8	days	EHT
	12	07-FEB-23 12:45	15-FEB-23 12:32	7	8	days	EHT
	13	07-FEB-23 13:30	15-FEB-23 12:32	7	8	days	EHT
	14	07-FEB-23 13:45	15-FEB-23 12:32	7	8	days	EHT
	15	07-FEB-23 15:55	15-FEB-23 12:32	7	8	days	EHT
	16	07-FEB-23 16:25	15-FEB-23 12:32	7	8	days	EHT

Legend & Qualifier Definitions:

Quality Control Report

Workorder: L2746863

Report Date: 08-JAN-24

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Page 25 of 25

Contact: Garnet Cornell

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2746863 were received on 10-FEB-23 11:33.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

SRC Group # 2023-1908

Feb 27, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Feb-15-2023

Client P.O.: L2746863

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Smith-Windsor, Jenna

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-1908

Feb 27, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #: **2023004480** Client PO #: **L2746863**
 Date Sampled: **Feb 07, 2023** Date Received: **Feb 15, 2023**
 Sample Matrix: **WATER**
 Description: **02/07/2023 SW20_W_20230207 L2746863-2**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 19.6 °C upon receipt.

SRC Group # 2023-1908

Feb 27, 2023

ALS, Thunder Bay Analytical

Sample #: **2023004481** Client PO #: **L2746863**
 Date Sampled: **Feb 07, 2023** Date Received: **Feb 15, 2023**
 Sample Matrix: **WATER**
 Description: **02/07/2023 SW23_SW_20230207 L2746863-11**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 19.6 °C upon receipt.

SRC Group # 2023-1908

Feb 27, 2023

ALS, Thunder Bay Analytical

Sample #: **2023004482** Client PO #: **L2746863**
 Date Sampled: **Feb 07, 2023** Date Received: **Feb 15, 2023**
 Sample Matrix: **WATER**
 Description: **02/07/2023 SW24_SW_20230207 L2746863-12**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 19.6 °C upon receipt.

SRC Group # 2023-1908

Feb 27, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105



L2746863

Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 2/9/2023 9:30:00 AM
COC Number: ALS-449663958

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
SW16_SW_20230207	7.13	7.44	0.61	02/07/2023 10:05	SW	X		11	
SW20_SW_20230207	2.15	7.42	0	02/07/2023 10:30	SW	X		12	
SW20_SW_20230207	2.15	7.42	0	02/07/2023 10:30	SW		X	12	
SW10_SW_20230207	6.65	7.38	-2	02/07/2023 11:05	SW	X		11	
SW17_SW_20230207	11.13	8.28	-0.55	02/07/2023 11:05	SW	X		11	
SW28A_SW_20230207	11.39	7.3	-0.2	02/07/2023 11:30	SW	X		11	

Signature Shipped by Received by SS09	Data/Time 2/9/2023 9:30:00 AM Feb 10, 23 11:33	Shipping Details Method of Shipment: Courier On Ice: <input checked="" type="checkbox"/> yes / <input type="checkbox"/> no Shipped: <input checked="" type="checkbox"/> Air / <input type="checkbox"/> Ground Lab Name: ALS Thunder Bay Lab Phone:	ATTN 5.7°C Temps: 6.1, 5.8, 5.2 6.4, 5.1	Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
--	---	---	---	---



0746963 COFC

CHAIN OF CUSTODY RECORD - ALS-449663958

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 2/9/2023 9:30:00 AM
 COC Number: ALS-449663958

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
SW15_SW_20230207	5.8	8	0.53	02/07/2023 11:50	SW	X		11	
FB_SW_20230207	0	0	0	02/07/2023 12:00	SW	X		11	
SW06_SW_20230207	7.13	7.44	0.61	02/07/2023 12:00	SW	X		11	
SW26_SW_20230207	7.4	7.26	0	02/07/2023 12:00	SW	X		11	
TB_SW_20230207	0	0	0	02/07/2023 12:00	SW	X		11	
SW23_SW_20230207	3.31	8.36	-0.28	02/07/2023 12:35	SW	X		12	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	2/9/2023 9:30:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by				



0746963 0050

CHAIN OF CUSTODY RECORD - ALS-449663958

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 2/9/2023 9:30:00 AM COC Number: ALS-449663958						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle							Number of Containers	Comments
						N	N										
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE										
SW23_SW_20230207	3.31	8.36	-0.28	02/07/2023 12:35	SW		X							12			
SW24_SW_20230207	1.93	8.27	-0.75	02/07/2023 12:45	SW	X								12			
SW24_SW_20230207	1.93	8.27	-0.75	02/07/2023 12:45	SW		X							12			
SW29_SW_20230207	0	7.96	-0.43	02/07/2023 13:30	SW	X								11			
SW03_SW_20230207	0	8.13	-0.61	02/07/2023 13:45	SW	X								11			
SW25_SW_20230207	9.42	7.6	-0.2	02/07/2023 15:55	SW	X								11			

Shipped by	Signature	Date/Time	Shipping Details		ATTN	Special Instructions:
		2/9/2023 9:30:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:			
Received by						Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com



0746862 CCF

CHAIN OF CUSTODY RECORD - ALS-449663958

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	2/9/2023 9:30:00 AM	Method of Shipment: Courier On Ice: yes / no		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by		Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		



New Gold Inc. Rainy River Project
ATTN: Garnet Cornell
24 Marr Rd
Barwick ON POW 1A0

Date Received: 10-MAR-23
Report Date: 28-MAR-23 07:07 (MT)
Version: FINAL

Client Phone: 807-234-8200

Certificate of Analysis

Lab Work Order #: L2748752
Project P.O. #: 4500062842
Job Reference: SURFACE WATER
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-1 SW16_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 09:15							
Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	15.85		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	8.62		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	33.6		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	56.8		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	24.8		0.50			10-MAR-23	
pH	7.20		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	2.5	<DL	3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	42		10	mg/L		11-MAR-23	R5935856
Turbidity	1.27		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	1.6	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	18.2		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.006	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	2.51		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.024		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.118	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.353		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	3.65	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0002	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	10.9		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	10.9		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.0662		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000045	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000390	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.00852		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000015	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.006	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000062	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	6.06		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000094	<DL	0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00046	<DL	0.00050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-1 SW16_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 09:15							
Matrix: SURFACE WATER							
Total Metals							
Cobalt (Co)-Total	0.000046	<DL	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00115	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.131		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00006	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0006	<DL	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	2.17		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.00572		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000145	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00066	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.016	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	0.748		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00187		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000108	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	2.01		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000085	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	2.97		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.0225		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	1.40		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000003	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000026	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00009	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00182		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.0000795	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00034	<DL	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0044	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000136	<DL	0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0234	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000045	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000390	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.00822		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	0.000005	<DL	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000054	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	6.24		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000026	<DL	0.000010	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-1 SW16_SW_20230307 Sampled By: Client on 07-MAR-23 @ 09:15 Matrix: SURFACE WATER							
Dissolved Metals							
Chromium (Cr)-Dissolved	0.00024	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000022	<DL	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00100	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.065		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0008	<DL	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	2.23		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.00190		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000130	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00046	<DL	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.006	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	0.730		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00183		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000102	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	1.86		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000040	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	3.03		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.0213		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	1.35		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000032	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00006	<DL	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00044		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.0000715	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0042	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000136	<DL	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	23		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.8		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-2 SW20_SW_20230307 Sampled By: Client on 07-MAR-23 @ 09:25 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	2.96		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.68		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	1.48		0	Degree C		13-MAR-23	R5935739

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-2 SW20_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 09:25							
Matrix: SURFACE WATER							
Field Tests							
Physical Tests							
Color, True	80.6		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	358		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	185		0.50			10-MAR-23	
pH	7.30		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	8.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	236		20	mg/L		11-MAR-23	R5935856
Turbidity	6.05		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	4.2		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	171		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.166	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	16.5		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.046		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.104	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.894		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0336		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	9.70		0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	21.8		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	21.8		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.178		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000045	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000985	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0200		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000015	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.016	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000158	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	41.1		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000254		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00086	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000976	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00070	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	1.69		0.010	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-2 SW20_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 09:25							
Matrix: SURFACE WATER							
Total Metals							
Lead (Pb)-Total	0.00042	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0066	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	19.8		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.529		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000245	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00142	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.080		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	1.71		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00207		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000126	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	8.88		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000070	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	7.55		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.114		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	2.70		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000004	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000046	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00592		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000576	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00090	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0070	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000324		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0134	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000040	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000825	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0155		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.016		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000056	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	41.6		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00016	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000156	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00040	<T	0.00020	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-2 SW20_SW_20230307 Sampled By: Client on 07-MAR-23 @ 09:25 Matrix: SURFACE WATER							
Dissolved Metals							
Iron (Fe)-Dissolved	0.753		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00008	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0068	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	19.7		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.0477		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000205	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00098	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.042	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	1.66		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00171		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000168	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.81		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000025	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	7.33		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.110		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	2.60		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000028	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00134		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000554	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00034	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0032	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000300		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	53		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.2	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Radiological Parameters							
Radium-226	0.01		0.005	Bq/L		14-MAR-23	R5939417
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-3 SW10_SW_20230307 Sampled By: Client on 07-MAR-23 @ 09:55 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	15.62		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.25		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	.26		0	Degree C		13-MAR-23	R5935739
Physical Tests							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-3 SW10_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 09:55							
Matrix: SURFACE WATER							
Physical Tests							
Color, True	37.6		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	449		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	226		0.50			10-MAR-23	
pH	7.64		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	12.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	294		20	mg/L		11-MAR-23	R5935856
Turbidity	14.5		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	0.6	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	213		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.134	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	16.7		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.042		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.104	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.08		0.050	mg/L	16-MAR-23	16-MAR-23	R5937299
Orthophosphate-Dissolved (as P)	0.0373		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	9.80		0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0008	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.1		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	23.3		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.397		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000055	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00109	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0244		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000026	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000020	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.022	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000234	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	50.4		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000580		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00106	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000660	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00255	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	1.58		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00090	<T	0.000050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-3 SW10_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 09:55							
Matrix: SURFACE WATER							
Total Metals							
Lithium (Li)-Total	0.0100	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	24.9		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.313		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000415	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00210	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.072		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.05		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00242		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000150	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	9.66		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000070	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	9.82		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.164		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	3.65		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000006	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000086	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00004	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.0121		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000018	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.00117	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00156	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0074	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000516		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0146	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000050	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000950	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0202		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	0.000005	<DL	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.022		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000108	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	51.1		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000024	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000400	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00135	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.772		0.010	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-3 SW10_SW_20230307 Sampled By: Client on 07-MAR-23 @ 09:55 Matrix: SURFACE WATER							
Dissolved Metals							
Lead (Pb)-Dissolved	0.00018	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0104	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	23.8		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.247		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000385	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00134	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.044	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	1.94		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00156		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000146	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.75		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000030	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	9.70		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.159		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	3.50		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	0.000020	<DL	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000040	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00200		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.00108	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00054	<T	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0044	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000384		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	61		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.0		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-4 SW17_SW_20230307 Sampled By: Client on 07-MAR-23 @ 10:15 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	12.3		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.94		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	38.3		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	72.2		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	30.7		0.50			10-MAR-23	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-4 SW17_SW_2023037							
Sampled By: Client on 07-MAR-23 @ 10:15							
Matrix: SURFACE WATER							
Physical Tests							
pH	7.27		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	3.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	56		13	mg/L		11-MAR-23	R5935856
Turbidity	1.63		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	1.2	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	26.2		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.002	<DL	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	3.03		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.029		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.120	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.363		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0014		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	4.45	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	<0.0002	<W	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	10.8		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	11.9		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.0960		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000040	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000430	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.00970		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.006	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000048	<DL	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	7.23		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000116		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00052	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000060	<DL	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00105	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.180		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00008	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0006	<DL	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	2.79		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.00904		0.00050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-4 SW17_SW_2023037							
Sampled By: Client on 07-MAR-23 @ 10:15							
Matrix: SURFACE WATER							
Total Metals							
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000160	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00068	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.006	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	0.786		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00194		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000122	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	2.26		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	3.49		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.0245		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	1.55		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000003	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000028	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00010		0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00224		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.0000885	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00040	<DL	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0018	<DL	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000164	<DL	0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0246	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000045	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000410	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.00938		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000054	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	7.53		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000026	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00022	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000026	<DL	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00090	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.084		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0008	<DL	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	2.89		0.0050	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-4 SW17_SW_2023037 Sampled By: Client on 07-MAR-23 @ 10:15 Matrix: SURFACE WATER							
Dissolved Metals							
Manganese (Mn)-Dissolved	0.00302		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000150	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00046	<DL	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.004	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	0.842		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00181		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000112	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	2.06		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000020	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	3.52		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.0246		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	1.45		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000036	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00058		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.0000780	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00022	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0016	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000148	<DL	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	33		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.4	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-5 SW15_SW_20230307 Sampled By: Client on 07-MAR-23 @ 10:50 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	9.73		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.36		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	54.6		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	125		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	59.0		0.50			10-MAR-23	
pH	7.42		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	3.0		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	90		13	mg/L		11-MAR-23	R5935856

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-5 SW15_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 10:50							
Matrix: SURFACE WATER							
Physical Tests							
Turbidity	3.17		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO ₃)	2.2		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO ₃)	51.0		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.014	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	4.13		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.032		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.164	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.485		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0079		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO ₄)	5.90		0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0002	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0002	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0008	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.6		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	14.7		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.136		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000055	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000625	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0127		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.008	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000082	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	14.9		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000204		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00068	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000126	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00130	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.382		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00012	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0018	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	6.02		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.0240		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000230	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00098	<T	0.00050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-5 SW15_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 10:50							
Matrix: SURFACE WATER							
Total Metals							
Phosphorus (P)-Total	0.014	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	1.12		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00224		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000156	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	3.56		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000020	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	4.77		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.0397		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	2.15		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000004	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000038	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00456		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000181	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00064	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0032	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000244		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0288	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000050	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000540	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0118		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.008	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000070	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	14.2		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00026	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000062	<DL	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00110	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.186		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0018	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	5.71		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.0179		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000205	<T	0.000050	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-5 SW15_SW_20230307 Sampled By: Client on 07-MAR-23 @ 10:50 Matrix: SURFACE WATER							
Dissolved Metals							
Nickel (Ni)-Dissolved	0.00066	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.016	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	1.05		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00201		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000118	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	3.26		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000010	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	4.61		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.0381		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	2.05		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000054	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00022		0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00112		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000170	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00030	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0032	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000228	<T	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	50		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.4	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-6 SW23_SW_20230307 Sampled By: Client on 07-MAR-23 @ 11:25 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	2.72		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.45		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	87.9		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	448		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	243		0.50			10-MAR-23	
pH	7.45		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	19.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	300		20	mg/L		11-MAR-23	R5935856
Turbidity	23.1		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	7.6		2.0	mg/L		13-MAR-23	R5935926

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-6 SW23_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 11:25							
Matrix: SURFACE WATER							
Anions and Nutrients							
Alkalinity, Total (as CaCO3)	233		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.200	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	10.6		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.045		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.036	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.26		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0499		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	3.10	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0008	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0010	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	27.0		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	27.5		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.480		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000090	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00177	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0277		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000036	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000020	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.014	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000416	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	58.6		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000700		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00130	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.00202	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00145	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	2.73		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00054	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0066	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	26.2		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	2.28		0.0050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	0.000020	<T	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000310	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00294	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.130		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.22		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00310		0.00020	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-6 SW23_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 11:25							
Matrix: SURFACE WATER							
Total Metals							
Selenium (Se)-Total	0.000192	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	10.4		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000050	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	6.41		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.128		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	1.90		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000008	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000112		0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00005	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.0184		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000848	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00204	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0084	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000684		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0158	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000075	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.00121	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0135		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.012		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000148	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	55.7		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000018	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000548	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00095	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.752		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00010	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0056	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	25.2		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.583		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000245	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00196	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.068		0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.13		0.050	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-6 SW23_SW_20230307 Sampled By: Client on 07-MAR-23 @ 11:25 Matrix: SURFACE WATER							
Dissolved Metals							
Rubidium (Rb)-Dissolved	0.00195		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000228	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	9.24		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000015	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	6.29		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.120		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	1.65		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	0.000010	<DL	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000001	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000034	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00206		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000002	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000799	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00046	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0032	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000428		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	2.4		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	76		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.2		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Radiological Parameters							
Radium-226	0.008		0.005	Bq/L		14-MAR-23	R5939417
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-7 SW24_SW_20230307 Sampled By: Client on 07-MAR-23 @ 11:40 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	2.96		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.39		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	88.4		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	454		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	241		0.50			10-MAR-23	
pH	7.47		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	39.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	310		20	mg/L		11-MAR-23	R5935856
Turbidity	33.4		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	6.6		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	236		2.0	mg/L		11-MAR-23	R5935599

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-7 SW24_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 11:40							
Matrix: SURFACE WATER							
Anions and Nutrients							
Ammonia, Total (as N)	0.200	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	11.1		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.042		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.038	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.25		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0463		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	3.40	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0008	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0007	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	27.4		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	28.5		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	1.17		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000110	<T	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00202	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0330		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000068	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000030	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.014	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000422	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	57.1		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.000177		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00268	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.00247	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00235	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	3.70		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00098	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0070	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	26.2		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	2.31		0.0050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000320	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00406	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.170		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.43		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00489		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000200	<T	0.000050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-7 SW24_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 11:40							
Matrix: SURFACE WATER							
Total Metals							
Silicon (Si)-Total	12.2		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000135	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	6.60		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.125		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	1.75		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000020	<T	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000216		0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00012		0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.0411		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000906	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00390	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0100		0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000872		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0082	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000075	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.00117	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0122		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.012		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000078	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	55.0		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000022	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000508	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00105	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.625		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00008	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0056	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	25.2		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.503		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000260	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00200	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.052		0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.13		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00209		0.00020	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-7 SW24_SW_20230307 Sampled By: Client on 07-MAR-23 @ 11:40 Matrix: SURFACE WATER							
Dissolved Metals							
Selenium (Se)-Dissolved	0.000224	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	9.40		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000005	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	6.73		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.120		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	1.55		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	0.000020	<DL	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000024	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00002	<DL	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00060		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000799	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00044	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0022	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000392		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	2.1		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	78		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.0		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Radiological Parameters							
Radium-226	0.01		0.005	Bq/L		14-MAR-23	R5939417
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-8 FB_SW_20230307 Sampled By: Client on 07-MAR-23 @ 12:00 Matrix: SURFACE WATER							
Physical Tests							
Color, True	<2.0		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	0.2	<DL	1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	<0.50		0.50			10-MAR-23	
pH	5.38		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	<0.5	<W	3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	<2	<W	10	mg/L		11-MAR-23	R5935856
Turbidity	<0.10		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	0.2	<DL	2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		13-MAR-23	R5935916
Chloride (Cl)	<0.10		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	<0.020		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	<0.002	<W	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-8 FB_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Anions and Nutrients							
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	<0.05	<W	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	<0.0002	<W	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	<0.0001	<W	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	07-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	<0.50		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.0004	<DL	0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	<0.000005	<W	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000015	<DL	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.00002	<DL	0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.006	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000002	<DL	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	0.015	<DL	0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	<0.0000002	<W	0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00016	<DL	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	<0.00005	<W	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	<0.001	<W	0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	<0.0002	<W	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	<0.0005	<W	0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.00010	<DL	0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.006	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	0.002	<DL	0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	0.070	<DL	0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	0.020	<DL	0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	<0.00001	<W	0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	<0.05	<W	0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-8 FB_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Total Metals							
Thallium (Tl)-Total	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00002	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00002	<DL	0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	<0.0000005	<W	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00002	<DL	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	<0.0002	<W	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	<0.000004	<W	0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	<0.0002	<W	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	<0.000005	<W	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	<0.000005	<W	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	<0.00002	<W	0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000004	<DL	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	0.015	<DL	0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	<0.0000002	<W	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00014	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	<0.00005	<W	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	<0.001	<W	0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	<0.0002	<W	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	<0.0005	<W	0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	<0.002	<W	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	0.002	<DL	0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	<0.000002	<W	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	0.070		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	0.030	<DL	0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	<0.00001	<W	0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	<0.05	<W	0.50	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-8 FB_SW_20230307 Sampled By: Client on 07-MAR-23 @ 12:00 Matrix: SURFACE WATER							
Dissolved Metals							
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	<0.00002	<W	0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	<0.0000005	<W	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	<0.0002	<W	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	<0.000004	<W	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	<10		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.2		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-9 SW06_SW_20230307 Sampled By: Client on 07-MAR-23 @ 12:00 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	2.49		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.27		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	56.6		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	306		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	175		0.50			10-MAR-23	
pH	7.46		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	6.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	206		20	mg/L		11-MAR-23	R5935856
Turbidity	2.80		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	5.0		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	167		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.190	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	2.12		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.038		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.088	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.837		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0111		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	0.70	<T	0.30	mg/L		13-MAR-23	R5935920

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-9 SW06_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Cyanides							
Cyanide, Weak Acid Diss	0.0003	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	21.8		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	22.4		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.159		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000040	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000750	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0198		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.008	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000158	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	41.1		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000208		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00062	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000876	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00065	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.966		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00016	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0042	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	18.2		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.570		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000185	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00138	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.044	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	1.13		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00201		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000158	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	8.97		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000025	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	2.69		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.0818		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	0.65		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000003	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000030	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-9 SW06_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Total Metals							
Titanium (Ti)-Total	0.00566		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000575	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00076	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0052	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000236		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0066	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000035	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000670	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0157		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000056	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	39.9		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000008	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00016	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000266	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00035	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.333		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0040	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	18.3		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.188		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000170	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00102	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.022	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	1.12		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00173		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000152	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.64		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000005	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	2.74		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.0793		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	0.60		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000001	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000014	<DL	0.00010	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-9 SW06_SW_20230307 Sampled By: Client on 07-MAR-23 @ 12:00 Matrix: SURFACE WATER							
Dissolved Metals							
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00028	<DL	0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000542	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00026	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0032	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000208	<T	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	53		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.4		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-10 SW29_SW_20230307 Sampled By: Client on 07-MAR-23 @ 12:45 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	2.49		0	mg/L		12-MAR-23	R5935500
pH, Client Supplied	7.27		0.10	pH		12-MAR-23	R5935500
Temperature, Client Supplied	<0		0	Degree C		12-MAR-23	R5935500
Physical Tests							
Color, True	55.5		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	306		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	170		0.50			10-MAR-23	
pH	7.44		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	6.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	206		20	mg/L		11-MAR-23	R5935856
Turbidity	2.83		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	6.4		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	165		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.194	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	2.09		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.037		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.092	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.913		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0111		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	0.80	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0002	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-10 SW29_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 12:45							
Matrix: SURFACE WATER							
Cyanides							
Cyanide, Free	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	21.8		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	21.9		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.133		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000040	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000750	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0190		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.006	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000138	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	39.3		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000176		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00068	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000868	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00055	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.959		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00014	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0036	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	18.3		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.577		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000195	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00150	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.048	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	1.09		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00192		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000156	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	8.86		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000015	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	2.81		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.0832		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	0.65		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000002	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000032	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00011		0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00442		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000022	<DL	0.00010	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-10 SW29_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 12:45							
Matrix: SURFACE WATER							
Total Metals							
Uranium (U)-Total	0.000562	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00070	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0050	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000228		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0068	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000035	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000680	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0157		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000048	<DL	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	37.4		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000004	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00016	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000264	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00035	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.335		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0036	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	18.7		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.165		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000160	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00102	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.018	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	1.11		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00175		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000174	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.76		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	2.77		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.0773		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	0.55		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00024	<DL	0.00030	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-10 SW29_SW_20230307 Sampled By: Client on 07-MAR-23 @ 12:45 Matrix: SURFACE WATER							
Dissolved Metals							
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000520	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00026	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0024	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000204	<T	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	52		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.0		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-11 SW03_SW_20230307 Sampled By: Client on 07-MAR-23 @ 13:15 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	.01		0	mg/L		12-MAR-23	R5935500
pH, Client Supplied	7.32		0.10	pH		12-MAR-23	R5935500
Temperature, Client Supplied	<0		0	Degree C		12-MAR-23	R5935500
Physical Tests							
Color, True	92.2		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	479		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	246		0.50			10-MAR-23	
pH	7.44		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	18.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	288		20	mg/L		11-MAR-23	R5935856
Turbidity	20.7		0.10	NTU		14-MAR-23	R5936139
Anions and Nutrients							
Acidity (as CaCO3)	8.0		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	240		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.198	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	18.1		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.057		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.024	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.13		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.106		0.010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	4.70	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0003	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	26.0		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-11 SW03_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 13:15							
Matrix: SURFACE WATER							
Organic / Inorganic Carbon							
Total Organic Carbon	27.4		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.305		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000105	<T	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00195	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0453		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000024	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.014	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000230	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	60.8		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000408		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00102	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.00375	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00095	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	3.75		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00028	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0064	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	26.4		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	4.22		0.0050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000310	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00234	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.356		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.60		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00256		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000216	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	9.80		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000035	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	8.92		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.143		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	2.20		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000005	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000080	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00012		0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.0108		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000014	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000672	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00160	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0072	<T	0.0030	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-11 SW03_SW_20230307							
Sampled By: Client on 07-MAR-23 @ 13:15							
Matrix: SURFACE WATER							
Total Metals							
Zirconium (Zr)-Total	0.000540		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0056	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000095	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.00117	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0197		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000010	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.014		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000042	<DL	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	56.2		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000012	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.00136	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00055	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.713		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0060	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	25.7		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	1.63		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000230	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00166	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.086		0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.48		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00181		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000238	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.94		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000005	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	9.00		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.137		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	2.05		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	0.000005	<DL	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000016	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00002	<DL	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00036		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000632	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00032	<DL	0.00050	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-11 SW03_SW_20230307 Sampled By: Client on 07-MAR-23 @ 13:15 Matrix: SURFACE WATER							
Dissolved Metals							
Zinc (Zn)-Dissolved	0.0032	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000312		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	3.4		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	74		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.8	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2748752-12 SW02_SW_20230307 Sampled By: Client on 08-MAR-23 @ 11:30 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	3.44		0	mg/L		12-MAR-23	R5935500
pH, Client Supplied	7.66		0.10	pH		12-MAR-23	R5935500
Temperature, Client Supplied	<0		0	Degree C		12-MAR-23	R5935500
Physical Tests							
Color, True	187		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	166		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	100		0.50			10-MAR-23	
pH	7.15		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	7.0		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	152		13	mg/L		11-MAR-23	R5935856
Turbidity	2.21		0.10	NTU		11-MAR-23	R5935483
Anions and Nutrients							
Acidity (as CaCO3)	5.4		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	86.8		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.370		0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	0.001	<DL	0.010	mg/L		14-MAR-23	
Chloride (Cl)	0.71		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	<0.020		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.010	<DL	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.14		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	0.25	<DL	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0007	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	35.2		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	34.7		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.123		0.0050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-12 SW02_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 11:30							
Matrix: SURFACE WATER							
Total Metals							
Antimony (Sb)-Total	0.000030	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000760	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0124		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.006	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000136	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	24.2		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000142		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00054	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000620	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00095	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.887		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00036	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0024	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	9.93		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.291		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000065	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00080	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.014	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	0.624		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00186		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000134	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	9.28		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000040	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	1.53		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.0365		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	0.40	<DL	0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000004	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000026	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00284		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.0000440	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00042	<DL	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0126		0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000152	<DL	0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-12 SW02_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 11:30							
Matrix: SURFACE WATER							
Dissolved Metals							
Aluminum (Al)-Dissolved	0.0492		0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000025	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000685	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0107		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	0.000005	<DL	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000078	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	23.6		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000028	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00022	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000396	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00070	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.597		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00010	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0024	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	10.1		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.167		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000055	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00044	<DL	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.006	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	0.608		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00171		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000134	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.85		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000010	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	1.53		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.0352		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	0.40	<DL	0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000003	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000022	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00088		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.0000405	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0066	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000168	<DL	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-12 SW02_SW_20230307 Sampled By: Client on 08-MAR-23 @ 11:30 Matrix: SURFACE WATER							
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	89		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.0		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
L2748752-13 SW26_SW_20230307 Sampled By: Client on 08-MAR-23 @ 12:15 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	7.87		0	mg/L		12-MAR-23	R5935500
pH, Client Supplied	7.97		0.10	pH		12-MAR-23	R5935500
Temperature, Client Supplied	<0		0	Degree C		12-MAR-23	R5935500
Physical Tests							
Color, True	87.8		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	453		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	241		0.50			10-MAR-23	
pH	7.98		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	7.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	304		20	mg/L		11-MAR-23	R5935856
Turbidity	5.47		0.10	NTU		11-MAR-23	R5935483
Anions and Nutrients							
Acidity (as CaCO3)	1.6	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	205		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.024	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	18.6		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.054		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.196	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.754		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0053		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	19.1		0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0008	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.5		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	24.9		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.314		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000115	<T	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00122	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0282		0.00010	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-13 SW26_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:15							
Matrix: SURFACE WATER							
Total Metals							
Beryllium (Be)-Total	0.000018	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000015	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.016	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000272	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	58.2		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000426		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00208	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.000306	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00390	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.635		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00036	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0068	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	24.4		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.114		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000855	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00202	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.026	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.34		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00274		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000174	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	6.80		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000075	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	5.95		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.133		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	6.45		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000008	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000068	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.0113		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000022	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.00187	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00122	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.122		0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000460		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0208	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000110	<T	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.00110	<T	0.00010	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-13 SW26_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:15							
Matrix: SURFACE WATER							
Dissolved Metals							
Barium (Ba)-Dissolved	0.0263		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.016		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000176	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	55.8		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000042	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00022	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000188	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00315	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.249		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00008	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0066	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	24.7		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.102		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000775	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00142	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.016	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.27		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00212		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000204	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	6.26		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000025	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	5.88		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.134		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	6.55		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000004	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000040	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00160		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.00183	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00044	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.108		0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000360		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	60		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	<0.2	<W	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-14 SW27_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:40							
Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	6		0	mg/L		12-MAR-23	R5935500
pH, Client Supplied	7.86		0.10	pH		12-MAR-23	R5935500
Temperature, Client Supplied	<0		0	Degree C		12-MAR-23	R5935500
Physical Tests							
Color, True	89.2		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	434		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	225		0.50			10-MAR-23	
pH	7.91		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	5.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	270		20	mg/L		11-MAR-23	R5935856
Turbidity	6.14		0.10	NTU		11-MAR-23	R5935483
Anions and Nutrients							
Acidity (as CaCO3)	1.2	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	202		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.024	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	14.5		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.055		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.148	<T	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	0.745		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.0071		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	14.9		0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0004	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.6		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	24.7		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.266		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000105	<T	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00107	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0244		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000024	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.016	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000130	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	56.2		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000356		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00084	<T	0.00050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-14 SW27_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:40							
Matrix: SURFACE WATER							
Total Metals							
Cobalt (Co)-Total	0.000360	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00300	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	0.649		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00024	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0062	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	22.6		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.179		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000635	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00186	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.022	<DL	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.09		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00224		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000146	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	6.93		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000060	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	5.34		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.124		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	5.10		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000006	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000064	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00004	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00860		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000020	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.00167	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00116	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0556		0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000416		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0138	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000090	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.000985	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0222		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.014		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000092	<T	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	52.7		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000012	<DL	0.000010	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-14 SW27_SW_20230307 Sampled By: Client on 08-MAR-23 @ 12:40 Matrix: SURFACE WATER							
Dissolved Metals							
Chromium (Cr)-Dissolved	0.00018	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.000220	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00265	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.244		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0056	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	22.8		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	0.156		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000615	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00138	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.014	<DL	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.00		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00175		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000200	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	6.32		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000010	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	5.33		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.125		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	4.95		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	0.000005	<DL	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000038	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00180		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.00162	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00046	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0510		0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000336		0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	60		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.4	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
L2748752-15 SW21A_SW_20230307 Sampled By: Client on 08-MAR-23 @ 13:10 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	0		0	mg/L		12-MAR-23	R5935500
pH, Client Supplied	7.56		0.10	pH		12-MAR-23	R5935500
Temperature, Client Supplied	<0		0	Degree C		12-MAR-23	R5935500
Physical Tests							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-15 SW21A_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 13:10							
Matrix: SURFACE WATER							
Physical Tests							
Color, True	87.3		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	484		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	246		0.50			10-MAR-23	
pH	7.49		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	16.0		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	306		20	mg/L		11-MAR-23	R5935856
Turbidity	18.4		0.10	NTU		11-MAR-23	R5935483
Anions and Nutrients							
Acidity (as CaCO3)	6.4		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	241		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.270		0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	19.3		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.053		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.002	<DL	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.19		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.128		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	3.15	<T	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0003	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.3		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	26.8		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.186		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000055	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00199	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0401		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000020	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.014	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000296	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	60.0		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000246		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00172	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.00300	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00070	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	5.01		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00024	<T	0.000050	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-15 SW21A_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 13:10							
Matrix: SURFACE WATER							
Total Metals							
Lithium (Li)-Total	0.0066	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	27.0		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	2.06		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	0.000170	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00214	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.406		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.21		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00248		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000170	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	9.36		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000060	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	9.38		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.143		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	1.50		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000003	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000062	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00017		0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00640		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000010	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000560	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00104	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0094	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000376		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0070	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000045	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.00107	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0256		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000010	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.012		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000044	<DL	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	55.6		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000008	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.00156	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00020	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.830		0.010	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-15 SW21A_SW_20230307 Sampled By: Client on 08-MAR-23 @ 13:10 Matrix: SURFACE WATER							
Dissolved Metals							
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0062	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	26.0		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	1.24		0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000140	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00150	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.092		0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.12		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00195		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000196	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	9.44		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	9.11		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.133		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	1.50		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000014	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00030		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000511	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00022	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0036	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000256	<T	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	2.7		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	71		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.4	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
L2748752-16 SW22A_SW_20230307 Sampled By: Client on 08-MAR-23 @ 14:10 Matrix: SURFACE WATER							
Field Tests							
Dissolved Oxygen, Client Supplied	0		0	mg/L		13-MAR-23	R5935739
pH, Client Supplied	7.55		0.10	pH		13-MAR-23	R5935739
Temperature, Client Supplied	<0		0	Degree C		13-MAR-23	R5935739
Physical Tests							
Color, True	88.6		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	480		1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	246		0.50			10-MAR-23	
pH	7.57		0.10	pH		11-MAR-23	R5935599

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-16 SW22A_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 14:10							
Matrix: SURFACE WATER							
Physical Tests							
Total Suspended Solids	14.5		3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	308		20	mg/L		11-MAR-23	R5935856
Turbidity	14.9		0.10	NTU		11-MAR-23	R5935483
Anions and Nutrients							
Acidity (as CaCO3)	6.4		2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	238		2.0	mg/L		11-MAR-23	R5935599
Ammonia, Total (as N)	0.220	<T	0.0050	mg/L		13-MAR-23	R5935916
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		14-MAR-23	
Chloride (Cl)	16.9		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	0.058		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.016	<DL	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	1.06		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	0.079		0.010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	5.00		0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	0.0006	<DL	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	0.0007	<DL	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.8		0.50	mg/L	14-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	26.5		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	0.174		0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	0.000060	<DL	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.00176	<T	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	0.0379		0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	0.000018	<DL	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.014	<T	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	0.0000114	<T	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	59.0		0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	0.0000240		0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00076	<T	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	0.00263	<T	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	0.00085	<T	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	3.87		0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	0.00020	<T	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	0.0066	<T	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	25.6		0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	2.04		0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-16 SW22A_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 14:10							
Matrix: SURFACE WATER							
Total Metals							
Molybdenum (Mo)-Total	0.000270	<T	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	0.00192	<T	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	0.324		0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	2.15		0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	0.00231		0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000182	<T	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	9.51		0.10	mg/L		15-MAR-23	R5936776
Silver (Ag)-Total	0.0000035	<DL	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	8.41		0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	0.142		0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	2.30		0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	0.000003	<DL	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	0.000056	<DL	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	0.00618		0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	0.000006	<DL	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	0.000786	<T	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	0.00100	<T	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0090	<T	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	0.000376		0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					15-MAR-23	R5936336
Aluminum (Al)-Dissolved	0.0072	<T	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	0.000055	<DL	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	0.00119	<T	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	0.0243		0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.014		0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000030	<DL	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	56.0		0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00018	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	0.00122	<T	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	0.00060	<T	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	0.781		0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	0.0062	<T	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	25.8		0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	1.03		0.00050	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-16 SW22A_SW_20230307 Sampled By: Client on 08-MAR-23 @ 14:10 Matrix: SURFACE WATER							
Dissolved Metals							
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	0.000230	<T	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	0.00146	<T	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	0.094		0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	2.14		0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.00181		0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000208	<T	0.000050	mg/L		15-MAR-23	R5936777
Silicon (Si)-Dissolved	8.61		0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	0.0000010	<DL	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	8.44		0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	0.132		0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	2.25		0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	0.000015	<DL	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	0.000016	<DL	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	0.00058		0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	0.000750	<T	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	0.00026	<DL	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	0.0052	<T	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	0.000280	<T	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	2.7		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	78		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	0.8	<DL	1.0	mg/L	15-MAR-23	15-MAR-23	R5936577
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		14-MAR-23	R5939417
L2748752-17 TB_SW_20230307 Sampled By: Client on 08-MAR-23 @ 12:00 Matrix: SURFACE WATER							
Physical Tests							
Color, True	<2.0		2.0	CU		13-MAR-23	R5935738
Conductivity (EC)	0.4	<DL	1.0	uS/cm		11-MAR-23	R5935599
Hardness (as CaCO3)	<0.50		0.50			10-MAR-23	
pH	5.34		0.10	pH		11-MAR-23	R5935599
Total Suspended Solids	1.0	<DL	3.0	mg/L		11-MAR-23	R5935956
Total Dissolved Solids	<2	<W	10	mg/L		11-MAR-23	R5935856
Turbidity	<0.10		0.10	NTU		11-MAR-23	R5935483
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		13-MAR-23	R5935926
Alkalinity, Total (as CaCO3)	0.4	<DL	2.0	mg/L		11-MAR-23	R5935599

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-17 TB_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Anions and Nutrients							
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		13-MAR-23	R5935916
Chloride (Cl)	<0.10		0.10	mg/L	12-MAR-23	13-MAR-23	R5935920
Fluoride (F)	<0.020		0.020	mg/L	12-MAR-23	13-MAR-23	R5935920
Nitrate (as N)	0.004	<DL	0.020	mg/L		13-MAR-23	R5935920
Nitrite (as N)	<0.001	<W	0.010	mg/L		13-MAR-23	R5935920
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	12-MAR-23	15-MAR-23	R5936617
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	12-MAR-23	13-MAR-23	R5935696
Sulfate (SO4)	<0.05	<W	0.30	mg/L		13-MAR-23	R5935920
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Total	<0.0002	<W	0.0020	mg/L		15-MAR-23	R5936836
Cyanide, Free	<0.0001	<W	0.0020	mg/L		15-MAR-23	R5936836
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	08-MAR-23	17-MAR-23	R5937776
Total Organic Carbon	<0.50		0.50	mg/L		16-MAR-23	R5937339
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		15-MAR-23	R5936776
Antimony (Sb)-Total	<0.000005	<W	0.00010	mg/L		15-MAR-23	R5936776
Arsenic (As)-Total	0.000005	<DL	0.00010	mg/L		15-MAR-23	R5936776
Barium (Ba)-Total	<0.00002	<W	0.00010	mg/L		15-MAR-23	R5936776
Beryllium (Be)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936776
Boron (B)-Total	0.002	<DL	0.010	mg/L		15-MAR-23	R5936776
Cadmium (Cd)-Total	<0.0000002	<W	0.0000050	mg/L		15-MAR-23	R5936776
Calcium (Ca)-Total	<0.005	<W	0.050	mg/L		15-MAR-23	R5936776
Cesium (Cs)-Total	<0.0000002	<W	0.000010	mg/L		15-MAR-23	R5936776
Chromium (Cr)-Total	0.00016	<DL	0.00050	mg/L		15-MAR-23	R5936776
Cobalt (Co)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Copper (Cu)-Total	<0.00005	<W	0.00050	mg/L		15-MAR-23	R5936776
Iron (Fe)-Total	<0.001	<W	0.010	mg/L		15-MAR-23	R5936776
Lead (Pb)-Total	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936776
Lithium (Li)-Total	<0.0002	<W	0.0010	mg/L		15-MAR-23	R5936776
Magnesium (Mg)-Total	<0.0005	<W	0.0050	mg/L		15-MAR-23	R5936776
Manganese (Mn)-Total	0.00006	<DL	0.00050	mg/L		15-MAR-23	R5936776
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936499
Molybdenum (Mo)-Total	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936776
Nickel (Ni)-Total	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936776
Phosphorus (P)-Total	<0.002	<W	0.050	mg/L		15-MAR-23	R5936776
Potassium (K)-Total	<0.002	<W	0.050	mg/L		15-MAR-23	R5936776
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		15-MAR-23	R5936776
Selenium (Se)-Total	0.000004	<DL	0.000050	mg/L		15-MAR-23	R5936776
Silicon (Si)-Total	<0.002	<W	0.10	mg/L		15-MAR-23	R5936776

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-17 TB_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Total Metals							
Silver (Ag)-Total	<0.0000005	<W	0.000050	mg/L		15-MAR-23	R5936776
Sodium (Na)-Total	<0.005	<W	0.050	mg/L		15-MAR-23	R5936776
Strontium (Sr)-Total	<0.00001	<W	0.0010	mg/L		15-MAR-23	R5936776
Sulfur (S)-Total	<0.05	<W	0.50	mg/L		15-MAR-23	R5936776
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936776
Thallium (Tl)-Total	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936776
Thorium (Th)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Tin (Sn)-Total	0.00002	<DL	0.00010	mg/L		15-MAR-23	R5936776
Titanium (Ti)-Total	<0.00002	<W	0.00030	mg/L		15-MAR-23	R5936776
Tungsten (W)-Total	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936776
Uranium (U)-Total	<0.0000005	<W	0.000010	mg/L		15-MAR-23	R5936776
Vanadium (V)-Total	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936776
Zinc (Zn)-Total	0.0008	<DL	0.0030	mg/L		15-MAR-23	R5936776
Zirconium (Zr)-Total	<0.000004	<W	0.00020	mg/L		15-MAR-23	R5936776
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					15-MAR-23	R5936416
Aluminum (Al)-Dissolved	<0.0002	<W	0.0050	mg/L		15-MAR-23	R5936777
Antimony (Sb)-Dissolved	<0.000005	<W	0.00010	mg/L		15-MAR-23	R5936777
Arsenic (As)-Dissolved	<0.000005	<W	0.00010	mg/L		15-MAR-23	R5936777
Barium (Ba)-Dissolved	<0.00002	<W	0.00010	mg/L		15-MAR-23	R5936777
Beryllium (Be)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Bismuth (Bi)-Dissolved	0.000025	<DL	0.000050	mg/L		15-MAR-23	R5936777
Boron (B)-Dissolved	0.002	<DL	0.010	mg/L		15-MAR-23	R5936777
Cadmium (Cd)-Dissolved	0.0000006	<DL	0.0000050	mg/L		15-MAR-23	R5936777
Calcium (Ca)-Dissolved	<0.005	<W	0.050	mg/L		15-MAR-23	R5936777
Cesium (Cs)-Dissolved	<0.0000002	<W	0.000010	mg/L		15-MAR-23	R5936777
Chromium (Cr)-Dissolved	0.00014	<DL	0.00050	mg/L		15-MAR-23	R5936777
Cobalt (Co)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Copper (Cu)-Dissolved	<0.00005	<W	0.00020	mg/L		15-MAR-23	R5936777
Iron (Fe)-Dissolved	<0.001	<W	0.010	mg/L		15-MAR-23	R5936777
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		15-MAR-23	R5936777
Lithium (Li)-Dissolved	<0.0002	<W	0.0010	mg/L		15-MAR-23	R5936777
Magnesium (Mg)-Dissolved	<0.0005	<W	0.0050	mg/L		15-MAR-23	R5936777
Manganese (Mn)-Dissolved	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936777
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		15-MAR-23	R5936497
Molybdenum (Mo)-Dissolved	<0.000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Nickel (Ni)-Dissolved	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936777
Phosphorus (P)-Dissolved	<0.002	<W	0.050	mg/L		15-MAR-23	R5936777
Potassium (K)-Dissolved	<0.002	<W	0.050	mg/L		15-MAR-23	R5936777
Rubidium (Rb)-Dissolved	0.000004	<DL	0.00020	mg/L		15-MAR-23	R5936777
Selenium (Se)-Dissolved	0.000004	<DL	0.000050	mg/L		15-MAR-23	R5936777

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2748752-17 TB_SW_20230307							
Sampled By: Client on 08-MAR-23 @ 12:00							
Matrix: SURFACE WATER							
Dissolved Metals							
Silicon (Si)-Dissolved	<0.002	<W	0.050	mg/L		15-MAR-23	R5936777
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		15-MAR-23	R5936777
Sodium (Na)-Dissolved	<0.005	<W	0.050	mg/L		15-MAR-23	R5936777
Strontium (Sr)-Dissolved	<0.00001	<W	0.0010	mg/L		15-MAR-23	R5936777
Sulfur (S)-Dissolved	<0.05	<W	0.50	mg/L		15-MAR-23	R5936777
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		15-MAR-23	R5936777
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		15-MAR-23	R5936777
Thorium (Th)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Tin (Sn)-Dissolved	0.00001	<DL	0.00010	mg/L		15-MAR-23	R5936777
Titanium (Ti)-Dissolved	<0.00002	<W	0.00030	mg/L		15-MAR-23	R5936777
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		15-MAR-23	R5936777
Uranium (U)-Dissolved	<0.0000005	<W	0.000010	mg/L		15-MAR-23	R5936777
Vanadium (V)-Dissolved	<0.00002	<W	0.00050	mg/L		15-MAR-23	R5936777
Zinc (Zn)-Dissolved	<0.0002	<W	0.0010	mg/L		15-MAR-23	R5936777
Zirconium (Zr)-Dissolved	<0.000004	<W	0.00020	mg/L		15-MAR-23	R5936777
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		11-MAR-23	R5936916
Chemical Oxygen Demand	<10		10	mg/L	12-MAR-23	14-MAR-23	R5936176
Oil and Grease, Total	1.2		1.0	mg/L	15-MAR-23	15-MAR-23	R5936577

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Ammonia, Total (as N)	MS-B	L2748752-1, -10, -11, -12, -13, -14, -15, -16, -17, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Orthophosphate-Dissolved (as P)	MS-B	L2748752-1, -10, -11, -12, -13, -14, -15, -16, -17, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Total Organic Carbon	MS-B	L2748752-1, -10, -11, -12, -13, -14, -15, -16, -17, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACY-MISA-TB	Effluent	Acidity (as CaCO ₃)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-MISA-TB	Effluent	Alkalinity, Total (as CaCO ₃)	APHA 2320 B-Auto-Pot. Titration
This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.			
BOD-TB	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B- BIOCHEMICAL OXYGEN DEMAND
All forms of biochemical oxygen demand (BOD) are determined by diluting and incubating a sample for a specified time period, and measuring the oxygen depletion using a dissolved oxygen meter. Dissolved BOD (SOLUBLE) is determined by filtering the sample through a glass fibre filter prior to dilution. Carbonaceous BOD (CBOD) is determined by adding a nitrification inhibitor to the diluted sample prior to incubation.			
CL-L-IC-N-TB	Water	Chloride in Water by IC (Low Level)	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
CN-FREE-MISA-CFA-WT	Effluent	Free Cyanide by Continuous Flow Analyzer	ASTM D7237-10 (modified)
This analysis is carried out using procedures adapted from ASTM Method 7237 "Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection". Free cyanide is determined by in-line gas diffusion at pH 6 with final determination by colourimetric analysis.			
CN-T-MISA-CFA-WT	Effluent	Total Cyanide by CFA	ISO 14403-2:2012 (modified)
This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by colourimetric analysis. Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.			
CN-WAD-MISA-CFA-WT	Effluent	Weak Acid Dissociable Cyanide by CFA	APHA 4500-CN CYANIDE (modified)
This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.			
COD-TB	Water	Chemical Oxygen Demand	APHA 5220D
This analysis is carried out using procedures adapted from APHA Method 5220 "Chemical Oxygen Demand (COD)". Chemical oxygen demand is determined using the closed reflux colourimetric method.			
COLOUR-TB	Water	Colour, True	APHA 2120 C
True Colour in aqueous matrices is analyzed using colourimetric detection. This is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using a platinum-cobalt standard.			
DO-CLIENT-TB	Water	Dissolved Oxygen, Client Supplied	Result supplied by Client
DOC-WT	Effluent	Dissolved Organic Carbon for MISA	APHA 5310 B-Instrumental
EC-MISA-TB	Effluent	Conductivity (EC)	APHA 2510 B-ELECTRODE
This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.			

Reference Information

F-IC-N-TB	Water	Fluoride in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
HARDNESS-CALC-TB	Effluent	Hardness (as CaCO ₃)	CALCULATION
HG-DIS-WT	Effluent	Mercury (Hg)-Dissolved for MISA	SW846 7470A
HG-TOT-WT	Effluent	Mercury (Hg)-Total for MISA	SW846 7470A
MET-D-MISA-MS-WT	Effluent	Diss. Metals in Effluent by ICPMS (MISA)	EPA 200.8
The concentration of metals determined on an filtered effluent sample for the MISA regulation. The samples are analyzed directly (undigested) by ICP-MS.			
MET-T-MISA-MS-WT	Effluent	Total Metals by ICPMS	EPA 200.8
The concentration of metals determined on an unfiltered effluent sample for the MISA regulation. The samples are digested in acid and analyzed by ICP-MS.			
NH3-MISA-F-TB	Effluent	Ammonia by Discrete Analyzer	catnr 157/158 062217/99321057 (modified)
Ammonia is determined by Flow-injection analysis with fluorescence detection			
NH3-UNION-CALC-TB	Effluent	Un-ionized ammonia	Calculation
NO2-MISA-IC-TB	Effluent	Nitrite in Water by IC	EPA 300.1 (mod)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
NO3-MISA-IC-TB	Effluent	Nitrate in Water by IC	EPA 300.1 (mod)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
OGG-TOT-WT	Effluent	Oil and Grease, Total for MISA	APHA 5520 B-Hexane Gravimetric
PH-CLIENT-TB	Water	pH	Result supplied by Client
PH-MISA-TB	Effluent	pH	APHA 4500-H-ELECTRODE
This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode			
PO4-DO-COL-TB	Water	Dissolved Orthophosphate	APHA 4500-P B, F, G (modified)
Phosphorus in aqueous matrices is analyzed using discrete Analyzer with colourimetric detection.			
RADIO-RADIUM226-SR	Water	Radium 226	CANMET 1986
SO4-MISA-IC-TB	Effluent	Sulfate in Water by IC	EPA 300.1 (mod)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
TDS-MISA-TB	Effluent	Total Dissolved Solids	APHA 2540 C (modified)
Aqueous matrices are analyzed using gravimetry and evaporation			
TEMP-CLIENT-TB	Water	Temperature	Result supplied by Client
TKN-F-TB	Water	TKN in Water by Fluorescence	catnr 157/158, 062818/99334821
Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection			
TOC-WT	Water	Total Organic Carbon	APHA 5310B
Sample is injected into a heated reaction chamber which is packed with an oxidative catalyst. The water is vaporized and the organic carbon is oxidized to carbon dioxide. The carbon dioxide is transported in a carrier gas and is measured by a non-dispersive infrared detector.			

Reference Information

TSS-MISA-TB Effluent Total Suspended Solids APHA 2540 D (modified)

Aqueous matrices are analyzed using gravimetry

TURBIDITY-TB Water Turbidity APHA 2130 B-Nephelometer

Aqueous matrices are analyzed using nephelometry with the light scatter measured at a 90° angle.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SR	Saskatchewan Research Council - Saskatoon, Saskatchewan, Can
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Environmental

Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 1 of 17

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BOD-TB								
	Water							
Batch	R5936916							
WG3781397-3	DUP	L2748752-13						
Biochemical Oxygen Demand		<2.0	<2.0	RPD-NA	mg/L	N/A	30	11-MAR-23
WG3781397-2	LCS							
Biochemical Oxygen Demand			103.4		%		85-115	11-MAR-23
WG3781397-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	11-MAR-23
CL-L-IC-N-TB								
	Water							
Batch	R5935920							
WG3781409-3	DUP	L2748752-1						
Chloride (Cl)		2.51	2.55		mg/L	1.6	20	13-MAR-23
WG3781409-2	LCS							
Chloride (Cl)			106.5		%		90-110	13-MAR-23
WG3781409-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	13-MAR-23
WG3781409-4	MS	L2748752-2						
Chloride (Cl)			113.9		%		75-125	13-MAR-23
COD-TB								
	Water							
Batch	R5936176							
WG3781412-3	DUP	L2748752-1						
Chemical Oxygen Demand		23	26		mg/L	10	20	14-MAR-23
WG3781412-2	LCS							
Chemical Oxygen Demand			98.1		%		85-115	14-MAR-23
WG3781412-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	14-MAR-23
WG3781412-4	MS	L2748752-2						
Chemical Oxygen Demand			98.4		%		75-125	14-MAR-23
COLOUR-TB								
	Water							
Batch	R5935738							
WG3781407-3	DUP	L2748752-1						
Color, True		33.6	33.8		CU	0.4	20	13-MAR-23
WG3781407-2	LCS							
Color, True			95.2		%		85-115	13-MAR-23
WG3781407-1	MB							
Color, True			<2.0		CU		2	13-MAR-23
F-IC-N-TB								
	Water							



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 2 of 17

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F-IC-N-TB								
	Water							
Batch	R5935920							
WG3781409-3	DUP	L2748752-1						
Fluoride (F)		0.024	0.021		mg/L	11	20	13-MAR-23
WG3781409-2	LCS							
Fluoride (F)			95.9		%		90-110	13-MAR-23
WG3781409-1	MB							
Fluoride (F)			<0.020		mg/L		0.02	13-MAR-23
WG3781409-4	MS	L2748752-2						
Fluoride (F)			104.5		%		75-125	13-MAR-23
PO4-DO-COL-TB								
	Water							
Batch	R5935696							
WG3781408-3	DUP	L2748752-1						
Orthophosphate-Dissolved (as P)		<0.0010	0.0011	RPD-NA	mg/L	N/A	20	13-MAR-23
WG3781408-2	LCS							
Orthophosphate-Dissolved (as P)			106.5		%		80-120	13-MAR-23
WG3781408-1	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	13-MAR-23
WG3781408-4	MS	L2748752-2						
Orthophosphate-Dissolved (as P)			N/A	MS-B	%		-	13-MAR-23
TKN-F-TB								
	Water							
Batch	R5936617							
WG3781413-3	DUP	L2748752-1						
Total Kjeldahl Nitrogen		0.353	0.372		mg/L	5.4	20	15-MAR-23
WG3781413-2	LCS							
Total Kjeldahl Nitrogen			95.1		%		75-125	15-MAR-23
WG3781413-1	MB							
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	15-MAR-23
TOC-WT								
	Water							
Batch	R5937339							
WG3781607-3	DUP	L2748752-1						
Total Organic Carbon		10.9	11.2		mg/L	2.6	20	16-MAR-23
WG3781607-2	LCS							
Total Organic Carbon			108.9		%		80-120	16-MAR-23
WG3781607-1	MB							
Total Organic Carbon			<0.50		mg/L		0.5	16-MAR-23
WG3781607-4	MS	L2748752-1						
Total Organic Carbon			N/A	MS-B	%		-	16-MAR-23
TURBIDITY-TB								
	Water							



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 3 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TURBIDITY-TB		Water						
Batch	R5935483							
WG3781400-3	DUP	L2748752-14						
Turbidity		6.14	6.31		NTU	2.7	15	11-MAR-23
WG3781400-2	LCS							
Turbidity			95.5		%		85-115	11-MAR-23
WG3781400-1	MB							
Turbidity			<0.10		NTU		0.1	11-MAR-23
Batch	R5936139							
WG3781525-3	DUP	L2748752-11						
Turbidity		20.7	18.8		NTU	9.6	15	14-MAR-23
WG3781525-2	LCS							
Turbidity			95.0		%		85-115	14-MAR-23
WG3781525-1	MB							
Turbidity			<0.10		NTU		0.1	14-MAR-23
ACY-MISA-TB		Effluent						
Batch	R5935926							
WG3781406-3	DUP	L2748752-1						
Acidity (as CaCO3)		1.6	1.4	RPD-NA	mg/L	N/A	20	13-MAR-23
WG3781406-2	LCS							
Acidity (as CaCO3)			94.8		%		85-115	13-MAR-23
WG3781406-1	MB							
Acidity (as CaCO3)			1.6		mg/L		3	13-MAR-23
ALK-MISA-TB		Effluent						
Batch	R5935599							
WG3781401-2	LCS							
Alkalinity, Total (as CaCO3)			100.5		%		85-115	11-MAR-23
WG3781401-1	MB							
Alkalinity, Total (as CaCO3)			0.4		mg/L		2	11-MAR-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	11-MAR-23
CN-FREE-MISA-CFA-WT		Effluent						
Batch	R5936836							
WG3781594-3	DUP	L2748752-1						
Cyanide, Free		0.0005	0.0007	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781594-2	LCS							
Cyanide, Free			104.9		%		80-120	15-MAR-23
WG3781594-1	MB							
Cyanide, Free			<0.0001		mg/L		0.002	15-MAR-23
WG3781594-4	MS	L2748752-1						



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 4 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON POW 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-FREE-MISA-CFA-WT Effluent								
Batch	R5936836							
WG3781594-4	MS	L2748752-1						
Cyanide, Free			101.4		%		75-125	15-MAR-23
CN-T-MISA-CFA-WT Effluent								
Batch	R5936836							
WG3781594-3	DUP	L2748752-1						
Cyanide, Total		0.0004	0.0002	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781594-2	LCS							
Cyanide, Total			87.2		%		80-120	15-MAR-23
WG3781594-1	MB							
Cyanide, Total			<0.0002		mg/L		0.002	15-MAR-23
WG3781594-4	MS	L2748752-1						
Cyanide, Total			84.1		%		75-125	15-MAR-23
CN-WAD-MISA-CFA-WT Effluent								
Batch	R5936836							
WG3781594-3	DUP	L2748752-1						
Cyanide, Weak Acid Diss		0.0002	<0.0001	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781594-2	LCS							
Cyanide, Weak Acid Diss			110.9		%		80-120	15-MAR-23
WG3781594-1	MB							
Cyanide, Weak Acid Diss			<0.0001		mg/L		0.002	15-MAR-23
WG3781594-4	MS	L2748752-1						
Cyanide, Weak Acid Diss			103.3		%		75-125	15-MAR-23
DOC-WT Effluent								
Batch	R5937776							
WG3781616-3	DUP	L2748752-4						
Dissolved Organic Carbon		10.8	11.0		mg/L	1.5	25	17-MAR-23
WG3781616-2	LCS							
Dissolved Organic Carbon			101.5		%		70-130	17-MAR-23
WG3781616-1	MB							
Dissolved Organic Carbon			<0.50		mg/L		0.5	17-MAR-23
EC-MISA-TB Effluent								
Batch	R5935599							
WG3781401-2	LCS							
Conductivity (EC)			97.1		%		90-110	11-MAR-23
WG3781401-1	MB							
Conductivity (EC)			<0.2		uS/cm		2	11-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 5 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-DIS-WT		Effluent						
Batch R5936497								
WG3781543-3 DUP		L2748752-1						
Mercury (Hg)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781543-2 LCS								
Mercury (Hg)-Dissolved			92.5		%		80-120	15-MAR-23
WG3781543-1 MB								
Mercury (Hg)-Dissolved			<0.000005		mg/L		0.000005	15-MAR-23
WG3781543-4 MS		L2748752-2						
Mercury (Hg)-Dissolved			89.2		%		70-130	15-MAR-23
HG-TOT-WT		Effluent						
Batch R5936499								
WG3781544-3 DUP		L2748752-1						
Mercury (Hg)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781544-2 LCS								
Mercury (Hg)-Total			91.5		%		80-120	15-MAR-23
WG3781544-1 MB								
Mercury (Hg)-Total			<0.000005		mg/L		0.000005	15-MAR-23
WG3781544-4 MS		L2748752-2						
Mercury (Hg)-Total			89.7		%		70-130	15-MAR-23
MET-D-MISA-MS-WT		Effluent						
Batch R5936777								
WG3781558-4 DUP		WG3781558-3						
Aluminum (Al)-Dissolved		0.0234	0.0190	J	mg/L	0.0044	0.01	15-MAR-23
Antimony (Sb)-Dissolved		0.000045	0.000045	RPD-NA	mg/L	N/A	20	15-MAR-23
Arsenic (As)-Dissolved		0.000390	0.000365		mg/L	6.9	20	15-MAR-23
Barium (Ba)-Dissolved		0.00822	0.00834		mg/L	1.5	20	15-MAR-23
Beryllium (Be)-Dissolved		0.000006	0.000004	RPD-NA	mg/L	N/A	20	15-MAR-23
Bismuth (Bi)-Dissolved		0.000005	<0.000005	RPD-NA	mg/L	N/A	20	15-MAR-23
Boron (B)-Dissolved		0.006	0.006	RPD-NA	mg/L	N/A	20	15-MAR-23
Cadmium (Cd)-Dissolved		0.0000054	0.0000038	RPD-NA	mg/L	N/A	20	15-MAR-23
Calcium (Ca)-Dissolved		6.24	6.05		mg/L	3.1	20	15-MAR-23
Cesium (Cs)-Dissolved		0.0000026	0.0000028	RPD-NA	mg/L	N/A	25	15-MAR-23
Chromium (Cr)-Dissolved		0.00024	0.00024	RPD-NA	mg/L	N/A	20	15-MAR-23
Cobalt (Co)-Dissolved		0.000022	0.000016	RPD-NA	mg/L	N/A	20	15-MAR-23
Copper (Cu)-Dissolved		0.00100	0.00095		mg/L	4.0	20	15-MAR-23
Iron (Fe)-Dissolved		0.065	0.058		mg/L	11	20	15-MAR-23
Lead (Pb)-Dissolved		0.00002	<0.00002	RPD-NA	mg/L	N/A	20	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 6 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT								
	Effluent							
Batch	R5936777							
WG3781558-4	DUP	WG3781558-3						
Lithium (Li)-Dissolved		0.0008	0.0006	RPD-NA	mg/L	N/A	20	15-MAR-23
Magnesium (Mg)-Dissolved		2.23	2.15		mg/L	3.7	20	15-MAR-23
Manganese (Mn)-Dissolved		0.00190	0.00192		mg/L	0.5	20	15-MAR-23
Molybdenum (Mo)-Dissolved		0.000130	0.000130		mg/L	0.3	20	15-MAR-23
Nickel (Ni)-Dissolved		0.00046	0.00044	RPD-NA	mg/L	N/A	20	15-MAR-23
Phosphorus (P)-Dissolved		0.006	0.004	RPD-NA	mg/L	N/A	25	15-MAR-23
Potassium (K)-Dissolved		0.730	0.744		mg/L	1.9	20	15-MAR-23
Rubidium (Rb)-Dissolved		0.00183	0.00183		mg/L	0.1	25	15-MAR-23
Selenium (Se)-Dissolved		0.000102	0.000102		mg/L	0.0	20	15-MAR-23
Silicon (Si)-Dissolved		1.86	1.87		mg/L	0.7	25	15-MAR-23
Silver (Ag)-Dissolved		0.0000040	0.0000025	RPD-NA	mg/L	N/A	20	15-MAR-23
Sodium (Na)-Dissolved		3.03	3.07		mg/L	1.4	20	15-MAR-23
Strontium (Sr)-Dissolved		0.0213	0.0225		mg/L	5.7	20	15-MAR-23
Sulfur (S)-Dissolved		1.35	1.35		mg/L	1.6	25	15-MAR-23
Tellurium (Te)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	15-MAR-23
Thallium (Tl)-Dissolved		0.000002	0.000002	RPD-NA	mg/L	N/A	20	15-MAR-23
Thorium (Th)-Dissolved		0.000032	0.000030	RPD-NA	mg/L	N/A	25	15-MAR-23
Tin (Sn)-Dissolved		0.00006	0.00006	RPD-NA	mg/L	N/A	20	15-MAR-23
Titanium (Ti)-Dissolved		0.00044	0.00024	RPD-NA	mg/L	N/A	20	15-MAR-23
Tungsten (W)-Dissolved		0.000004	0.000002	RPD-NA	mg/L	N/A	20	15-MAR-23
Uranium (U)-Dissolved		0.0000715	0.0000715		mg/L	0.3	20	15-MAR-23
Vanadium (V)-Dissolved		0.00020	0.00020	RPD-NA	mg/L	N/A	20	15-MAR-23
Zinc (Zn)-Dissolved		0.0042	0.0044		mg/L	4.1	20	15-MAR-23
Zirconium (Zr)-Dissolved		0.000136	0.000136	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781571-4	DUP	WG3781571-3						
Aluminum (Al)-Dissolved		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	15-MAR-23
Antimony (Sb)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	15-MAR-23
Arsenic (As)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	15-MAR-23
Barium (Ba)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	15-MAR-23
Beryllium (Be)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	15-MAR-23
Bismuth (Bi)-Dissolved		0.000025	0.000010	RPD-NA	mg/L	N/A	20	15-MAR-23
Boron (B)-Dissolved		0.002	0.002	RPD-NA	mg/L	N/A	20	15-MAR-23
Cadmium (Cd)-Dissolved		0.0000006	0.0000016	RPD-NA	mg/L	N/A	20	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 7 of 17

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT								
	Effluent							
Batch	R5936777							
WG3781571-4	DUP	WG3781571-3						
Calcium (Ca)-Dissolved		<0.005	<0.005	RPD-NA	mg/L	N/A	20	15-MAR-23
Cesium (Cs)-Dissolved		<0.0000002	0.0000004	RPD-NA	mg/L	N/A	25	15-MAR-23
Chromium (Cr)-Dissolved		0.00014	0.00016	RPD-NA	mg/L	N/A	20	15-MAR-23
Cobalt (Co)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	15-MAR-23
Copper (Cu)-Dissolved		<0.00005	<0.00005	RPD-NA	mg/L	N/A	20	15-MAR-23
Iron (Fe)-Dissolved		<0.001	<0.001	RPD-NA	mg/L	N/A	20	15-MAR-23
Lead (Pb)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	15-MAR-23
Lithium (Li)-Dissolved		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	15-MAR-23
Magnesium (Mg)-Dissolved		<0.0005	<0.0005	RPD-NA	mg/L	N/A	20	15-MAR-23
Manganese (Mn)-Dissolved		<0.00002	0.00004	RPD-NA	mg/L	N/A	20	15-MAR-23
Molybdenum (Mo)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	15-MAR-23
Nickel (Ni)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	15-MAR-23
Phosphorus (P)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	25	15-MAR-23
Potassium (K)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	20	15-MAR-23
Rubidium (Rb)-Dissolved		0.000004	<0.000002	RPD-NA	mg/L	N/A	25	15-MAR-23
Selenium (Se)-Dissolved		0.000004	0.000004	RPD-NA	mg/L	N/A	20	15-MAR-23
Silicon (Si)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	25	15-MAR-23
Silver (Ag)-Dissolved		<0.0000005	0.0000010	RPD-NA	mg/L	N/A	20	15-MAR-23
Sodium (Na)-Dissolved		<0.005	<0.005	RPD-NA	mg/L	N/A	20	15-MAR-23
Strontium (Sr)-Dissolved		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	15-MAR-23
Sulfur (S)-Dissolved		<0.05	<0.05	RPD-NA	mg/L	N/A	25	15-MAR-23
Tellurium (Te)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	15-MAR-23
Thallium (Tl)-Dissolved		<0.000001	<0.000001	RPD-NA	mg/L	N/A	20	15-MAR-23
Thorium (Th)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	15-MAR-23
Tin (Sn)-Dissolved		0.00001	0.00001	RPD-NA	mg/L	N/A	20	15-MAR-23
Titanium (Ti)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	15-MAR-23
Tungsten (W)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	15-MAR-23
Uranium (U)-Dissolved		<0.0000005	0.0000010	RPD-NA	mg/L	N/A	20	15-MAR-23
Vanadium (V)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	15-MAR-23
Zinc (Zn)-Dissolved		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	15-MAR-23
Zirconium (Zr)-Dissolved		<0.000004	<0.000004	RPD-NA	mg/L	N/A	20	15-MAR-23
WG3781558-1	MB							
Aluminum (Al)-Dissolved			0.0006		mg/L		0.005	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 8 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch	R5936777							
WG3781558-1 MB								
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0001	15-MAR-23
Arsenic (As)-Dissolved			<0.000005		mg/L		0.0001	15-MAR-23
Barium (Ba)-Dissolved			<0.00002		mg/L		0.0001	15-MAR-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Bismuth (Bi)-Dissolved			<0.000005		mg/L		0.00005	15-MAR-23
Boron (B)-Dissolved			<0.002		mg/L		0.01	15-MAR-23
Cadmium (Cd)-Dissolved			<0.0000002		mg/L		0.000005	15-MAR-23
Calcium (Ca)-Dissolved			<0.005		mg/L		0.05	15-MAR-23
Cesium (Cs)-Dissolved			<0.0000002		mg/L		0.00001	15-MAR-23
Chromium (Cr)-Dissolved			<0.00002		mg/L		0.0005	15-MAR-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Copper (Cu)-Dissolved			<0.00005		mg/L		0.0002	15-MAR-23
Iron (Fe)-Dissolved			<0.001		mg/L		0.01	15-MAR-23
Lead (Pb)-Dissolved			<0.00002		mg/L		0.00005	15-MAR-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.001	15-MAR-23
Magnesium (Mg)-Dissolved			0.0005		mg/L		0.005	15-MAR-23
Manganese (Mn)-Dissolved			0.00006		mg/L		0.0005	15-MAR-23
Molybdenum (Mo)-Dissolved			<0.000005		mg/L		0.00005	15-MAR-23
Nickel (Ni)-Dissolved			0.00010		mg/L		0.0005	15-MAR-23
Phosphorus (P)-Dissolved			<0.002		mg/L		0.05	15-MAR-23
Potassium (K)-Dissolved			<0.002		mg/L		0.05	15-MAR-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	15-MAR-23
Selenium (Se)-Dissolved			<0.000002		mg/L		0.00005	15-MAR-23
Silicon (Si)-Dissolved			<0.002		mg/L		0.05	15-MAR-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.00005	15-MAR-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.05	15-MAR-23
Strontium (Sr)-Dissolved			0.00006		mg/L		0.001	15-MAR-23
Sulfur (S)-Dissolved			<0.05		mg/L		0.5	15-MAR-23
Tellurium (Te)-Dissolved			0.000010		mg/L		0.0002	15-MAR-23
Thallium (Tl)-Dissolved			<0.000001		mg/L		0.00001	15-MAR-23
Thorium (Th)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Tin (Sn)-Dissolved			<0.00001		mg/L		0.0001	15-MAR-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.0003	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 9 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch	R5936777							
WG3781558-1 MB								
Tungsten (W)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Uranium (U)-Dissolved			<0.000000E		mg/L		0.00001	15-MAR-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.0005	15-MAR-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.001	15-MAR-23
Zirconium (Zr)-Dissolved			<0.000004		mg/L		0.0002	15-MAR-23
WG3781571-1 MB								
Aluminum (Al)-Dissolved			0.0004		mg/L		0.005	15-MAR-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0001	15-MAR-23
Arsenic (As)-Dissolved			<0.000005		mg/L		0.0001	15-MAR-23
Barium (Ba)-Dissolved			<0.00002		mg/L		0.0001	15-MAR-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Bismuth (Bi)-Dissolved			<0.000005		mg/L		0.00005	15-MAR-23
Boron (B)-Dissolved			<0.002		mg/L		0.01	15-MAR-23
Cadmium (Cd)-Dissolved			<0.0000002		mg/L		0.000005	15-MAR-23
Calcium (Ca)-Dissolved			<0.005		mg/L		0.05	15-MAR-23
Cesium (Cs)-Dissolved			<0.0000002		mg/L		0.00001	15-MAR-23
Chromium (Cr)-Dissolved			<0.00002		mg/L		0.0005	15-MAR-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Copper (Cu)-Dissolved			<0.00005		mg/L		0.0002	15-MAR-23
Iron (Fe)-Dissolved			<0.001		mg/L		0.01	15-MAR-23
Lead (Pb)-Dissolved			<0.00002		mg/L		0.00005	15-MAR-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.001	15-MAR-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.005	15-MAR-23
Manganese (Mn)-Dissolved			0.00010		mg/L		0.0005	15-MAR-23
Molybdenum (Mo)-Dissolved			<0.000005		mg/L		0.00005	15-MAR-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.0005	15-MAR-23
Phosphorus (P)-Dissolved			<0.002		mg/L		0.05	15-MAR-23
Potassium (K)-Dissolved			<0.002		mg/L		0.05	15-MAR-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	15-MAR-23
Selenium (Se)-Dissolved			<0.000002		mg/L		0.00005	15-MAR-23
Silicon (Si)-Dissolved			<0.002		mg/L		0.05	15-MAR-23
Silver (Ag)-Dissolved			<0.000000E		mg/L		0.00005	15-MAR-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.05	15-MAR-23
Strontium (Sr)-Dissolved			<0.00001		mg/L		0.001	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 10 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch R5936777								
WG3781571-1 MB								
Sulfur (S)-Dissolved			<0.05		mg/L		0.5	15-MAR-23
Tellurium (Te)-Dissolved			0.000020		mg/L		0.0002	15-MAR-23
Thallium (Tl)-Dissolved			<0.000001		mg/L		0.00001	15-MAR-23
Thorium (Th)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Tin (Sn)-Dissolved			<0.00001		mg/L		0.0001	15-MAR-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.0003	15-MAR-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.0001	15-MAR-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.00001	15-MAR-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.0005	15-MAR-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.001	15-MAR-23
Zirconium (Zr)-Dissolved			<0.000004		mg/L		0.0002	15-MAR-23
MET-T-MISA-MS-WT		Effluent						
Batch R5936776								
WG3781553-4 DUP								
		WG3781553-3						
Aluminum (Al)-Total		0.273	0.276		mg/L	0.9	25	15-MAR-23
Antimony (Sb)-Total		0.000050	0.000060	RPD-NA	mg/L	N/A	25	15-MAR-23
Arsenic (As)-Total		0.000140	0.000135		mg/L	4.9	25	15-MAR-23
Barium (Ba)-Total		0.00274	0.00270		mg/L	1.3	25	15-MAR-23
Beryllium (Be)-Total		0.000004	0.000006	RPD-NA	mg/L	N/A	25	15-MAR-23
Bismuth (Bi)-Total		0.000025	0.000015	RPD-NA	mg/L	N/A	25	15-MAR-23
Boron (B)-Total		<0.002	<0.002	RPD-NA	mg/L	N/A	25	15-MAR-23
Cadmium (Cd)-Total		0.0000242	0.0000256		mg/L	5.6	25	15-MAR-23
Calcium (Ca)-Total		1.54	1.55		mg/L	0.5	25	15-MAR-23
Cesium (Cs)-Total		0.0000762	0.0000776		mg/L	1.8	25	15-MAR-23
Chromium (Cr)-Total		0.00134	0.00140		mg/L	4.5	25	15-MAR-23
Cobalt (Co)-Total		0.000116	0.000114		mg/L	1.7	25	15-MAR-23
Copper (Cu)-Total		0.00140	0.00150		mg/L	5.4	25	15-MAR-23
Iron (Fe)-Total		0.351	0.358		mg/L	2.1	25	15-MAR-23
Lead (Pb)-Total		0.00076	0.00076		mg/L	0.7	25	15-MAR-23
Lithium (Li)-Total		0.0004	0.0004	RPD-NA	mg/L	N/A	25	15-MAR-23
Magnesium (Mg)-Total		0.334	0.342		mg/L	2.3	25	15-MAR-23
Manganese (Mn)-Total		0.0215	0.0214		mg/L	0.5	25	15-MAR-23
Molybdenum (Mo)-Total		0.000185	0.000195		mg/L	3.9	25	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 11 of 17

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT		Effluent						
Batch	R5936776							
WG3781553-4	DUP	WG3781553-3						
Nickel (Ni)-Total		0.00074	0.00074		mg/L	2.3	25	15-MAR-23
Phosphorus (P)-Total		0.060	0.058		mg/L	3.2	25	15-MAR-23
Potassium (K)-Total		0.678	0.698		mg/L	2.8	25	15-MAR-23
Rubidium (Rb)-Total		0.00281	0.00294		mg/L	4.5	25	15-MAR-23
Selenium (Se)-Total		0.000032	0.000042	RPD-NA	mg/L	N/A	25	15-MAR-23
Silicon (Si)-Total		0.440	0.428		mg/L	2.7	25	15-MAR-23
Silver (Ag)-Total		0.0000125	0.0000140	RPD-NA	mg/L	N/A	25	15-MAR-23
Sodium (Na)-Total		0.115	0.115		mg/L	2.7	25	15-MAR-23
Strontium (Sr)-Total		0.00321	0.00335		mg/L	4.3	25	15-MAR-23
Sulfur (S)-Total		0.15	0.10	RPD-NA	mg/L	N/A	25	15-MAR-23
Tellurium (Te)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	15-MAR-23
Thallium (Tl)-Total		0.000004	0.000005	RPD-NA	mg/L	N/A	25	15-MAR-23
Thorium (Th)-Total		0.000024	0.000026	RPD-NA	mg/L	N/A	25	15-MAR-23
Tin (Sn)-Total		0.00004	0.00004	RPD-NA	mg/L	N/A	25	15-MAR-23
Titanium (Ti)-Total		0.00460	0.00484		mg/L	5.2	25	15-MAR-23
Tungsten (W)-Total		0.000014	0.000016	RPD-NA	mg/L	N/A	25	15-MAR-23
Uranium (U)-Total		0.0000100	0.0000100	RPD-NA	mg/L	N/A	25	15-MAR-23
Vanadium (V)-Total		0.00050	0.00048	RPD-NA	mg/L	N/A	25	15-MAR-23
Zinc (Zn)-Total		0.0070	0.0072		mg/L	4.4	25	15-MAR-23
Zirconium (Zr)-Total		0.000068	0.000052	RPD-NA	mg/L	N/A	25	15-MAR-23
WG3781553-1	MB							
Aluminum (Al)-Total			0.0012		mg/L		0.005	15-MAR-23
Antimony (Sb)-Total			0.000010		mg/L		0.0001	15-MAR-23
Arsenic (As)-Total			<0.000005		mg/L		0.0001	15-MAR-23
Barium (Ba)-Total			<0.00002		mg/L		0.0001	15-MAR-23
Beryllium (Be)-Total			<0.000002		mg/L		0.0001	15-MAR-23
Bismuth (Bi)-Total			<0.000005		mg/L		0.00005	15-MAR-23
Boron (B)-Total			<0.002		mg/L		0.01	15-MAR-23
Cadmium (Cd)-Total			0.0000002		mg/L		0.000005	15-MAR-23
Calcium (Ca)-Total			<0.005		mg/L		0.05	15-MAR-23
Cesium (Cs)-Total			<0.0000002		mg/L		0.00001	15-MAR-23
Chromium (Cr)-Total			<0.00002		mg/L		0.0005	15-MAR-23
Cobalt (Co)-Total			<0.000002		mg/L		0.0001	15-MAR-23



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 12 of 17

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT								
	Effluent							
Batch	R5936776							
WG3781553-1	MB							
Copper (Cu)-Total			<0.00005		mg/L		0.0005	15-MAR-23
Iron (Fe)-Total			<0.001		mg/L		0.01	15-MAR-23
Lead (Pb)-Total			<0.00002		mg/L		0.00005	15-MAR-23
Lithium (Li)-Total			<0.0002		mg/L		0.001	15-MAR-23
Magnesium (Mg)-Total			0.0005		mg/L		0.005	15-MAR-23
Manganese (Mn)-Total			0.00006		mg/L		0.0005	15-MAR-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.00005	15-MAR-23
Nickel (Ni)-Total			<0.00002		mg/L		0.0005	15-MAR-23
Phosphorus (P)-Total			0.006		mg/L		0.05	15-MAR-23
Potassium (K)-Total			<0.002		mg/L		0.05	15-MAR-23
Rubidium (Rb)-Total			<0.000002		mg/L		0.0002	15-MAR-23
Selenium (Se)-Total			<0.000002		mg/L		0.00005	15-MAR-23
Silicon (Si)-Total			0.022		mg/L		0.1	15-MAR-23
Silver (Ag)-Total			0.0000005		mg/L		0.00005	15-MAR-23
Sodium (Na)-Total			0.010		mg/L		0.05	15-MAR-23
Strontium (Sr)-Total			0.00003		mg/L		0.001	15-MAR-23
Sulfur (S)-Total			<0.05		mg/L		0.5	15-MAR-23
Tellurium (Te)-Total			0.000145		mg/L		0.0002	15-MAR-23
Thallium (Tl)-Total			<0.000001		mg/L		0.00001	15-MAR-23
Thorium (Th)-Total			<0.000002		mg/L		0.0001	15-MAR-23
Tin (Sn)-Total			<0.00001		mg/L		0.0001	15-MAR-23
Titanium (Ti)-Total			<0.00002		mg/L		0.0003	15-MAR-23
Tungsten (W)-Total			<0.000002		mg/L		0.0001	15-MAR-23
Uranium (U)-Total			<0.0000005		mg/L		0.00001	15-MAR-23
Vanadium (V)-Total			<0.00002		mg/L		0.0005	15-MAR-23
Zinc (Zn)-Total			<0.0002		mg/L		0.003	15-MAR-23
Zirconium (Zr)-Total			<0.000004		mg/L		0.0002	15-MAR-23
NH3-MISA-F-TB								
	Effluent							
Batch	R5935916							
WG3781411-3	DUP	L2748752-1						
Ammonia, Total (as N)		0.006	0.004	RPD-NA	mg/L	N/A	20	13-MAR-23
WG3781411-2	LCS							
Ammonia, Total (as N)			99.1		%		85-115	13-MAR-23
WG3781411-1	MB							



Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 13 of 17

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NH3-MISA-F-TB								
Effluent								
Batch	R5935916							
WG3781411-1	MB							
Ammonia, Total (as N)			<0.002		mg/L		0.005	13-MAR-23
WG3781411-4	MS	L2748752-2	N/A	MS-B	%		-	13-MAR-23
Ammonia, Total (as N)								
NO2-MISA-IC-TB								
Effluent								
Batch	R5935920							
WG3781409-3	DUP	L2748752-1						
Nitrite (as N)		<0.001	<0.001	RPD-NA	mg/L	N/A	20	13-MAR-23
WG3781409-2	LCS		102.3		%		90-110	13-MAR-23
Nitrite (as N)								
WG3781409-1	MB		0.002		mg/L		0.01	13-MAR-23
Nitrite (as N)								
WG3781409-4	MS	L2748752-2	93.1		%		75-125	13-MAR-23
Nitrite (as N)								
NO3-MISA-IC-TB								
Effluent								
Batch	R5935920							
WG3781409-3	DUP	L2748752-1						
Nitrate (as N)		0.118	0.120		mg/L	1.8	20	13-MAR-23
WG3781409-2	LCS		106.7		%		90-110	13-MAR-23
Nitrate (as N)								
WG3781409-1	MB		<0.002		mg/L		0.02	13-MAR-23
Nitrate (as N)								
WG3781409-4	MS	L2748752-2	115.1		%		75-125	13-MAR-23
Nitrate (as N)								
OGG-TOT-WT								
Effluent								
Batch	R5936577							
WG3781555-2	LCS		92.2		%		50-150	15-MAR-23
Oil and Grease, Total								
WG3781555-1	MB		0.4		mg/L		1	15-MAR-23
Oil and Grease, Total								
PH-MISA-TB								
Effluent								
Batch	R5935599							
WG3781401-3	DUP	L2748748-1						
pH		6.54	6.56	J	pH	0.02	0.2	11-MAR-23
WG3781401-2	LCS		6.92		pH		6.9-7.1	11-MAR-23
pH								
SO4-MISA-IC-TB								
Effluent								



Environmental

Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Page 14 of 17

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
SO4-MISA-IC-TB								
	Effluent							
Batch	R5935920							
WG3781409-3	DUP	L2748752-1						
Sulfate (SO4)		3.65	3.65		mg/L	0.6	20	13-MAR-23
WG3781409-2	LCS							
Sulfate (SO4)			107.3		%		90-110	13-MAR-23
WG3781409-1	MB							
Sulfate (SO4)			<0.05		mg/L		0.3	13-MAR-23
WG3781409-4	MS	L2748752-2						
Sulfate (SO4)			115.5		%		75-125	13-MAR-23
TDS-MISA-TB								
	Effluent							
Batch	R5935856							
WG3781398-2	LCS							
Total Dissolved Solids			95.7		%		85-115	11-MAR-23
WG3781398-1	MB							
Total Dissolved Solids			<2		mg/L		10	11-MAR-23
TSS-MISA-TB								
	Effluent							
Batch	R5935956							
WG3781399-3	DUP	L2748752-17						
Total Suspended Solids		1.0	<0.5	RPD-NA	mg/L	N/A	20	11-MAR-23
WG3781399-2	LCS							
Total Suspended Solids			103.8		%		85-115	11-MAR-23
WG3781399-1	MB							
Total Suspended Solids			<0.5		mg/L		3	11-MAR-23

Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 15 of 17

Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0
 Contact: Garnet Cornell

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Colour, True							
	1	07-MAR-23 09:15	12-MAR-23 17:00	3	5	days	EHTR
	2	07-MAR-23 09:25	12-MAR-23 17:00	3	5	days	EHTR
	3	07-MAR-23 09:55	12-MAR-23 17:00	3	5	days	EHTR
	4	07-MAR-23 10:15	12-MAR-23 17:00	3	5	days	EHTR
	5	07-MAR-23 10:50	12-MAR-23 17:00	3	5	days	EHTL
	6	07-MAR-23 11:25	12-MAR-23 17:00	3	5	days	EHTL
	7	07-MAR-23 11:40	12-MAR-23 17:00	3	5	days	EHTL
	8	07-MAR-23 12:00	12-MAR-23 17:00	3	5	days	EHTL
	9	07-MAR-23 12:00	12-MAR-23 17:00	3	5	days	EHTL
	10	07-MAR-23 12:45	12-MAR-23 17:00	3	5	days	EHTL
	11	07-MAR-23 13:15	12-MAR-23 17:00	3	5	days	EHTL
	12	08-MAR-23 11:30	12-MAR-23 17:00	3	4	days	EHT
	13	08-MAR-23 12:15	12-MAR-23 17:00	3	4	days	EHT
	14	08-MAR-23 12:40	12-MAR-23 17:00	3	4	days	EHT
	15	08-MAR-23 13:10	12-MAR-23 17:00	3	4	days	EHT
	16	08-MAR-23 14:10	12-MAR-23 17:00	3	4	days	EHT
	17	08-MAR-23 12:00	12-MAR-23 17:00	3	4	days	EHT
Turbidity							
	1	07-MAR-23 09:15	14-MAR-23 14:54	3	7	days	EHTR
	2	07-MAR-23 09:25	14-MAR-23 14:54	3	7	days	EHTR
	3	07-MAR-23 09:55	14-MAR-23 14:54	3	7	days	EHTR
	4	07-MAR-23 10:15	14-MAR-23 14:54	3	7	days	EHTR
	5	07-MAR-23 10:50	14-MAR-23 14:54	3	7	days	EHTL
	6	07-MAR-23 11:25	14-MAR-23 14:54	3	7	days	EHTL
	7	07-MAR-23 11:40	14-MAR-23 14:54	3	7	days	EHTL
	8	07-MAR-23 12:00	14-MAR-23 14:54	3	7	days	EHTL
	9	07-MAR-23 12:00	14-MAR-23 14:54	3	7	days	EHTL
	10	07-MAR-23 12:45	14-MAR-23 14:54	3	7	days	EHTL
	11	07-MAR-23 13:15	14-MAR-23 14:54	3	7	days	EHTL
Anions and Nutrients							
Filtr./Pres. for Carbons Subcontract							
	1	07-MAR-23 09:15	14-MAR-23 12:00	3	7	days	EHTR
	2	07-MAR-23 09:25	14-MAR-23 12:00	3	7	days	EHTR
	3	07-MAR-23 09:55	14-MAR-23 12:00	3	7	days	EHTR
	4	07-MAR-23 10:15	14-MAR-23 12:00	3	7	days	EHTR
	5	07-MAR-23 10:50	14-MAR-23 12:00	3	7	days	EHTL
	6	07-MAR-23 11:25	14-MAR-23 12:00	3	7	days	EHTL
	7	07-MAR-23 11:40	14-MAR-23 12:00	3	7	days	EHTL
	9	07-MAR-23 12:00	14-MAR-23 12:00	3	7	days	EHTL
	10	07-MAR-23 12:45	14-MAR-23 12:00	3	7	days	EHTL
	11	07-MAR-23 13:15	14-MAR-23 12:00	3	7	days	EHTL
	12	08-MAR-23 11:30	14-MAR-23 12:00	3	6	days	EHT
	13	08-MAR-23 12:15	14-MAR-23 12:00	3	6	days	EHT
	14	08-MAR-23 12:40	14-MAR-23 12:00	3	6	days	EHT
	15	08-MAR-23 13:10	14-MAR-23 12:00	3	6	days	EHT
	16	08-MAR-23 14:10	14-MAR-23 12:00	3	6	days	EHT
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	1	07-MAR-23 09:15	15-MAR-23 00:00	7	8	days	EHT
	2	07-MAR-23 09:25	15-MAR-23 00:00	7	8	days	EHT
	3	07-MAR-23 09:55	15-MAR-23 00:00	7	8	days	EHT

Quality Control Report

Workorder: L2748752

Report Date: 28-MAR-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 17 of 17

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	4	07-MAR-23 10:15	15-MAR-23 00:00	7	8	days	EHT
	5	07-MAR-23 10:50	15-MAR-23 00:00	7	8	days	EHT
	6	07-MAR-23 11:25	15-MAR-23 00:00	7	8	days	EHT
	7	07-MAR-23 11:40	15-MAR-23 00:00	7	8	days	EHT
	8	07-MAR-23 12:00	15-MAR-23 00:00	7	8	days	EHT
	9	07-MAR-23 12:00	15-MAR-23 00:00	7	8	days	EHT
Organic / Inorganic Carbon							
Dissolved Organic Carbon for MISA							
	1	07-MAR-23 09:15	15-MAR-23 00:00	3	8	days	EHTR
	2	07-MAR-23 09:25	15-MAR-23 00:00	3	8	days	EHTR
	3	07-MAR-23 09:55	15-MAR-23 00:00	3	8	days	EHTR
	4	07-MAR-23 10:15	15-MAR-23 00:00	3	8	days	EHTR
	5	07-MAR-23 10:50	15-MAR-23 00:00	3	8	days	EHTL
	6	07-MAR-23 11:25	15-MAR-23 00:00	3	8	days	EHTL
	7	07-MAR-23 11:40	15-MAR-23 00:00	3	8	days	EHTL
	9	07-MAR-23 12:00	15-MAR-23 00:00	3	8	days	EHTL
	10	07-MAR-23 12:45	15-MAR-23 00:00	3	7	days	EHTL
	11	07-MAR-23 13:15	15-MAR-23 00:00	3	7	days	EHTL
	12	08-MAR-23 11:30	15-MAR-23 00:00	3	7	days	EHT
	13	08-MAR-23 12:15	15-MAR-23 00:00	3	6	days	EHT
	14	08-MAR-23 12:40	15-MAR-23 00:00	3	6	days	EHT
	15	08-MAR-23 13:10	15-MAR-23 00:00	3	6	days	EHT
	16	08-MAR-23 14:10	15-MAR-23 00:00	3	6	days	EHT

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2748752 were received on 10-MAR-23 10:24.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

SRC Group # 2023-3018

Mar 23, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Mar-14-2023

Client P.O.: L2748752

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-3018

Mar 23, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023007057	Client PO #:	L2748752
Date Sampled:	Mar 07, 2023	Date Received:	Mar 14, 2023
Sample Matrix:	WATER		
Description:	03/07/2023 SW20_SW_20230307 L2748752-2		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.01	0.005

The temperature of the cooler was 18.9 °C upon receipt.

SRC Group # 2023-3018

Mar 23, 2023

ALS, Thunder Bay Analytical

Sample #: **2023007058** Client PO #: **L2748752**
 Date Sampled: **Mar 07, 2023** Date Received: **Mar 14, 2023**
 Sample Matrix: **WATER**
 Description: **03/07/2023 SW23_SW_20230307 L2748752-6**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 18.9 °C upon receipt.

SRC Group # 2023-3018

Mar 23, 2023

ALS, Thunder Bay Analytical

Sample #: **2023007059** Client PO #: **L2748752**
 Date Sampled: **Mar 07, 2023** Date Received: **Mar 14, 2023**
 Sample Matrix: **WATER**
 Description: **03/07/2023 SW24_SW_20230307 L2748752-7**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.01	0.005

The temperature of the cooler was 18.9 °C upon receipt.

SRC Group # 2023-3018

Mar 23, 2023

ALS, Thunder Bay Analytical

Sample #: **2023007060** Client PO #: **L2748752**
 Date Sampled: **Mar 08, 2023** Date Received: **Mar 14, 2023**
 Sample Matrix: **WATER**
 Description: **03/08/2023 SW22A_SW_20230307 L2748752-16**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.9 °C upon receipt.

SRC Group # 2023-3018

Mar 23, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105



1 0740752 0077

U2748752

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
SW16_SW_20230307	15.85	8.62	-0.22	03/07/2023 09:15	SW	X		11	
SW20_SW_20230307	2.96	7.68	1.48	03/07/2023 09:25	SW	X		12	
SW20_SW_20230307	2.96	7.68	1.48	03/07/2023 09:25	SW		X	12	
SW10_SW_20230307	15.62	7.25	0.26	03/07/2023 09:55	SW	X		11	
SW17_SW_20230307	12.3	7.94	-0.65	03/07/2023 10:15	SW	X		11	
SW15_SW_20230307	9.73	7.36	-0.36	03/07/2023 10:50	SW	X		11	

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 3/9/2023 9:56:00 AM
 COC Number: ALS-449944141

Signature: _____ Date/Time: 3/9/2023 9:56:00 AM

Method of Shipment: Courier
 On Ice: yes / no
 Shipped: Air/Ground
 Lab Name: ALS Thunder Bay
 Lab Phone:

Shipping Details: _____

ATTN: _____

Special Instructions: _____

Received by: *AN March 10. 10:24am*
2.6°C, 1.9°C, 3.8°C, 2.6, 5.0
54 coolers maintained

5
4
3
2
1

Email Invoice to:
 rainyriver.accounts1@newgold.com
 Email Report to:
 rainyriver.labresults@newgold.com



Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 3/9/2023 9:56:00 AM
COC Number: ALS-449944141

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Filtered		
SW23_SW_20230307	2.72	7.45	-0.1	03/07/2023 11:25	SW	X	NG-SW-P-TB	12	
SW23_SW_20230307	2.72	7.45	-0.1	03/07/2023 11:25	SW	X	RA226-MMER-BE	12	
SW24_SW_20230307	2.96	7.39	-0.72	03/07/2023 11:40	SW	X		12	
SW24_SW_20230307	2.96	7.39	-0.72	03/07/2023 11:40	SW	X		12	
FB_SW_20230307				03/07/2023 12:00	SW	X		11	
SW06_SW_20230307	2.49	7.27	-0.42	03/07/2023 12:00	SW	X		11	

Signature _____ **Data/Time** 3/9/2023 9:56:00 AM
Shipped by _____
Received by _____

Shipping Details	ATTN	Special Instructions:
Method of Shipment: Courier On Ice: Yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com



CHAIN OF CUST



1 0740750 0070

Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 3/9/2023 9:56:00 AM
COC Number: ALS-449944141

Field	Disolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Filtered		
SW29_SW_20230307	2.49	7.27	-0.42	03/07/2023 12:45	SW	X	NG-SW-P-TB	11	
SW03_SW_20230307	0.01	7.32	-0.55	03/07/2023 13:15	SW	X	RA226-MMER-BE	11	
SW02_SW_20230307	3.44	7.66	-0.11	03/08/2023 11:30	SW	X		11	
SW26_SW_20230307	7.87	7.97	-0.21	03/08/2023 12:15	SW	X		11	
SW27_SW_20230307	6	7.86	-0.47	03/08/2023 12:40	SW	X		11	
SW21A_SW_20230307	0	7.56	-0.67	03/08/2023 13:10	SW	X		11	

Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
	3/9/2023 9:56:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Shipped by
Received by



CHAIN OF CUSTODY RECORD -



1 07A07EN 007C

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 3/9/2023 9:56:00 AM
 COC Number: ALS-449944141

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						Filtered	SW Kit		
SW22A_SW_20230307	0	7.55	-0.19	03/08/2023 14:10	SW	X	NG-SW-P-TB	12	
SW22A_SW_20230307	0	7.55	-0.19	03/08/2023 14:10	SW	X	RA226-MMER-BE	12	
TB_SW_20230307				03/09/2023 12:00	SW	X		11	

Drinking Water (DW) Samples
 (client use)

Cooling Method: None Ice Ice Packs Frozen Cooling Initiated

Sample Receipt Details (ALS use only)

Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
	3/9/2023 9:56:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by				



New Gold Inc. Rainy River Project
ATTN: Garnet Cornell
24 Marr Rd
Barwick ON POW 1A0

Date Received: 06-APR-23
Report Date: 25-APR-23 15:24 (MT)
Version: FINAL

Client Phone: 807-234-8200

Certificate of Analysis

Lab Work Order #: L2749905
Project P.O. #: 4500062842
Job Reference: SURFACE WATER
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-1 SW16_SW_20230404							
Sampled By: Client on 04-APR-23 @ 08:25							
Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	11.24		0	mg/L		09-APR-23	R5942736
pH, Client Supplied	6.73		0.10	pH		09-APR-23	R5942736
Temperature, Client Supplied	1.01		0	Degree C		09-APR-23	R5942736
Physical Tests							
Color, True	37.9		2.0	CU		08-APR-23	R5942717
Conductivity (EC)	71.4		1.0	uS/cm		08-APR-23	R5942836
Hardness (as CaCO3)	26.1		0.50			06-APR-23	
pH	7.32		0.10	pH		08-APR-23	R5942836
Total Suspended Solids	8.5		3.0	mg/L		10-APR-23	R5943124
Total Dissolved Solids	66		13	mg/L		10-APR-23	R5943126
Turbidity	2.08		0.10	NTU		08-APR-23	R5942718
Anions and Nutrients							
Acidity (as CaCO3)	0.4	<DL	2.0	mg/L		12-APR-23	R5943537
Alkalinity, Total (as CaCO3)	25.2		2.0	mg/L		08-APR-23	R5942836
Ammonia, Total (as N)	0.020	<T	0.0050	mg/L		06-APR-23	R5942796
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		10-APR-23	
Chloride (Cl)	2.87		0.10	mg/L	08-APR-23	08-APR-23	R5942737
Fluoride (F)	0.033		0.020	mg/L	08-APR-23	08-APR-23	R5942737
Nitrate (as N)	0.112	<T	0.020	mg/L		08-APR-23	R5942737
Nitrite (as N)	<0.001	<W	0.010	mg/L		08-APR-23	R5942737
Total Kjeldahl Nitrogen	0.389		0.050	mg/L	06-APR-23	13-APR-23	R5943697
Orthophosphate-Dissolved (as P)	0.0034		0.0010	mg/L	08-APR-23	10-APR-23	R5942877
Sulfate (SO4)	3.95	<T	0.30	mg/L		08-APR-23	R5942737
Cyanides							
Cyanide, Weak Acid Diss	0.0003	<DL	0.0020	mg/L		11-APR-23	R5943138
Cyanide, Total	0.0006	<DL	0.0020	mg/L		11-APR-23	R5943138
Cyanide, Free	0.0007	<DL	0.0020	mg/L		10-APR-23	R5943138
Organic / Inorganic Carbon							
Dissolved Organic Carbon	10.1		0.50	mg/L	06-APR-23	12-APR-23	R5943496
Total Organic Carbon	10.1		0.50	mg/L		11-APR-23	R5943417
Total Metals							
Aluminum (Al)-Total	0.155		0.0050	mg/L		11-APR-23	R5943377
Antimony (Sb)-Total	0.000060	<DL	0.00010	mg/L		11-APR-23	R5943377
Arsenic (As)-Total	0.000430	<T	0.00010	mg/L		11-APR-23	R5943377
Barium (Ba)-Total	0.00956		0.00010	mg/L		11-APR-23	R5943377
Beryllium (Be)-Total	0.000012	<DL	0.00010	mg/L		11-APR-23	R5943377
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943377
Boron (B)-Total	0.006	<DL	0.010	mg/L		11-APR-23	R5943377
Cadmium (Cd)-Total	0.0000042	<DL	0.0000050	mg/L		11-APR-23	R5943377
Calcium (Ca)-Total	7.09		0.050	mg/L		11-APR-23	R5943377
Cesium (Cs)-Total	0.0000254		0.000010	mg/L		11-APR-23	R5943377
Chromium (Cr)-Total	0.00064	<T	0.00050	mg/L		11-APR-23	R5943377

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-1 SW16_SW_20230404							
Sampled By: Client on 04-APR-23 @ 08:25							
Matrix: SW							
Total Metals							
Cobalt (Co)-Total	0.000104	<T	0.00010	mg/L		11-APR-23	R5943377
Copper (Cu)-Total	0.00180	<T	0.00050	mg/L		11-APR-23	R5943377
Iron (Fe)-Total	0.254		0.010	mg/L		11-APR-23	R5943377
Lead (Pb)-Total	0.00028	<T	0.000050	mg/L		11-APR-23	R5943377
Lithium (Li)-Total	0.0010	<T	0.0010	mg/L		11-APR-23	R5943377
Magnesium (Mg)-Total	2.22		0.0050	mg/L		11-APR-23	R5943377
Manganese (Mn)-Total	0.00996		0.00050	mg/L		11-APR-23	R5943377
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943037
Molybdenum (Mo)-Total	0.000145	<T	0.000050	mg/L		11-APR-23	R5943377
Nickel (Ni)-Total	0.00080	<T	0.00050	mg/L		11-APR-23	R5943377
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		11-APR-23	R5943377
Potassium (K)-Total	0.838		0.050	mg/L		11-APR-23	R5943377
Rubidium (Rb)-Total	0.00218		0.00020	mg/L		11-APR-23	R5943377
Selenium (Se)-Total	0.000114	<T	0.000050	mg/L		11-APR-23	R5943377
Silicon (Si)-Total	2.35		0.10	mg/L		11-APR-23	R5943377
Silver (Ag)-Total	0.0000015	<DL	0.000050	mg/L		11-APR-23	R5943377
Sodium (Na)-Total	3.41		0.050	mg/L		11-APR-23	R5943377
Strontium (Sr)-Total	0.0224		0.0010	mg/L		11-APR-23	R5943377
Sulfur (S)-Total	1.55		0.50	mg/L		11-APR-23	R5943377
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943377
Thallium (Tl)-Total	0.000005	<DL	0.000010	mg/L		11-APR-23	R5943377
Thorium (Th)-Total	0.000044	<DL	0.00010	mg/L		11-APR-23	R5943377
Tin (Sn)-Total	0.00004	<DL	0.00010	mg/L		11-APR-23	R5943377
Titanium (Ti)-Total	0.00500		0.00030	mg/L		11-APR-23	R5943377
Tungsten (W)-Total	0.000008	<DL	0.00010	mg/L		11-APR-23	R5943377
Uranium (U)-Total	0.0000960	<T	0.000010	mg/L		11-APR-23	R5943377
Vanadium (V)-Total	0.00058	<T	0.00050	mg/L		11-APR-23	R5943377
Zinc (Zn)-Total	0.0018	<DL	0.0030	mg/L		11-APR-23	R5943377
Zirconium (Zr)-Total	0.000184	<DL	0.00020	mg/L		11-APR-23	R5943377
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					11-APR-23	R5943177
Aluminum (Al)-Dissolved	0.0296	<T	0.0050	mg/L		11-APR-23	R5943376
Antimony (Sb)-Dissolved	0.000045	<DL	0.00010	mg/L		11-APR-23	R5943376
Arsenic (As)-Dissolved	0.000430	<T	0.00010	mg/L		11-APR-23	R5943376
Barium (Ba)-Dissolved	0.00866		0.00010	mg/L		11-APR-23	R5943376
Beryllium (Be)-Dissolved	0.000010	<DL	0.00010	mg/L		11-APR-23	R5943376
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		11-APR-23	R5943376
Cadmium (Cd)-Dissolved	0.0000044	<DL	0.0000050	mg/L		11-APR-23	R5943376
Calcium (Ca)-Dissolved	6.89		0.050	mg/L		11-APR-23	R5943376
Cesium (Cs)-Dissolved	0.0000024	<DL	0.000010	mg/L		11-APR-23	R5943376

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-1 SW16_SW_20230404 Sampled By: Client on 04-APR-23 @ 08:25 Matrix: SW							
Dissolved Metals							
Chromium (Cr)-Dissolved	0.00022	<DL	0.00050	mg/L		11-APR-23	R5943376
Cobalt (Co)-Dissolved	0.000030	<DL	0.00010	mg/L		11-APR-23	R5943376
Copper (Cu)-Dissolved	0.00130	<T	0.00020	mg/L		11-APR-23	R5943376
Iron (Fe)-Dissolved	0.090		0.010	mg/L		11-APR-23	R5943376
Lead (Pb)-Dissolved	0.00008	<T	0.000050	mg/L		11-APR-23	R5943376
Lithium (Li)-Dissolved	0.0010	<T	0.0010	mg/L		11-APR-23	R5943376
Magnesium (Mg)-Dissolved	2.15		0.0050	mg/L		11-APR-23	R5943376
Manganese (Mn)-Dissolved	0.00396		0.00050	mg/L		11-APR-23	R5943376
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943036
Molybdenum (Mo)-Dissolved	0.000145	<T	0.000050	mg/L		11-APR-23	R5943376
Nickel (Ni)-Dissolved	0.00060	<T	0.00050	mg/L		11-APR-23	R5943376
Phosphorus (P)-Dissolved	0.008	<DL	0.050	mg/L		11-APR-23	R5943376
Potassium (K)-Dissolved	0.804		0.050	mg/L		11-APR-23	R5943376
Rubidium (Rb)-Dissolved	0.00179		0.00020	mg/L		11-APR-23	R5943376
Selenium (Se)-Dissolved	0.000110	<T	0.000050	mg/L		11-APR-23	R5943376
Silicon (Si)-Dissolved	2.10		0.050	mg/L		11-APR-23	R5943376
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		11-APR-23	R5943376
Sodium (Na)-Dissolved	3.41		0.050	mg/L		11-APR-23	R5943376
Strontium (Sr)-Dissolved	0.0220		0.0010	mg/L		11-APR-23	R5943376
Sulfur (S)-Dissolved	1.55		0.50	mg/L		11-APR-23	R5943376
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943376
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		11-APR-23	R5943376
Thorium (Th)-Dissolved	0.000038	<DL	0.00010	mg/L		11-APR-23	R5943376
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		11-APR-23	R5943376
Titanium (Ti)-Dissolved	0.00064		0.00030	mg/L		11-APR-23	R5943376
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		11-APR-23	R5943376
Uranium (U)-Dissolved	0.0000795	<T	0.000010	mg/L		11-APR-23	R5943376
Vanadium (V)-Dissolved	0.00024	<DL	0.00050	mg/L		11-APR-23	R5943376
Zinc (Zn)-Dissolved	0.0006	<DL	0.0010	mg/L		11-APR-23	R5943376
Zirconium (Zr)-Dissolved	0.000148	<DL	0.00020	mg/L		11-APR-23	R5943376
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		06-APR-23	R5943156
Chemical Oxygen Demand	34		10	mg/L	06-APR-23	08-APR-23	R5942702
Oil and Grease, Total	1.2		1.0	mg/L	11-APR-23	11-APR-23	R5943122
L2749905-2 SW17_SW_20230404 Sampled By: Client on 04-APR-23 @ 09:45 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	12.16		0	mg/L		09-APR-23	R5942736
pH, Client Supplied	7.35		0.10	pH		09-APR-23	R5942736
Temperature, Client Supplied	1		0	Degree C		09-APR-23	R5942736
Physical Tests							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-2 SW17_SW_20230404							
Sampled By: Client on 04-APR-23 @ 09:45							
Matrix: SW							
Physical Tests							
Color, True	40.1		2.0	CU		08-APR-23	R5942717
Conductivity (EC)	74.4		1.0	uS/cm		08-APR-23	R5942836
Hardness (as CaCO3)	30.6		0.50			06-APR-23	
pH	7.38		0.10	pH		08-APR-23	R5942836
Total Suspended Solids	2.5	<DL	3.0	mg/L		10-APR-23	R5943124
Total Dissolved Solids	50		13	mg/L		10-APR-23	R5943126
Turbidity	1.55		0.10	NTU		08-APR-23	R5942718
Anions and Nutrients							
Acidity (as CaCO3)	1.6	<DL	2.0	mg/L		12-APR-23	R5943537
Alkalinity, Total (as CaCO3)	29.6		2.0	mg/L		08-APR-23	R5942896
Ammonia, Total (as N)	0.024	<T	0.0050	mg/L		06-APR-23	R5942796
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		10-APR-23	
Chloride (Cl)	2.57		0.10	mg/L	08-APR-23	08-APR-23	R5942737
Fluoride (F)	0.031		0.020	mg/L	08-APR-23	08-APR-23	R5942737
Nitrate (as N)	0.114	<T	0.020	mg/L		08-APR-23	R5942737
Nitrite (as N)	<0.001	<W	0.010	mg/L		08-APR-23	R5942737
Total Kjeldahl Nitrogen	0.406		0.050	mg/L	06-APR-23	13-APR-23	R5943697
Orthophosphate-Dissolved (as P)	0.0030		0.0010	mg/L	08-APR-23	10-APR-23	R5942877
Sulfate (SO4)	3.70	<T	0.30	mg/L		08-APR-23	R5942737
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Free	0.0005	<DL	0.0020	mg/L		10-APR-23	R5943138
Organic / Inorganic Carbon							
Dissolved Organic Carbon	11.1		0.50	mg/L	06-APR-23	12-APR-23	R5943496
Total Organic Carbon	11.1		0.50	mg/L		11-APR-23	R5943417
Total Metals							
Aluminum (Al)-Total	0.102		0.0050	mg/L		11-APR-23	R5943377
Antimony (Sb)-Total	0.000055	<DL	0.00010	mg/L		11-APR-23	R5943377
Arsenic (As)-Total	0.000450	<T	0.00010	mg/L		11-APR-23	R5943377
Barium (Ba)-Total	0.0102		0.00010	mg/L		11-APR-23	R5943377
Beryllium (Be)-Total	0.000008	<DL	0.00010	mg/L		11-APR-23	R5943377
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943377
Boron (B)-Total	0.008	<DL	0.010	mg/L		11-APR-23	R5943377
Cadmium (Cd)-Total	0.0000056	<T	0.0000050	mg/L		11-APR-23	R5943377
Calcium (Ca)-Total	8.04		0.050	mg/L		11-APR-23	R5943377
Cesium (Cs)-Total	0.0000144		0.000010	mg/L		11-APR-23	R5943377
Chromium (Cr)-Total	0.00056	<T	0.00050	mg/L		11-APR-23	R5943377
Cobalt (Co)-Total	0.000074	<DL	0.00010	mg/L		11-APR-23	R5943377
Copper (Cu)-Total	0.00115	<T	0.00050	mg/L		11-APR-23	R5943377
Iron (Fe)-Total	0.225		0.010	mg/L		11-APR-23	R5943377
Lead (Pb)-Total	0.00018	<T	0.000050	mg/L		11-APR-23	R5943377

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-2 SW17_SW_20230404							
Sampled By: Client on 04-APR-23 @ 09:45							
Matrix: SW							
Total Metals							
Lithium (Li)-Total	0.0008	<DL	0.0010	mg/L		11-APR-23	R5943377
Magnesium (Mg)-Total	2.76		0.0050	mg/L		11-APR-23	R5943377
Manganese (Mn)-Total	0.0107		0.00050	mg/L		11-APR-23	R5943377
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943037
Molybdenum (Mo)-Total	0.000150	<T	0.000050	mg/L		11-APR-23	R5943377
Nickel (Ni)-Total	0.00072	<T	0.00050	mg/L		11-APR-23	R5943377
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		11-APR-23	R5943377
Potassium (K)-Total	0.876		0.050	mg/L		11-APR-23	R5943377
Rubidium (Rb)-Total	0.00216		0.00020	mg/L		11-APR-23	R5943377
Selenium (Se)-Total	0.000108	<T	0.000050	mg/L		11-APR-23	R5943377
Silicon (Si)-Total	2.44		0.10	mg/L		11-APR-23	R5943377
Silver (Ag)-Total	0.0000010	<DL	0.000050	mg/L		11-APR-23	R5943377
Sodium (Na)-Total	3.21		0.050	mg/L		11-APR-23	R5943377
Strontium (Sr)-Total	0.0246		0.0010	mg/L		11-APR-23	R5943377
Sulfur (S)-Total	1.45		0.50	mg/L		11-APR-23	R5943377
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943377
Thallium (Tl)-Total	0.000003	<DL	0.000010	mg/L		11-APR-23	R5943377
Thorium (Th)-Total	0.000034	<DL	0.00010	mg/L		11-APR-23	R5943377
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		11-APR-23	R5943377
Titanium (Ti)-Total	0.00318		0.00030	mg/L		11-APR-23	R5943377
Tungsten (W)-Total	0.000006	<DL	0.00010	mg/L		11-APR-23	R5943377
Uranium (U)-Total	0.0000985	<T	0.000010	mg/L		11-APR-23	R5943377
Vanadium (V)-Total	0.00044	<DL	0.00050	mg/L		11-APR-23	R5943377
Zinc (Zn)-Total	0.0020	<DL	0.0030	mg/L		11-APR-23	R5943377
Zirconium (Zr)-Total	0.000156	<DL	0.00020	mg/L		11-APR-23	R5943377
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					11-APR-23	R5943177
Aluminum (Al)-Dissolved	0.0258	<T	0.0050	mg/L		11-APR-23	R5943376
Antimony (Sb)-Dissolved	0.000045	<DL	0.00010	mg/L		11-APR-23	R5943376
Arsenic (As)-Dissolved	0.000455	<T	0.00010	mg/L		11-APR-23	R5943376
Barium (Ba)-Dissolved	0.00908		0.00010	mg/L		11-APR-23	R5943376
Beryllium (Be)-Dissolved	0.000010	<DL	0.00010	mg/L		11-APR-23	R5943376
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		11-APR-23	R5943376
Cadmium (Cd)-Dissolved	0.0000044	<DL	0.0000050	mg/L		11-APR-23	R5943376
Calcium (Ca)-Dissolved	7.82		0.050	mg/L		11-APR-23	R5943376
Cesium (Cs)-Dissolved	0.0000028	<DL	0.000010	mg/L		11-APR-23	R5943376
Chromium (Cr)-Dissolved	0.00024	<DL	0.00050	mg/L		11-APR-23	R5943376
Cobalt (Co)-Dissolved	0.000026	<DL	0.00010	mg/L		11-APR-23	R5943376
Copper (Cu)-Dissolved	0.00100	<T	0.00020	mg/L		11-APR-23	R5943376
Iron (Fe)-Dissolved	0.111		0.010	mg/L		11-APR-23	R5943376

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-2 SW17_SW_20230404 Sampled By: Client on 04-APR-23 @ 09:45 Matrix: SW							
Dissolved Metals							
Lead (Pb)-Dissolved	0.00004	<DL	0.000050	mg/L		11-APR-23	R5943376
Lithium (Li)-Dissolved	0.0012	<T	0.0010	mg/L		11-APR-23	R5943376
Magnesium (Mg)-Dissolved	2.68		0.0050	mg/L		11-APR-23	R5943376
Manganese (Mn)-Dissolved	0.00494		0.00050	mg/L		11-APR-23	R5943376
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943036
Molybdenum (Mo)-Dissolved	0.000150	<T	0.000050	mg/L		11-APR-23	R5943376
Nickel (Ni)-Dissolved	0.00058	<T	0.00050	mg/L		11-APR-23	R5943376
Phosphorus (P)-Dissolved	0.008	<DL	0.050	mg/L		11-APR-23	R5943376
Potassium (K)-Dissolved	0.850		0.050	mg/L		11-APR-23	R5943376
Rubidium (Rb)-Dissolved	0.00187		0.00020	mg/L		11-APR-23	R5943376
Selenium (Se)-Dissolved	0.000112	<T	0.000050	mg/L		11-APR-23	R5943376
Silicon (Si)-Dissolved	2.25		0.050	mg/L		11-APR-23	R5943376
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		11-APR-23	R5943376
Sodium (Na)-Dissolved	3.16		0.050	mg/L		11-APR-23	R5943376
Strontium (Sr)-Dissolved	0.0237		0.0010	mg/L		11-APR-23	R5943376
Sulfur (S)-Dissolved	1.55		0.50	mg/L		11-APR-23	R5943376
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943376
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		11-APR-23	R5943376
Thorium (Th)-Dissolved	0.000034	<DL	0.00010	mg/L		11-APR-23	R5943376
Tin (Sn)-Dissolved	0.00003	<DL	0.00010	mg/L		11-APR-23	R5943376
Titanium (Ti)-Dissolved	0.00066		0.00030	mg/L		11-APR-23	R5943376
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		11-APR-23	R5943376
Uranium (U)-Dissolved	0.0000850	<T	0.000010	mg/L		11-APR-23	R5943376
Vanadium (V)-Dissolved	0.00024	<DL	0.00050	mg/L		11-APR-23	R5943376
Zinc (Zn)-Dissolved	0.0030	<T	0.0010	mg/L		11-APR-23	R5943376
Zirconium (Zr)-Dissolved	0.000152	<DL	0.00020	mg/L		11-APR-23	R5943376
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		06-APR-23	R5943156
Chemical Oxygen Demand	32		10	mg/L	06-APR-23	08-APR-23	R5942702
Oil and Grease, Total	0.6	<DL	1.0	mg/L	11-APR-23	11-APR-23	R5943122
L2749905-3 SW23_SW_20230404 Sampled By: Client on 04-APR-23 @ 11:10 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	4.5		0	mg/L		09-APR-23	R5942736
pH, Client Supplied	7.08		0.10	pH		09-APR-23	R5942736
Temperature, Client Supplied	.08		0	Degree C		09-APR-23	R5942736
Physical Tests							
Color, True	78.3		2.0	CU		08-APR-23	R5942717
Conductivity (EC)	472		1.0	uS/cm		08-APR-23	R5942836
Hardness (as CaCO3)	248		0.50			06-APR-23	
pH	7.37		0.10	pH		08-APR-23	R5942836

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-3 SW23_SW_20230404							
Sampled By: Client on 04-APR-23 @ 11:10							
Matrix: SW							
Physical Tests							
Total Suspended Solids	18.5		3.0	mg/L		10-APR-23	R5943124
Total Dissolved Solids	298		20	mg/L		10-APR-23	R5943126
Turbidity	22.0		0.10	NTU		08-APR-23	R5942718
Anions and Nutrients							
Acidity (as CaCO3)	3.2		2.0	mg/L		12-APR-23	R5943537
Alkalinity, Total (as CaCO3)	512		2.0	mg/L		08-APR-23	R5942836
Ammonia, Total (as N)	0.342		0.0050	mg/L		06-APR-23	R5942796
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		10-APR-23	
Chloride (Cl)	12.7		0.10	mg/L	08-APR-23	08-APR-23	R5942737
Fluoride (F)	0.068		0.020	mg/L	08-APR-23	08-APR-23	R5942737
Nitrate (as N)	0.090	<T	0.020	mg/L		08-APR-23	R5942737
Nitrite (as N)	0.004	<DL	0.010	mg/L		08-APR-23	R5942737
Total Kjeldahl Nitrogen	1.38		0.050	mg/L	06-APR-23	13-APR-23	R5943697
Orthophosphate-Dissolved (as P)	0.0497		0.0010	mg/L	08-APR-23	10-APR-23	R5942877
Sulfate (SO4)	4.85	<T	0.30	mg/L		08-APR-23	R5942737
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Total	0.0010	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Free	0.0008	<DL	0.0020	mg/L		10-APR-23	R5943138
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.5		0.50	mg/L	06-APR-23	12-APR-23	R5943496
Total Organic Carbon	24.6		0.50	mg/L		11-APR-23	R5943417
Total Metals							
Aluminum (Al)-Total	0.461		0.0050	mg/L		11-APR-23	R5943377
Antimony (Sb)-Total	0.000095	<DL	0.00010	mg/L		11-APR-23	R5943377
Arsenic (As)-Total	0.00172	<T	0.00010	mg/L		11-APR-23	R5943377
Barium (Ba)-Total	0.0299		0.00010	mg/L		11-APR-23	R5943377
Beryllium (Be)-Total	0.000034	<DL	0.00010	mg/L		11-APR-23	R5943377
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		11-APR-23	R5943377
Boron (B)-Total	0.014	<T	0.010	mg/L		11-APR-23	R5943377
Cadmium (Cd)-Total	0.0000236	<T	0.0000050	mg/L		11-APR-23	R5943377
Calcium (Ca)-Total	58.8		0.050	mg/L		11-APR-23	R5943377
Cesium (Cs)-Total	0.0000648		0.000010	mg/L		11-APR-23	R5943377
Chromium (Cr)-Total	0.00118	<T	0.00050	mg/L		11-APR-23	R5943377
Cobalt (Co)-Total	0.00219	<T	0.00010	mg/L		11-APR-23	R5943377
Copper (Cu)-Total	0.00120	<T	0.00050	mg/L		11-APR-23	R5943377
Iron (Fe)-Total	2.99		0.010	mg/L		11-APR-23	R5943377
Lead (Pb)-Total	0.00046	<T	0.000050	mg/L		11-APR-23	R5943377
Lithium (Li)-Total	0.0074	<T	0.0010	mg/L		11-APR-23	R5943377
Magnesium (Mg)-Total	24.7		0.0050	mg/L		11-APR-23	R5943377
Manganese (Mn)-Total	2.15		0.00050	mg/L		11-APR-23	R5943377
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943037

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-3 SW23_SW_20230404							
Sampled By: Client on 04-APR-23 @ 11:10							
Matrix: SW							
Total Metals							
Molybdenum (Mo)-Total	0.000285	<T	0.000050	mg/L		11-APR-23	R5943377
Nickel (Ni)-Total	0.00264	<T	0.00050	mg/L		11-APR-23	R5943377
Phosphorus (P)-Total	0.196		0.050	mg/L		11-APR-23	R5943377
Potassium (K)-Total	2.44		0.050	mg/L		11-APR-23	R5943377
Rubidium (Rb)-Total	0.00291		0.00020	mg/L		11-APR-23	R5943377
Selenium (Se)-Total	0.000176	<T	0.000050	mg/L		11-APR-23	R5943377
Silicon (Si)-Total	10.5		0.10	mg/L		11-APR-23	R5943377
Silver (Ag)-Total	0.0000030	<DL	0.000050	mg/L		11-APR-23	R5943377
Sodium (Na)-Total	7.17		0.050	mg/L		11-APR-23	R5943377
Strontium (Sr)-Total	0.131		0.0010	mg/L		11-APR-23	R5943377
Sulfur (S)-Total	1.90		0.50	mg/L		11-APR-23	R5943377
Tellurium (Te)-Total	0.000010	<DL	0.00020	mg/L		11-APR-23	R5943377
Thallium (Tl)-Total	0.000009	<DL	0.000010	mg/L		11-APR-23	R5943377
Thorium (Th)-Total	0.000118		0.00010	mg/L		11-APR-23	R5943377
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		11-APR-23	R5943377
Titanium (Ti)-Total	0.0163		0.00030	mg/L		11-APR-23	R5943377
Tungsten (W)-Total	0.000008	<DL	0.00010	mg/L		11-APR-23	R5943377
Uranium (U)-Total	0.000841	<T	0.000010	mg/L		11-APR-23	R5943377
Vanadium (V)-Total	0.00188	<T	0.00050	mg/L		11-APR-23	R5943377
Zinc (Zn)-Total	0.0046	<T	0.0030	mg/L		11-APR-23	R5943377
Zirconium (Zr)-Total	0.000656		0.00020	mg/L		11-APR-23	R5943377
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					11-APR-23	R5943177
Aluminum (Al)-Dissolved	0.0158	<T	0.0050	mg/L		11-APR-23	R5943376
Antimony (Sb)-Dissolved	0.000075	<DL	0.00010	mg/L		11-APR-23	R5943376
Arsenic (As)-Dissolved	0.00145	<T	0.00010	mg/L		11-APR-23	R5943376
Barium (Ba)-Dissolved	0.0233		0.00010	mg/L		11-APR-23	R5943376
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		11-APR-23	R5943376
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Boron (B)-Dissolved	0.014		0.010	mg/L		11-APR-23	R5943376
Cadmium (Cd)-Dissolved	0.0000080	<T	0.0000050	mg/L		11-APR-23	R5943376
Calcium (Ca)-Dissolved	58.1		0.050	mg/L		11-APR-23	R5943376
Cesium (Cs)-Dissolved	0.0000016	<DL	0.000010	mg/L		11-APR-23	R5943376
Chromium (Cr)-Dissolved	0.00018	<DL	0.00050	mg/L		11-APR-23	R5943376
Cobalt (Co)-Dissolved	0.00167	<T	0.00010	mg/L		11-APR-23	R5943376
Copper (Cu)-Dissolved	0.00085	<T	0.00020	mg/L		11-APR-23	R5943376
Iron (Fe)-Dissolved	1.05		0.010	mg/L		11-APR-23	R5943376
Lead (Pb)-Dissolved	0.00012	<T	0.000050	mg/L		11-APR-23	R5943376
Lithium (Li)-Dissolved	0.0072	<T	0.0010	mg/L		11-APR-23	R5943376
Magnesium (Mg)-Dissolved	24.9		0.0050	mg/L		11-APR-23	R5943376
Manganese (Mn)-Dissolved	1.89		0.00050	mg/L		11-APR-23	R5943376

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-3 SW23_SW_20230404 Sampled By: Client on 04-APR-23 @ 11:10 Matrix: SW							
Dissolved Metals							
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943036
Molybdenum (Mo)-Dissolved	0.000265	<T	0.000050	mg/L		11-APR-23	R5943376
Nickel (Ni)-Dissolved	0.00198	<T	0.00050	mg/L		11-APR-23	R5943376
Phosphorus (P)-Dissolved	0.090		0.050	mg/L		11-APR-23	R5943376
Potassium (K)-Dissolved	2.36		0.050	mg/L		11-APR-23	R5943376
Rubidium (Rb)-Dissolved	0.00197		0.00020	mg/L		11-APR-23	R5943376
Selenium (Se)-Dissolved	0.000206	<T	0.000050	mg/L		11-APR-23	R5943376
Silicon (Si)-Dissolved	9.54		0.050	mg/L		11-APR-23	R5943376
Silver (Ag)-Dissolved	0.0000005	<DL	0.000050	mg/L		11-APR-23	R5943376
Sodium (Na)-Dissolved	7.15		0.050	mg/L		11-APR-23	R5943376
Strontium (Sr)-Dissolved	0.129		0.0010	mg/L		11-APR-23	R5943376
Sulfur (S)-Dissolved	1.90		0.50	mg/L		11-APR-23	R5943376
Tellurium (Te)-Dissolved	0.000010	<DL	0.00020	mg/L		11-APR-23	R5943376
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		11-APR-23	R5943376
Thorium (Th)-Dissolved	0.000040	<DL	0.00010	mg/L		11-APR-23	R5943376
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		11-APR-23	R5943376
Titanium (Ti)-Dissolved	0.00218		0.00030	mg/L		11-APR-23	R5943376
Tungsten (W)-Dissolved	0.000002	<DL	0.00010	mg/L		11-APR-23	R5943376
Uranium (U)-Dissolved	0.000786	<T	0.000010	mg/L		11-APR-23	R5943376
Vanadium (V)-Dissolved	0.00050	<T	0.00050	mg/L		11-APR-23	R5943376
Zinc (Zn)-Dissolved	0.0020	<T	0.0010	mg/L		11-APR-23	R5943376
Zirconium (Zr)-Dissolved	0.000472		0.00020	mg/L		11-APR-23	R5943376
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		06-APR-23	R5943156
Chemical Oxygen Demand	77		10	mg/L	06-APR-23	08-APR-23	R5942702
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-APR-23	11-APR-23	R5943122
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		24-APR-23	R5946239
L2749905-4 FB_SW_20230404 Sampled By: Client on 04-APR-23 @ 12:00 Matrix: SW							
Physical Tests							
Color, True	<2.0		2.0	CU		08-APR-23	R5942717
Conductivity (EC)	0.2	<DL	1.0	uS/cm		08-APR-23	R5942836
Hardness (as CaCO3)	<0.50		0.50			06-APR-23	
pH	5.49		0.10	pH		08-APR-23	R5942836
Total Suspended Solids	<0.5	<W	3.0	mg/L		10-APR-23	R5943124
Total Dissolved Solids	<2	<W	10	mg/L		10-APR-23	R5943126
Turbidity	<0.10		0.10	NTU		08-APR-23	R5942718
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		12-APR-23	R5943537
Alkalinity, Total (as CaCO3)	1.2	<DL	2.0	mg/L		08-APR-23	R5942836

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-4 FB_SW_20230404							
Sampled By: Client on 04-APR-23 @ 12:00							
Matrix: SW							
Anions and Nutrients							
Ammonia, Total (as N)	0.004	<DL	0.0050	mg/L		06-APR-23	R5942796
Chloride (Cl)	0.28		0.10	mg/L	08-APR-23	08-APR-23	R5942737
Fluoride (F)	<0.020		0.020	mg/L	08-APR-23	08-APR-23	R5942737
Nitrate (as N)	0.004	<DL	0.020	mg/L		08-APR-23	R5942737
Nitrite (as N)	<0.001	<W	0.010	mg/L		08-APR-23	R5942737
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	06-APR-23	13-APR-23	R5943697
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	08-APR-23	10-APR-23	R5942877
Sulfate (SO4)	0.20	<DL	0.30	mg/L		08-APR-23	R5942737
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Free	0.0007	<DL	0.0020	mg/L		10-APR-23	R5943138
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	04-APR-23	12-APR-23	R5943496
Total Organic Carbon	<0.50		0.50	mg/L		11-APR-23	R5943417
Total Metals							
Aluminum (Al)-Total	0.0006	<DL	0.0050	mg/L		11-APR-23	R5943377
Antimony (Sb)-Total	0.000015	<DL	0.00010	mg/L		11-APR-23	R5943377
Arsenic (As)-Total	0.000005	<DL	0.00010	mg/L		11-APR-23	R5943377
Barium (Ba)-Total	0.00006	<DL	0.00010	mg/L		11-APR-23	R5943377
Beryllium (Be)-Total	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943377
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943377
Boron (B)-Total	0.006	<DL	0.010	mg/L		11-APR-23	R5943377
Cadmium (Cd)-Total	<0.0000002	<W	0.0000050	mg/L		11-APR-23	R5943377
Calcium (Ca)-Total	0.020	<DL	0.050	mg/L		11-APR-23	R5943377
Cesium (Cs)-Total	0.0000004	<DL	0.000010	mg/L		11-APR-23	R5943377
Chromium (Cr)-Total	0.00018	<DL	0.00050	mg/L		11-APR-23	R5943377
Cobalt (Co)-Total	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943377
Copper (Cu)-Total	<0.00005	<W	0.00050	mg/L		11-APR-23	R5943377
Iron (Fe)-Total	<0.001	<W	0.010	mg/L		11-APR-23	R5943377
Lead (Pb)-Total	<0.00002	<W	0.000050	mg/L		11-APR-23	R5943377
Lithium (Li)-Total	<0.0002	<W	0.0010	mg/L		11-APR-23	R5943377
Magnesium (Mg)-Total	0.0005	<DL	0.0050	mg/L		11-APR-23	R5943377
Manganese (Mn)-Total	0.00002	<DL	0.00050	mg/L		11-APR-23	R5943377
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943037
Molybdenum (Mo)-Total	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943377
Nickel (Ni)-Total	0.00004	<DL	0.00050	mg/L		11-APR-23	R5943377
Phosphorus (P)-Total	0.012	<DL	0.050	mg/L		11-APR-23	R5943377
Potassium (K)-Total	<0.002	<W	0.050	mg/L		11-APR-23	R5943377
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		11-APR-23	R5943377
Selenium (Se)-Total	<0.000002	<W	0.000050	mg/L		11-APR-23	R5943377
Silicon (Si)-Total	0.110		0.10	mg/L		11-APR-23	R5943377

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-4 FB_SW_20230404							
Sampled By: Client on 04-APR-23 @ 12:00							
Matrix: SW							
Total Metals							
Silver (Ag)-Total	0.0000015	<DL	0.000050	mg/L		11-APR-23	R5943377
Sodium (Na)-Total	0.040	<DL	0.050	mg/L		11-APR-23	R5943377
Strontium (Sr)-Total	0.00003	<DL	0.0010	mg/L		11-APR-23	R5943377
Sulfur (S)-Total	<0.05	<W	0.50	mg/L		11-APR-23	R5943377
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943377
Thallium (Tl)-Total	<0.000001	<W	0.000010	mg/L		11-APR-23	R5943377
Thorium (Th)-Total	0.000008	<DL	0.00010	mg/L		11-APR-23	R5943377
Tin (Sn)-Total	0.00002	<DL	0.00010	mg/L		11-APR-23	R5943377
Titanium (Ti)-Total	<0.00002	<W	0.00030	mg/L		11-APR-23	R5943377
Tungsten (W)-Total	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943377
Uranium (U)-Total	<0.0000005	<W	0.000010	mg/L		11-APR-23	R5943377
Vanadium (V)-Total	<0.00002	<W	0.00050	mg/L		11-APR-23	R5943377
Zinc (Zn)-Total	0.0002	<DL	0.0030	mg/L		11-APR-23	R5943377
Zirconium (Zr)-Total	<0.000004	<W	0.00020	mg/L		11-APR-23	R5943377
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					11-APR-23	R5943076
Aluminum (Al)-Dissolved	0.0012	<DL	0.0050	mg/L		11-APR-23	R5943376
Antimony (Sb)-Dissolved	<0.000005	<W	0.00010	mg/L		11-APR-23	R5943376
Arsenic (As)-Dissolved	<0.000005	<W	0.00010	mg/L		11-APR-23	R5943376
Barium (Ba)-Dissolved	0.00008	<DL	0.00010	mg/L		11-APR-23	R5943376
Beryllium (Be)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		11-APR-23	R5943376
Cadmium (Cd)-Dissolved	<0.0000002	<W	0.0000050	mg/L		11-APR-23	R5943376
Calcium (Ca)-Dissolved	0.020	<DL	0.050	mg/L		11-APR-23	R5943376
Cesium (Cs)-Dissolved	<0.0000002	<W	0.000010	mg/L		11-APR-23	R5943376
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		11-APR-23	R5943376
Cobalt (Co)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376
Copper (Cu)-Dissolved	<0.00005	<W	0.00020	mg/L		11-APR-23	R5943376
Iron (Fe)-Dissolved	<0.001	<W	0.010	mg/L		11-APR-23	R5943376
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		11-APR-23	R5943376
Lithium (Li)-Dissolved	<0.0002	<W	0.0010	mg/L		11-APR-23	R5943376
Magnesium (Mg)-Dissolved	0.0015	<DL	0.0050	mg/L		11-APR-23	R5943376
Manganese (Mn)-Dissolved	0.00002	<DL	0.00050	mg/L		11-APR-23	R5943376
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943036
Molybdenum (Mo)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Nickel (Ni)-Dissolved	<0.00002	<W	0.00050	mg/L		11-APR-23	R5943376
Phosphorus (P)-Dissolved	<0.002	<W	0.050	mg/L		11-APR-23	R5943376
Potassium (K)-Dissolved	<0.002	<W	0.050	mg/L		11-APR-23	R5943376
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		11-APR-23	R5943376
Selenium (Se)-Dissolved	<0.000002	<W	0.000050	mg/L		11-APR-23	R5943376

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-4 FB_SW_20230404 Sampled By: Client on 04-APR-23 @ 12:00 Matrix: SW							
Dissolved Metals							
Silicon (Si)-Dissolved	0.114		0.050	mg/L		11-APR-23	R5943376
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		11-APR-23	R5943376
Sodium (Na)-Dissolved	0.045	<DL	0.050	mg/L		11-APR-23	R5943376
Strontium (Sr)-Dissolved	0.00003	<DL	0.0010	mg/L		11-APR-23	R5943376
Sulfur (S)-Dissolved	<0.05	<W	0.50	mg/L		11-APR-23	R5943376
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943376
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		11-APR-23	R5943376
Thorium (Th)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376
Tin (Sn)-Dissolved	0.00002	<DL	0.00010	mg/L		11-APR-23	R5943376
Titanium (Ti)-Dissolved	<0.00002	<W	0.00030	mg/L		11-APR-23	R5943376
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376
Uranium (U)-Dissolved	<0.0000005	<W	0.000010	mg/L		11-APR-23	R5943376
Vanadium (V)-Dissolved	<0.00002	<W	0.00050	mg/L		11-APR-23	R5943376
Zinc (Zn)-Dissolved	0.0004	<DL	0.0010	mg/L		11-APR-23	R5943376
Zirconium (Zr)-Dissolved	<0.000004	<W	0.00020	mg/L		11-APR-23	R5943376
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		06-APR-23	R5943156
Chemical Oxygen Demand	<10		10	mg/L	06-APR-23	08-APR-23	R5942702
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-APR-23	11-APR-23	R5943122
L2749905-5 TB_SW_20230404 Sampled By: Client on 04-APR-23 @ 12:00 Matrix: SW							
Physical Tests							
Color, True	<2.0		2.0	CU		08-APR-23	R5942717
Conductivity (EC)	0.4	<DL	1.0	uS/cm		08-APR-23	R5942836
Hardness (as CaCO3)	<0.50		0.50			06-APR-23	
pH	5.24		0.10	pH		08-APR-23	R5942836
Total Suspended Solids	<0.5	<W	3.0	mg/L		10-APR-23	R5943124
Total Dissolved Solids	<2	<W	10	mg/L		10-APR-23	R5943126
Turbidity	<0.10		0.10	NTU		08-APR-23	R5942718
Anions and Nutrients							
Acidity (as CaCO3)	<0.2	<W	2.0	mg/L		12-APR-23	R5943537
Alkalinity, Total (as CaCO3)	0.4	<DL	2.0	mg/L		08-APR-23	R5942836
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		06-APR-23	R5942796
Chloride (Cl)	<0.10		0.10	mg/L	08-APR-23	08-APR-23	R5942737
Fluoride (F)	<0.020		0.020	mg/L	08-APR-23	08-APR-23	R5942737
Nitrate (as N)	0.008	<DL	0.020	mg/L		08-APR-23	R5942737
Nitrite (as N)	<0.001	<W	0.010	mg/L		08-APR-23	R5942737
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	06-APR-23	13-APR-23	R5943697
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	08-APR-23	10-APR-23	R5942877
Sulfate (SO4)	0.05	<DL	0.30	mg/L		08-APR-23	R5942737
Cyanides							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-5 TB_SW_20230404							
Sampled By: Client on 04-APR-23 @ 12:00							
Matrix: SW							
Cyanides							
Cyanide, Weak Acid Diss	0.0001	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Total	0.0004	<DL	0.0020	mg/L		10-APR-23	R5943138
Cyanide, Free	0.0004	<DL	0.0020	mg/L		10-APR-23	R5943138
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	04-APR-23	12-APR-23	R5943496
Total Organic Carbon	<0.50		0.50	mg/L		11-APR-23	R5943417
Total Metals							
Aluminum (Al)-Total	0.0008	<DL	0.0050	mg/L		11-APR-23	R5943377
Antimony (Sb)-Total	0.000010	<DL	0.00010	mg/L		11-APR-23	R5943377
Arsenic (As)-Total	0.000010	<DL	0.00010	mg/L		11-APR-23	R5943377
Barium (Ba)-Total	0.00006	<DL	0.00010	mg/L		11-APR-23	R5943377
Beryllium (Be)-Total	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943377
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943377
Boron (B)-Total	0.006	<DL	0.010	mg/L		11-APR-23	R5943377
Cadmium (Cd)-Total	<0.0000002	<W	0.0000050	mg/L		11-APR-23	R5943377
Calcium (Ca)-Total	0.010	<DL	0.050	mg/L		11-APR-23	R5943377
Cesium (Cs)-Total	<0.0000002	<W	0.000010	mg/L		11-APR-23	R5943377
Chromium (Cr)-Total	0.00018	<DL	0.00050	mg/L		11-APR-23	R5943377
Cobalt (Co)-Total	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943377
Copper (Cu)-Total	<0.00005	<W	0.00050	mg/L		11-APR-23	R5943377
Iron (Fe)-Total	<0.001	<W	0.010	mg/L		11-APR-23	R5943377
Lead (Pb)-Total	<0.00002	<W	0.000050	mg/L		11-APR-23	R5943377
Lithium (Li)-Total	<0.0002	<W	0.0010	mg/L		11-APR-23	R5943377
Magnesium (Mg)-Total	0.0005	<DL	0.0050	mg/L		11-APR-23	R5943377
Manganese (Mn)-Total	0.00004	<DL	0.00050	mg/L		11-APR-23	R5943377
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943037
Molybdenum (Mo)-Total	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943377
Nickel (Ni)-Total	0.00004	<DL	0.00050	mg/L		11-APR-23	R5943377
Phosphorus (P)-Total	0.004	<DL	0.050	mg/L		11-APR-23	R5943377
Potassium (K)-Total	<0.002	<W	0.050	mg/L		11-APR-23	R5943377
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		11-APR-23	R5943377
Selenium (Se)-Total	<0.000002	<W	0.000050	mg/L		11-APR-23	R5943377
Silicon (Si)-Total	<0.002	<W	0.10	mg/L		11-APR-23	R5943377
Silver (Ag)-Total	0.0000010	<DL	0.000050	mg/L		11-APR-23	R5943377
Sodium (Na)-Total	<0.005	<W	0.050	mg/L		11-APR-23	R5943377
Strontium (Sr)-Total	0.00002	<DL	0.0010	mg/L		11-APR-23	R5943377
Sulfur (S)-Total	<0.05	<W	0.50	mg/L		11-APR-23	R5943377
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943377
Thallium (Tl)-Total	<0.000001	<W	0.000010	mg/L		11-APR-23	R5943377
Thorium (Th)-Total	0.000006	<DL	0.00010	mg/L		11-APR-23	R5943377
Tin (Sn)-Total	0.00001	<DL	0.00010	mg/L		11-APR-23	R5943377

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2749905-5 TB_SW_20230404							
Sampled By: Client on 04-APR-23 @ 12:00							
Matrix: SW							
Total Metals							
Titanium (Ti)-Total	<0.00002	<W	0.00030	mg/L		11-APR-23	R5943377
Tungsten (W)-Total	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943377
Uranium (U)-Total	<0.0000005	<W	0.000010	mg/L		11-APR-23	R5943377
Vanadium (V)-Total	<0.00002	<W	0.00050	mg/L		11-APR-23	R5943377
Zinc (Zn)-Total	0.0004	<DL	0.0030	mg/L		11-APR-23	R5943377
Zirconium (Zr)-Total	<0.000004	<W	0.00020	mg/L		11-APR-23	R5943377
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					11-APR-23	R5943076
Aluminum (Al)-Dissolved	0.0008	<DL	0.0050	mg/L		11-APR-23	R5943376
Antimony (Sb)-Dissolved	<0.000005	<W	0.00010	mg/L		11-APR-23	R5943376
Arsenic (As)-Dissolved	<0.000005	<W	0.00010	mg/L		11-APR-23	R5943376
Barium (Ba)-Dissolved	0.00006	<DL	0.00010	mg/L		11-APR-23	R5943376
Beryllium (Be)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		11-APR-23	R5943376
Cadmium (Cd)-Dissolved	<0.0000002	<W	0.0000050	mg/L		11-APR-23	R5943376
Calcium (Ca)-Dissolved	<0.005	<W	0.050	mg/L		11-APR-23	R5943376
Cesium (Cs)-Dissolved	<0.0000002	<W	0.000010	mg/L		11-APR-23	R5943376
Chromium (Cr)-Dissolved	0.00018	<DL	0.00050	mg/L		11-APR-23	R5943376
Cobalt (Co)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376
Copper (Cu)-Dissolved	<0.00005	<W	0.00020	mg/L		11-APR-23	R5943376
Iron (Fe)-Dissolved	<0.001	<W	0.010	mg/L		11-APR-23	R5943376
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		11-APR-23	R5943376
Lithium (Li)-Dissolved	<0.0002	<W	0.0010	mg/L		11-APR-23	R5943376
Magnesium (Mg)-Dissolved	0.0005	<DL	0.0050	mg/L		11-APR-23	R5943376
Manganese (Mn)-Dissolved	<0.00002	<W	0.00050	mg/L		11-APR-23	R5943376
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		10-APR-23	R5943036
Molybdenum (Mo)-Dissolved	<0.000005	<W	0.000050	mg/L		11-APR-23	R5943376
Nickel (Ni)-Dissolved	<0.00002	<W	0.00050	mg/L		11-APR-23	R5943376
Phosphorus (P)-Dissolved	<0.002	<W	0.050	mg/L		11-APR-23	R5943376
Potassium (K)-Dissolved	<0.002	<W	0.050	mg/L		11-APR-23	R5943376
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		11-APR-23	R5943376
Selenium (Se)-Dissolved	<0.000002	<W	0.000050	mg/L		11-APR-23	R5943376
Silicon (Si)-Dissolved	<0.002	<W	0.050	mg/L		11-APR-23	R5943376
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		11-APR-23	R5943376
Sodium (Na)-Dissolved	<0.005	<W	0.050	mg/L		11-APR-23	R5943376
Strontium (Sr)-Dissolved	<0.00001	<W	0.0010	mg/L		11-APR-23	R5943376
Sulfur (S)-Dissolved	<0.05	<W	0.50	mg/L		11-APR-23	R5943376
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		11-APR-23	R5943376
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		11-APR-23	R5943376
Thorium (Th)-Dissolved	<0.000002	<W	0.00010	mg/L		11-APR-23	R5943376

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Total Organic Carbon	MS-B	L2749905-1, -2, -3, -4, -5

Sample Parameter Qualifier key listed:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACY-MISA-TB	Effluent	Acidity (as CaCO ₃)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-MISA-TB	Effluent	Alkalinity, Total (as CaCO ₃)	APHA 2320 B-Auto-Pot. Titration
This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.			
BOD-TB	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B- BIOCHEMICAL OXYGEN DEMAND
All forms of biochemical oxygen demand (BOD) are determined by diluting and incubating a sample for a specified time period, and measuring the oxygen depletion using a dissolved oxygen meter. Dissolved BOD (SOLUBLE) is determined by filtering the sample through a glass fibre filter prior to dilution. Carbonaceous BOD (CBOD) is determined by adding a nitrification inhibitor to the diluted sample prior to incubation.			
CL-L-IC-N-TB	Water	Chloride in Water by IC (Low Level)	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
CN-FREE-MISA-CFA-WT	Effluent	Free Cyanide by Continuous Flow Analyzer	ASTM D7237-10 (modified)
This analysis is carried out using procedures adapted from ASTM Method 7237 "Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection". Free cyanide is determined by in-line gas diffusion at pH 6 with final determination by colourimetric analysis.			
CN-T-MISA-CFA-WT	Effluent	Total Cyanide by CFA	ISO 14403-2:2012 (modified)
This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by colourimetric analysis. Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.			
CN-WAD-MISA-CFA-WT	Effluent	Weak Acid Dissociable Cyanide by CFA	APHA 4500-CN CYANIDE (modified)
This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.			
COD-TB	Water	Chemical Oxygen Demand	APHA 5220D
This analysis is carried out using procedures adapted from APHA Method 5220 "Chemical Oxygen Demand (COD)". Chemical oxygen demand is determined using the closed reflux colourimetric method.			
COLOUR-TB	Water	Colour, True	APHA 2120 C
True Colour in aqueous matrices is analyzed using colourimetric detection. This is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using a platinum-cobalt standard.			
DO-CLIENT-TB	Water	Dissolved Oxygen, Client Supplied	Result supplied by Client
DOC-WT	Effluent	Dissolved Organic Carbon for MISA	APHA 5310 B-Instrumental
EC-MISA-TB	Effluent	Conductivity (EC)	APHA 2510 B-ELECTRODE
This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.			
F-IC-N-TB	Water	Fluoride in Water by IC	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
HARDNESS-CALC-TB	Effluent	Hardness (as CaCO ₃)	CALCULATION

Reference Information

HG-DIS-WT	Effluent	Mercury (Hg)-Dissolved for MISA	SW846 7470A
-----------	----------	---------------------------------	-------------

HG-TOT-WT	Effluent	Mercury (Hg)-Total for MISA	SW846 7470A
-----------	----------	-----------------------------	-------------

MET-D-MISA-MS-WT	Effluent	Diss. Metals in Effluent by ICPMS (MISA)	EPA 200.8
------------------	----------	--	-----------

The concentration of metals determined on an filtered effluent sample for the MISA regulation. The samples are analyzed directly (undigested) by ICP-MS.

MET-T-MISA-MS-WT	Effluent	Total Metals by ICPMS	EPA 200.8
------------------	----------	-----------------------	-----------

The concentration of metals determined on an unfiltered effluent sample for the MISA regulation. The samples are digested in acid and analyzed by ICP-MS.

NH3-MISA-F-TB	Effluent	Ammonia by Discrete Analyzer	catnr 157/158 062217/99321057 (modified)
---------------	----------	------------------------------	--

Ammonia is determined by Flow-injection analysis with fluorescence detection

NH3-UNION-CALC-TB	Effluent	Un-ionized ammonia	Calculation
-------------------	----------	--------------------	-------------

NO2-MISA-IC-TB	Effluent	Nitrite in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-MISA-IC-TB	Effluent	Nitrate in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT	Effluent	Oil and Grease, Total for MISA	APHA 5520 B-Hexane Gravimetric
------------	----------	--------------------------------	--------------------------------

PH-CLIENT-TB	Water	pH	Result supplied by Client
--------------	-------	----	---------------------------

PH-MISA-TB	Effluent	pH	APHA 4500-H-ELECTRODE
------------	----------	----	-----------------------

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

PO4-DO-COL-TB	Water	Dissolved Orthophosphate	APHA 4500-P B, F, G (modified)
---------------	-------	--------------------------	--------------------------------

Phosphorus in aqueous matrices is analyzed using discrete Analyzer with colourimetric detection.

RADIO-RADIUM226-SR	Water	Radium 226	CANMET 1986
--------------------	-------	------------	-------------

SO4-MISA-IC-TB	Effluent	Sulfate in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

TDS-MISA-TB	Effluent	Total Dissolved Solids	APHA 2540 C (modified)
-------------	----------	------------------------	------------------------

Aqueous matrices are analyzed using gravimetry and evaporation

TEMP-CLIENT-TB	Water	Temperature	Result supplied by Client
----------------	-------	-------------	---------------------------

TKN-F-TB	Water	TKN in Water by Fluorescence	catnr 157/158, 062818/99334821
----------	-------	------------------------------	--------------------------------

Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection

TOC-WT	Water	Total Organic Carbon	APHA 5310B
--------	-------	----------------------	------------

Sample is injected into a heated reaction chamber which is packed with an oxidative catalyst. The water is vaporized and the organic carbon is oxidized to carbon dioxide. The carbon dioxide is transported in a carrier gas and is measured by a non-dispersive infrared detector.

TSS-MISA-TB	Effluent	Total Suspended Solids	APHA 2540 D (modified)
-------------	----------	------------------------	------------------------

Aqueous matrices are analyzed using gravimetry

TURBIDITY-TB	Water	Turbidity	APHA 2130 B-Nephelometer
--------------	-------	-----------	--------------------------

Reference Information

Aqueous matrices are analyzed using nephelometry with the light scatter measured at a 90° angle.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SR	Saskatchewan Research Council - Saskatoon, Saskatchewan, Can
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 1 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BOD-TB								
	Water							
Batch	R5943156							
WG3782525-2	LCS							
Biochemical Oxygen Demand			98.0		%		85-115	06-APR-23
WG3782525-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	06-APR-23
CL-L-IC-N-TB								
	Water							
Batch	R5942737							
WG3782552-3	DUP	L2749905-1						
Chloride (Cl)		2.87	2.87		mg/L	0.1	20	08-APR-23
WG3782552-2	LCS							
Chloride (Cl)			102.5		%		90-110	08-APR-23
WG3782552-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	08-APR-23
WG3782552-4	MS	L2749905-2						
Chloride (Cl)			98.5		%		75-125	08-APR-23
COD-TB								
	Water							
Batch	R5942702							
WG3782530-3	DUP	L2749905-1						
Chemical Oxygen Demand		34	34		mg/L	0.0	20	08-APR-23
WG3782530-2	LCS							
Chemical Oxygen Demand			108.1		%		85-115	08-APR-23
WG3782530-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	08-APR-23
WG3782530-4	MS	L2749905-2						
Chemical Oxygen Demand			100.5		%		75-125	08-APR-23
COLOUR-TB								
	Water							
Batch	R5942717							
WG3782550-3	DUP	L2749905-1						
Color, True		37.9	38.2		CU	0.8	20	08-APR-23
WG3782550-2	LCS							
Color, True			108.8		%		85-115	08-APR-23
WG3782550-1	MB							
Color, True			<2.0		CU		2	08-APR-23
F-IC-N-TB								
	Water							
Batch	R5942737							
WG3782552-3	DUP	L2749905-1						
Fluoride (F)		0.033	0.031		mg/L	6.1	20	08-APR-23
WG3782552-2	LCS							



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 2 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F-IC-N-TB								
	Water							
Batch	R5942737							
WG3782552-2	LCS							
Fluoride (F)			104.4		%		90-110	08-APR-23
WG3782552-1	MB							
Fluoride (F)			<0.020		mg/L		0.02	08-APR-23
WG3782552-4	MS	L2749905-2						
Fluoride (F)			98.7		%		75-125	08-APR-23
PO4-DO-COL-TB								
	Water							
Batch	R5942877							
WG3782551-3	DUP	L2749905-1						
Orthophosphate-Dissolved (as P)		0.0034	0.0028		mg/L	17	20	10-APR-23
WG3782551-2	LCS							
Orthophosphate-Dissolved (as P)			105.9		%		80-120	10-APR-23
WG3782551-1	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	10-APR-23
WG3782551-4	MS	L2749905-2						
Orthophosphate-Dissolved (as P)			104.9		%		70-130	10-APR-23
TKN-F-TB								
	Water							
Batch	R5943697							
WG3782528-3	DUP	L2749905-3						
Total Kjeldahl Nitrogen		1.38	1.48		mg/L	6.8	20	13-APR-23
WG3782528-2	LCS							
Total Kjeldahl Nitrogen			103.4		%		75-125	13-APR-23
WG3782528-1	MB							
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	13-APR-23
WG3782528-4	MS	L2749905-4						
Total Kjeldahl Nitrogen			111.1		%		70-130	13-APR-23
TOC-WT								
	Water							
Batch	R5943417							
WG3782627-3	DUP	L2749905-1						
Total Organic Carbon		10.1	10.6		mg/L	4.3	20	11-APR-23
WG3782627-2	LCS							
Total Organic Carbon			91.7		%		80-120	11-APR-23
WG3782627-1	MB							
Total Organic Carbon			<0.50		mg/L		0.5	11-APR-23
WG3782627-4	MS	L2749905-1						
Total Organic Carbon			N/A	MS-B	%		-	11-APR-23
TURBIDITY-TB								
	Water							



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 3 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TURBIDITY-TB		Water						
Batch	R5942718							
WG3782544-3	DUP	L2749905-4						
Turbidity		<0.10	<0.10	RPD-NA	NTU	N/A	15	08-APR-23
WG3782544-2	LCS							
Turbidity			97.0		%		85-115	08-APR-23
WG3782544-1	MB							
Turbidity			<0.10		NTU		0.1	08-APR-23
ACY-MISA-TB		Effluent						
Batch	R5943537							
WG3782549-3	DUP	L2749905-1						
Acidity (as CaCO3)		0.4	1.6	RPD-NA	mg/L	N/A	20	12-APR-23
WG3782549-2	LCS							
Acidity (as CaCO3)			100.5		%		85-115	12-APR-23
WG3782549-1	MB							
Acidity (as CaCO3)			1.6		mg/L		3	12-APR-23
ALK-MISA-TB		Effluent						
Batch	R5942836							
WG3782548-3	DUP	L2749905-1						
Alkalinity, Total (as CaCO3)		25.2	25.0		mg/L	0.8	20	08-APR-23
Alkalinity, Phenolphthalein		<0.2	<0.2	RPD-NA	mg/L	N/A	25	08-APR-23
WG3782548-2	LCS							
Alkalinity, Total (as CaCO3)			104.9		%		85-115	08-APR-23
WG3782548-1	MB							
Alkalinity, Total (as CaCO3)			0.6		mg/L		2	08-APR-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	08-APR-23
Batch	R5942896							
WG3782583-2	LCS							
Alkalinity, Total (as CaCO3)			104.9		%		85-115	08-APR-23
WG3782583-1	MB							
Alkalinity, Total (as CaCO3)			0.6		mg/L		2	08-APR-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	08-APR-23
CN-FREE-MISA-CFA-WT		Effluent						
Batch	R5943138							
WG3782582-3	DUP	L2749905-1						
Cyanide, Free		0.0007	0.0004	RPD-NA	mg/L	N/A	20	10-APR-23
WG3782582-2	LCS							
Cyanide, Free			97.1		%		80-120	10-APR-23
WG3782582-1	MB							



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 4 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-FREE-MISA-CFA-WT Effluent								
Batch	R5943138							
WG3782582-1	MB							
Cyanide, Free			<0.0001		mg/L		0.002	10-APR-23
WG3782582-4	MS	L2749905-1						
Cyanide, Free			99.2		%		75-125	10-APR-23
CN-T-MISA-CFA-WT Effluent								
Batch	R5943138							
WG3782582-3	DUP	L2749905-1						
Cyanide, Total		0.0006	0.0004	RPD-NA	mg/L	N/A	20	11-APR-23
WG3782582-2	LCS							
Cyanide, Total			97.0		%		80-120	10-APR-23
WG3782582-1	MB							
Cyanide, Total			<0.0002		mg/L		0.002	10-APR-23
WG3782582-4	MS	L2749905-1						
Cyanide, Total			89.8		%		75-125	11-APR-23
CN-WAD-MISA-CFA-WT Effluent								
Batch	R5943138							
WG3782582-3	DUP	L2749905-1						
Cyanide, Weak Acid Diss		0.0003	<0.0001	RPD-NA	mg/L	N/A	20	11-APR-23
WG3782582-2	LCS							
Cyanide, Weak Acid Diss			100.6		%		80-120	10-APR-23
WG3782582-1	MB							
Cyanide, Weak Acid Diss			<0.0001		mg/L		0.002	10-APR-23
WG3782582-4	MS	L2749905-1						
Cyanide, Weak Acid Diss			96.9		%		75-125	11-APR-23
DOC-WT Effluent								
Batch	R5943496							
WG3782652-3	DUP	L2749905-1						
Dissolved Organic Carbon		10.1	10.7		mg/L	6.4	25	12-APR-23
WG3782652-2	LCS							
Dissolved Organic Carbon			98.9		%		70-130	12-APR-23
WG3782652-1	MB							
Dissolved Organic Carbon			<0.50		mg/L		0.5	12-APR-23
EC-MISA-TB Effluent								
Batch	R5942836							
WG3782548-3	DUP	L2749905-1						
Conductivity (EC)		71.4	67.8		uS/cm	5.0	10	08-APR-23
WG3782548-2	LCS							



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 5 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EC-MISA-TB		Effluent						
Batch	R5942836							
WG3782548-2	LCS							
Conductivity (EC)			100.4		%		90-110	08-APR-23
WG3782548-1	MB							
Conductivity (EC)			<0.2		uS/cm		2	08-APR-23
HG-DIS-WT		Effluent						
Batch	R5943036							
WG3782598-3	DUP	L2749905-1						
Mercury (Hg)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	10-APR-23
WG3782598-2	LCS							
Mercury (Hg)-Dissolved			104.0		%		80-120	10-APR-23
WG3782598-1	MB							
Mercury (Hg)-Dissolved			<0.000005		mg/L		0.000005	10-APR-23
WG3782598-4	MS	L2749905-2						
Mercury (Hg)-Dissolved			106.7		%		70-130	10-APR-23
HG-TOT-WT		Effluent						
Batch	R5943037							
WG3782599-3	DUP	L2749905-1						
Mercury (Hg)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	10-APR-23
WG3782599-2	LCS							
Mercury (Hg)-Total			107.0		%		80-120	10-APR-23
WG3782599-1	MB							
Mercury (Hg)-Total			<0.000005		mg/L		0.000005	10-APR-23
WG3782599-4	MS	L2749905-2						
Mercury (Hg)-Total			118.4		%		70-130	10-APR-23
MET-D-MISA-MS-WT		Effluent						
Batch	R5943376							
WG3782608-4	DUP	WG3782608-3						
Aluminum (Al)-Dissolved		0.0012	0.0010	RPD-NA	mg/L	N/A	20	11-APR-23
Antimony (Sb)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	11-APR-23
Arsenic (As)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	11-APR-23
Barium (Ba)-Dissolved		0.00008	0.00006	RPD-NA	mg/L	N/A	20	11-APR-23
Beryllium (Be)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	11-APR-23
Bismuth (Bi)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	11-APR-23
Boron (B)-Dissolved		0.006	0.006	RPD-NA	mg/L	N/A	20	11-APR-23
Cadmium (Cd)-Dissolved		<0.0000002	<0.0000002	RPD-NA	mg/L	N/A	20	11-APR-23
Calcium (Ca)-Dissolved		0.020	0.020	RPD-NA	mg/L	N/A	20	11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 6 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT								
	Effluent							
Batch	R5943376							
WG3782608-4	DUP	WG3782608-3						
Cesium (Cs)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	11-APR-23
Chromium (Cr)-Dissolved		0.00020	0.00018	RPD-NA	mg/L	N/A	20	11-APR-23
Cobalt (Co)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	11-APR-23
Copper (Cu)-Dissolved		<0.00005	<0.00005	RPD-NA	mg/L	N/A	20	11-APR-23
Iron (Fe)-Dissolved		<0.001	<0.001	RPD-NA	mg/L	N/A	20	11-APR-23
Lead (Pb)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	11-APR-23
Lithium (Li)-Dissolved		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	11-APR-23
Magnesium (Mg)-Dissolved		0.0015	0.0015	RPD-NA	mg/L	N/A	20	11-APR-23
Manganese (Mn)-Dissolved		0.00002	0.00002	RPD-NA	mg/L	N/A	20	11-APR-23
Molybdenum (Mo)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	11-APR-23
Nickel (Ni)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	11-APR-23
Phosphorus (P)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	25	11-APR-23
Potassium (K)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	20	11-APR-23
Rubidium (Rb)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	11-APR-23
Selenium (Se)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	11-APR-23
Silicon (Si)-Dissolved		0.114	0.114		mg/L	0.2	25	11-APR-23
Silver (Ag)-Dissolved		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	20	11-APR-23
Sodium (Na)-Dissolved		0.045	0.045	RPD-NA	mg/L	N/A	20	11-APR-23
Strontium (Sr)-Dissolved		0.00003	0.00003	RPD-NA	mg/L	N/A	20	11-APR-23
Sulfur (S)-Dissolved		<0.05	<0.05	RPD-NA	mg/L	N/A	25	11-APR-23
Tellurium (Te)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	11-APR-23
Thallium (Tl)-Dissolved		<0.000001	<0.000001	RPD-NA	mg/L	N/A	20	11-APR-23
Thorium (Th)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	11-APR-23
Tin (Sn)-Dissolved		0.00002	0.00002	RPD-NA	mg/L	N/A	20	11-APR-23
Titanium (Ti)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	11-APR-23
Tungsten (W)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	11-APR-23
Uranium (U)-Dissolved		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	20	11-APR-23
Vanadium (V)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	11-APR-23
Zinc (Zn)-Dissolved		0.0004	0.0004	RPD-NA	mg/L	N/A	20	11-APR-23
Zirconium (Zr)-Dissolved		<0.000004	<0.000004	RPD-NA	mg/L	N/A	20	11-APR-23
WG3782623-4	DUP	WG3782623-3						
Aluminum (Al)-Dissolved		0.0296	0.0290		mg/L	2.0	20	11-APR-23
Antimony (Sb)-Dissolved		0.000045	0.000045	RPD-NA	mg/L	N/A	20	11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 7 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT								
	Effluent							
Batch	R5943376							
WG3782623-4	DUP	WG3782623-3						
Arsenic (As)-Dissolved		0.000430	0.000405		mg/L	6.5	20	11-APR-23
Barium (Ba)-Dissolved		0.00866	0.00864		mg/L	0.3	20	11-APR-23
Beryllium (Be)-Dissolved		0.000010	0.000006	RPD-NA	mg/L	N/A	20	11-APR-23
Bismuth (Bi)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	11-APR-23
Boron (B)-Dissolved		0.006	0.006	RPD-NA	mg/L	N/A	20	11-APR-23
Cadmium (Cd)-Dissolved		0.0000044	0.0000034	RPD-NA	mg/L	N/A	20	11-APR-23
Calcium (Ca)-Dissolved		6.89	6.90		mg/L	0.2	20	11-APR-23
Cesium (Cs)-Dissolved		0.0000024	0.0000024	RPD-NA	mg/L	N/A	25	11-APR-23
Chromium (Cr)-Dissolved		0.00022	0.00024	RPD-NA	mg/L	N/A	20	11-APR-23
Cobalt (Co)-Dissolved		0.000030	0.000030	RPD-NA	mg/L	N/A	20	11-APR-23
Copper (Cu)-Dissolved		0.00130	0.00130		mg/L	0.7	20	11-APR-23
Iron (Fe)-Dissolved		0.090	0.089		mg/L	1.5	20	11-APR-23
Lead (Pb)-Dissolved		0.00008	0.00008		mg/L	0.1	20	11-APR-23
Lithium (Li)-Dissolved		0.0010	0.0008	RPD-NA	mg/L	N/A	20	11-APR-23
Magnesium (Mg)-Dissolved		2.15	2.16		mg/L	0.3	20	11-APR-23
Manganese (Mn)-Dissolved		0.00396	0.00408		mg/L	3.1	20	11-APR-23
Molybdenum (Mo)-Dissolved		0.000145	0.000145		mg/L	1.1	20	11-APR-23
Nickel (Ni)-Dissolved		0.00060	0.00060		mg/L	0.8	20	11-APR-23
Phosphorus (P)-Dissolved		0.008	0.008	RPD-NA	mg/L	N/A	25	11-APR-23
Potassium (K)-Dissolved		0.804	0.814		mg/L	1.3	20	11-APR-23
Rubidium (Rb)-Dissolved		0.00179	0.00194		mg/L	8.0	25	11-APR-23
Selenium (Se)-Dissolved		0.000110	0.000100		mg/L	11	20	11-APR-23
Silicon (Si)-Dissolved		2.10	2.06		mg/L	2.1	25	11-APR-23
Silver (Ag)-Dissolved		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	20	11-APR-23
Sodium (Na)-Dissolved		3.41	3.42		mg/L	0.1	20	11-APR-23
Strontium (Sr)-Dissolved		0.0220	0.0220		mg/L	0.3	20	11-APR-23
Sulfur (S)-Dissolved		1.55	1.50		mg/L	1.7	25	11-APR-23
Tellurium (Te)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	11-APR-23
Thallium (Tl)-Dissolved		0.000002	0.000002	RPD-NA	mg/L	N/A	20	11-APR-23
Thorium (Th)-Dissolved		0.000038	0.000038	RPD-NA	mg/L	N/A	25	11-APR-23
Tin (Sn)-Dissolved		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	11-APR-23
Titanium (Ti)-Dissolved		0.00064	0.00068		mg/L	4.9	20	11-APR-23
Tungsten (W)-Dissolved		0.000004	0.000004		mg/L			11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 8 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT								
	Effluent							
Batch	R5943376							
WG3782623-4	DUP	WG3782623-3						
Tungsten (W)-Dissolved		0.000004	0.000004	RPD-NA	mg/L	N/A	20	11-APR-23
Uranium (U)-Dissolved		0.0000795	0.0000810		mg/L	2.0	20	11-APR-23
Vanadium (V)-Dissolved		0.00024	0.00026	RPD-NA	mg/L	N/A	20	11-APR-23
Zinc (Zn)-Dissolved		0.0006	0.0006	RPD-NA	mg/L	N/A	20	11-APR-23
Zirconium (Zr)-Dissolved		0.000148	0.000160	RPD-NA	mg/L	N/A	20	11-APR-23
WG3782608-1	MB							
Aluminum (Al)-Dissolved			<0.0002		mg/L		0.005	11-APR-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0001	11-APR-23
Arsenic (As)-Dissolved			<0.000005		mg/L		0.0001	11-APR-23
Barium (Ba)-Dissolved			<0.00002		mg/L		0.0001	11-APR-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Bismuth (Bi)-Dissolved			<0.000005		mg/L		0.00005	11-APR-23
Boron (B)-Dissolved			<0.002		mg/L		0.01	11-APR-23
Cadmium (Cd)-Dissolved			<0.0000002		mg/L		0.000005	11-APR-23
Calcium (Ca)-Dissolved			<0.005		mg/L		0.05	11-APR-23
Cesium (Cs)-Dissolved			0.0000004		mg/L		0.00001	11-APR-23
Chromium (Cr)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Copper (Cu)-Dissolved			<0.00005		mg/L		0.0002	11-APR-23
Iron (Fe)-Dissolved			<0.001		mg/L		0.01	11-APR-23
Lead (Pb)-Dissolved			<0.00002		mg/L		0.00005	11-APR-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.001	11-APR-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.005	11-APR-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Molybdenum (Mo)-Dissolved			<0.000005		mg/L		0.00005	11-APR-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Phosphorus (P)-Dissolved			0.004		mg/L		0.05	11-APR-23
Potassium (K)-Dissolved			<0.002		mg/L		0.05	11-APR-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	11-APR-23
Selenium (Se)-Dissolved			<0.000002		mg/L		0.00005	11-APR-23
Silicon (Si)-Dissolved			<0.002		mg/L		0.05	11-APR-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.00005	11-APR-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.05	11-APR-23
							0.001	



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 9 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch	R5943376							
WG3782608-1	MB							
Strontium (Sr)-Dissolved			<0.00001		mg/L		0.001	11-APR-23
Sulfur (S)-Dissolved			0.10		mg/L		0.5	11-APR-23
Tellurium (Te)-Dissolved			<0.000005		mg/L		0.0002	11-APR-23
Thallium (Tl)-Dissolved			<0.000001		mg/L		0.00001	11-APR-23
Thorium (Th)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Tin (Sn)-Dissolved			<0.00001		mg/L		0.0001	11-APR-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.0003	11-APR-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.00001	11-APR-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.001	11-APR-23
Zirconium (Zr)-Dissolved			<0.000004		mg/L		0.0002	11-APR-23
WG3782623-1	MB							
Aluminum (Al)-Dissolved			<0.0002		mg/L		0.005	11-APR-23
Antimony (Sb)-Dissolved			0.000005		mg/L		0.0001	11-APR-23
Arsenic (As)-Dissolved			<0.000005		mg/L		0.0001	11-APR-23
Barium (Ba)-Dissolved			<0.00002		mg/L		0.0001	11-APR-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Bismuth (Bi)-Dissolved			<0.000005		mg/L		0.00005	11-APR-23
Boron (B)-Dissolved			<0.002		mg/L		0.01	11-APR-23
Cadmium (Cd)-Dissolved			<0.0000002		mg/L		0.000005	11-APR-23
Calcium (Ca)-Dissolved			<0.005		mg/L		0.05	11-APR-23
Cesium (Cs)-Dissolved			0.0000004		mg/L		0.00001	11-APR-23
Chromium (Cr)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Copper (Cu)-Dissolved			<0.00005		mg/L		0.0002	11-APR-23
Iron (Fe)-Dissolved			<0.001		mg/L		0.01	11-APR-23
Lead (Pb)-Dissolved			<0.00002		mg/L		0.00005	11-APR-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.001	11-APR-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.005	11-APR-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Molybdenum (Mo)-Dissolved			<0.000005		mg/L		0.00005	11-APR-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Phosphorus (P)-Dissolved			<0.002		mg/L		0.05	11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 10 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
------	--------	-----------	--------	-----------	-------	-----	-------	----------

MET-D-MISA-MS-WT Effluent

Batch R5943376

WG3782623-1 MB

Potassium (K)-Dissolved			<0.002		mg/L		0.05	11-APR-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	11-APR-23
Selenium (Se)-Dissolved			<0.000002		mg/L		0.00005	11-APR-23
Silicon (Si)-Dissolved			<0.002		mg/L		0.05	11-APR-23
Silver (Ag)-Dissolved			0.0000010		mg/L		0.00005	11-APR-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.05	11-APR-23
Strontium (Sr)-Dissolved			<0.00001		mg/L		0.001	11-APR-23
Sulfur (S)-Dissolved			<0.05		mg/L		0.5	11-APR-23
Tellurium (Te)-Dissolved			<0.000005		mg/L		0.0002	11-APR-23
Thallium (Tl)-Dissolved			<0.000001		mg/L		0.00001	11-APR-23
Thorium (Th)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Tin (Sn)-Dissolved			<0.00001		mg/L		0.0001	11-APR-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.0003	11-APR-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.0001	11-APR-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.00001	11-APR-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.0005	11-APR-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.001	11-APR-23
Zirconium (Zr)-Dissolved			<0.000004		mg/L		0.0002	11-APR-23

MET-T-MISA-MS-WT Effluent

Batch R5943377

WG3782607-4 DUP

WG3782607-3

Aluminum (Al)-Total	0.155	0.155			mg/L	0.4	25	11-APR-23
Antimony (Sb)-Total	0.000060	0.000060	RPD-NA		mg/L	N/A	25	11-APR-23
Arsenic (As)-Total	0.000430	0.000455			mg/L	5.8	25	11-APR-23
Barium (Ba)-Total	0.00956	0.00958			mg/L	0.2	25	11-APR-23
Beryllium (Be)-Total	0.000012	0.000012	RPD-NA		mg/L	N/A	25	11-APR-23
Bismuth (Bi)-Total	<0.000005	<0.000005	RPD-NA		mg/L	N/A	25	11-APR-23
Boron (B)-Total	0.006	0.006	RPD-NA		mg/L	N/A	25	11-APR-23
Cadmium (Cd)-Total	0.0000042	0.0000062	RPD-NA		mg/L	N/A	25	11-APR-23
Calcium (Ca)-Total	7.09	7.13			mg/L	0.6	25	11-APR-23
Cesium (Cs)-Total	0.0000254	0.0000250			mg/L	1.6	25	11-APR-23
Chromium (Cr)-Total	0.00064	0.00064			mg/L	0.7	25	11-APR-23
Cobalt (Co)-Total	0.000104	0.000108			mg/L	2.5	25	11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 11 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT		Effluent						
Batch	R5943377							
WG3782607-4	DUP	WG3782607-3						
Copper (Cu)-Total		0.00180	0.00185		mg/L	0.0	25	11-APR-23
Iron (Fe)-Total		0.254	0.252		mg/L	0.8	25	11-APR-23
Lead (Pb)-Total		0.00028	0.00026		mg/L	1.2	25	11-APR-23
Lithium (Li)-Total		0.0010	0.0008	RPD-NA	mg/L	N/A	25	11-APR-23
Magnesium (Mg)-Total		2.22	2.27		mg/L	2.5	25	11-APR-23
Manganese (Mn)-Total		0.00996	0.0103		mg/L	3.1	25	11-APR-23
Molybdenum (Mo)-Total		0.000145	0.000145		mg/L	1.9	25	11-APR-23
Nickel (Ni)-Total		0.00080	0.00080		mg/L	2.3	25	11-APR-23
Phosphorus (P)-Total		0.010	0.016	RPD-NA	mg/L	N/A	25	11-APR-23
Potassium (K)-Total		0.838	0.852		mg/L	1.7	25	11-APR-23
Rubidium (Rb)-Total		0.00218	0.00218		mg/L	0.3	25	11-APR-23
Selenium (Se)-Total		0.000114	0.000110		mg/L	4.3	25	11-APR-23
Silicon (Si)-Total		2.35	2.40		mg/L	2.1	25	11-APR-23
Silver (Ag)-Total		0.0000015	0.0000015	RPD-NA	mg/L	N/A	25	11-APR-23
Sodium (Na)-Total		3.41	3.48		mg/L	2.0	25	11-APR-23
Strontium (Sr)-Total		0.0224	0.0223		mg/L	0.5	25	11-APR-23
Sulfur (S)-Total		1.55	1.45		mg/L	3.9	25	11-APR-23
Tellurium (Te)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	11-APR-23
Thallium (Tl)-Total		0.000005	0.000004	RPD-NA	mg/L	N/A	25	11-APR-23
Thorium (Th)-Total		0.000044	0.000042	RPD-NA	mg/L	N/A	25	11-APR-23
Tin (Sn)-Total		0.00004	0.00003	RPD-NA	mg/L	N/A	25	11-APR-23
Titanium (Ti)-Total		0.00500	0.00454		mg/L	9.7	25	11-APR-23
Tungsten (W)-Total		0.000008	0.000006	RPD-NA	mg/L	N/A	25	11-APR-23
Uranium (U)-Total		0.0000960	0.0000965		mg/L	0.4	25	11-APR-23
Vanadium (V)-Total		0.00058	0.00058		mg/L	0.9	25	11-APR-23
Zinc (Zn)-Total		0.0018	0.0016	RPD-NA	mg/L	N/A	25	11-APR-23
Zirconium (Zr)-Total		0.000184	0.000176	RPD-NA	mg/L	N/A	25	11-APR-23
WG3782607-1	MB							
Aluminum (Al)-Total			0.0008		mg/L		0.005	11-APR-23
Antimony (Sb)-Total			<0.000005		mg/L		0.0001	11-APR-23
Arsenic (As)-Total			<0.000005		mg/L		0.0001	11-APR-23
Barium (Ba)-Total			<0.00002		mg/L		0.0001	11-APR-23
Beryllium (Be)-Total			0.000002		mg/L		0.0001	11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 12 of 16

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT		Effluent						
Batch	R5943377							
WG3782607-1 MB								
Bismuth (Bi)-Total			<0.000005		mg/L		0.00005	11-APR-23
Boron (B)-Total			<0.002		mg/L		0.01	11-APR-23
Cadmium (Cd)-Total			<0.0000002		mg/L		0.000005	11-APR-23
Calcium (Ca)-Total			<0.005		mg/L		0.05	11-APR-23
Cesium (Cs)-Total			<0.0000002		mg/L		0.00001	11-APR-23
Chromium (Cr)-Total			<0.00002		mg/L		0.0005	11-APR-23
Cobalt (Co)-Total			<0.000002		mg/L		0.0001	11-APR-23
Copper (Cu)-Total			<0.00005		mg/L		0.0005	11-APR-23
Iron (Fe)-Total			<0.001		mg/L		0.01	11-APR-23
Lead (Pb)-Total			<0.00002		mg/L		0.00005	11-APR-23
Lithium (Li)-Total			<0.0002		mg/L		0.001	11-APR-23
Magnesium (Mg)-Total			0.0005		mg/L		0.005	11-APR-23
Manganese (Mn)-Total			<0.00002		mg/L		0.0005	11-APR-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.00005	11-APR-23
Nickel (Ni)-Total			<0.00002		mg/L		0.0005	11-APR-23
Phosphorus (P)-Total			0.006		mg/L		0.05	11-APR-23
Potassium (K)-Total			<0.002		mg/L		0.05	11-APR-23
Rubidium (Rb)-Total			<0.000002		mg/L		0.0002	11-APR-23
Selenium (Se)-Total			0.000002		mg/L		0.00005	11-APR-23
Silicon (Si)-Total			0.028		mg/L		0.1	11-APR-23
Silver (Ag)-Total			0.0000025		mg/L		0.00005	11-APR-23
Sodium (Na)-Total			<0.005		mg/L		0.05	11-APR-23
Strontium (Sr)-Total			<0.00001		mg/L		0.001	11-APR-23
Sulfur (S)-Total			<0.05		mg/L		0.5	11-APR-23
Tellurium (Te)-Total			0.000010		mg/L		0.0002	11-APR-23
Thallium (Tl)-Total			<0.000001		mg/L		0.00001	11-APR-23
Thorium (Th)-Total			<0.000002		mg/L		0.0001	11-APR-23
Tin (Sn)-Total			<0.00001		mg/L		0.0001	11-APR-23
Titanium (Ti)-Total			<0.00002		mg/L		0.0003	11-APR-23
Tungsten (W)-Total			<0.000002		mg/L		0.0001	11-APR-23
Uranium (U)-Total			<0.0000005		mg/L		0.00001	11-APR-23
Vanadium (V)-Total			0.00002		mg/L		0.0005	11-APR-23
Zinc (Zn)-Total			<0.0002		mg/L		0.003	11-APR-23



Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 13 of 16

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT Effluent								
Batch	R5943377							
WG3782607-1	MB							
Zirconium (Zr)-Total			<0.000004		mg/L		0.0002	11-APR-23
NH3-MISA-F-TB Effluent								
Batch	R5942796							
WG3782527-3	DUP	L2749905-1						
Ammonia, Total (as N)		0.020	0.016	J	mg/L	0.0046	0.01	06-APR-23
WG3782527-2	LCS							
Ammonia, Total (as N)			101.6		%		85-115	06-APR-23
WG3782527-1	MB							
Ammonia, Total (as N)			<0.002		mg/L		0.005	06-APR-23
WG3782527-4	MS	L2749905-2						
Ammonia, Total (as N)			100.8		%		75-125	06-APR-23
NO2-MISA-IC-TB Effluent								
Batch	R5942737							
WG3782552-3	DUP	L2749905-1						
Nitrite (as N)		<0.001	0.001	RPD-NA	mg/L	N/A	20	08-APR-23
WG3782552-2	LCS							
Nitrite (as N)			98.7		%		90-110	08-APR-23
WG3782552-1	MB							
Nitrite (as N)			<0.001		mg/L		0.01	08-APR-23
WG3782552-4	MS	L2749905-2						
Nitrite (as N)			101.5		%		75-125	08-APR-23
NO3-MISA-IC-TB Effluent								
Batch	R5942737							
WG3782552-3	DUP	L2749905-1						
Nitrate (as N)		0.112	0.112		mg/L	0.3	20	08-APR-23
WG3782552-2	LCS							
Nitrate (as N)			102.3		%		90-110	08-APR-23
WG3782552-1	MB							
Nitrate (as N)			<0.002		mg/L		0.02	08-APR-23
WG3782552-4	MS	L2749905-2						
Nitrate (as N)			97.7		%		75-125	08-APR-23
OGG-TOT-WT Effluent								



Environmental

Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Page 14 of 16

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
OGG-TOT-WT		Effluent						
Batch	R5943122							
WG3782609-2	LCS							
Oil and Grease, Total			100.2		%		50-150	11-APR-23
WG3782609-1	MB							
Oil and Grease, Total			<0.2		mg/L		1	11-APR-23
PH-MISA-TB		Effluent						
Batch	R5942836							
WG3782548-3	DUP	L2749905-1						
pH		7.32	7.33	J	pH	0.01	0.2	08-APR-23
WG3782548-2	LCS							
pH			7.00		pH		6.9-7.1	08-APR-23
SO4-MISA-IC-TB		Effluent						
Batch	R5942737							
WG3782552-3	DUP	L2749905-1						
Sulfate (SO4)		3.95	3.85		mg/L	2.0	20	08-APR-23
WG3782552-2	LCS							
Sulfate (SO4)			104.2		%		90-110	08-APR-23
WG3782552-1	MB							
Sulfate (SO4)			<0.05		mg/L		0.3	08-APR-23
WG3782552-4	MS	L2749905-2						
Sulfate (SO4)			99.1		%		75-125	08-APR-23
TDS-MISA-TB		Effluent						
Batch	R5943126							
WG3782564-2	LCS							
Total Dissolved Solids			98.3		%		85-115	10-APR-23
WG3782564-1	MB							
Total Dissolved Solids			4		mg/L		10	10-APR-23
TSS-MISA-TB		Effluent						
Batch	R5943124							
WG3782565-2	LCS							
Total Suspended Solids			103.5		%		85-115	10-APR-23
WG3782565-1	MB							
Total Suspended Solids			<0.5		mg/L		3	10-APR-23

Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 15 of 16

Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L2749905

Report Date: 25-APR-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 16 of 16

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Colour, True	1	04-APR-23 08:25	08-APR-23 13:00	3	4	days	EHTL
	2	04-APR-23 09:45	08-APR-23 13:00	3	4	days	EHTL
	3	04-APR-23 11:10	08-APR-23 13:00	3	4	days	EHT
	4	04-APR-23 12:00	08-APR-23 13:00	3	4	days	EHT
	5	04-APR-23 12:00	08-APR-23 13:00	3	4	days	EHT
Turbidity	1	04-APR-23 08:25	08-APR-23 12:45	3	4	days	EHTL
	2	04-APR-23 09:45	08-APR-23 12:45	3	4	days	EHTL
	3	04-APR-23 11:10	08-APR-23 12:45	3	4	days	EHT
	4	04-APR-23 12:00	08-APR-23 12:45	3	4	days	EHT
	5	04-APR-23 12:00	08-APR-23 12:45	3	4	days	EHT

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2749905 were received on 06-APR-23 10:25.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

SRC Group # 2023-4105

Apr 24, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Apr-11-2023

Client P.O.: L2749905

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-4105

Apr 24, 2023

ALS, Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Sample #: **2023009968**
Date Sampled: **Apr 04, 2023**
Sample Matrix: **WATER**
Description: **04/04/2023 SW23 L2749905-3**

Client PO #: **L2749905**
Date Received: **Apr 11, 2023**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.9 °C upon receipt.

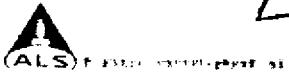
SRC Group # 2023-4105

Apr 24, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105



L2749905

CHAIN OF CUSTODY RECORD - ALS-450213750

L2

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 4/5/2023 9:00:00 AM
 COC Number: ALS-450213750



L2749905 COC

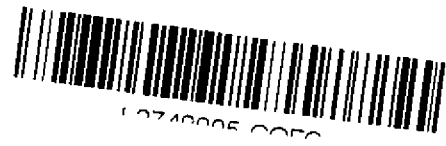
Containers	SW Kit	Ra-226 Bottle								Number of Containers	Comments	
	Filtered	N	N									
Preservatives	NG-SW-P-TB	RA226-MMER-BE										
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix							
SW16_SW_20230404	11.24	6.73	1.01	04/04/2023 08:25	SW	X					11	
SW17_SW_20230404	12.16	7.35	1	04/04/2023 09:45	SW	X					11	
SW23_SW_20230404	4.5	7.08	0.08	04/04/2023 11:10	SW	X					12	
SW23_SW_20230404	4.5	7.08	0.08	04/04/2023 11:10	SW		X				12	
FB_SW_20230404				04/04/2023 12:00	SW	X					11	
TB_SW_20230404				04/05/2023 12:00	SW	X					11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by <i>0.2°C, -0.3°C</i>	4/5/2023 9:00:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by <i>AN April 6, 2023 10:25am</i>		Lab Name: ALS Thunder Bay Lab Phone:		

2 coolers, Monitor in


Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are samples for human consumption / use? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			



Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	4/5/2023 9:00:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by		Lab Name: ALS Thunder Bay Lab Phone:		

Intake and Login Verification Form

SAMPLE INTAKE					ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO		Confirmed all as accurate as per CoC, Sample Remarks or PM			
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO		Client	Office	Work Contact	Quote
Client:	Rainy River - New Gold				RECEIPT DETAIL			
SAMPLE RECEIPT INFORMATION					Project	PO	Site/LSD	
Mode-of-Delivery:	<u>Courier</u>	Drop Off			Recipients match CoC or Sample Remarks		Yes	No
COURIER	Manitoulin				Billing Instruction added to remarks		Yes	NA
Waybill Number	330 233 7155				Sample Remarks checked		Yes	
Shipment Cost		Collect?	Y/N		Submission Issues communicated		Yes	NA
Temperature		Cooler Count	2		VERIFICATION CHECKLIST			
Cooling Method	None	Ice	<input checked="" type="radio"/> Ice Packs		Sample Name entered as per CoC			
SAMPLE MATRIX/BOTTLE INFORMATION					Sampling Date and time entered as per CoC			
Matrix:	<input checked="" type="radio"/> Water	Soil	Air	Biota	Containers selected in order of CoC			
DW Schedule 24 Bottles Correct?		Yes	No		Sales items from QUOTE ONLY (and/or verified as correct)			
DW Metals pH Check <2		Yes	No					
Bottle Types:	Sample Count		6		Field Data/Calc Codes removed if not on CoC			
Green/white	5 Routine, 5 BOD				Bottle Allocation Verified			
Orange/black					Guideline added or auto-allocated			
Warm red/green/white	5 Tot. Metals, 5 Diss. Metals				Due dates updated			
Warm red/white					VALIDATION			
Yellow/black	5 Tot. Hg - 5 Diss. Hg				Validation errors or ch		Yes	No
Purple/white	5 Nits, 5 Doc, 5 TOC				Internal CoC created			NA
Light blue/white					Login Comments:			
Others (detail)	1 Radium, 10 OGG 5 dark-green CN							
Comments on Samples and Bottles:								
Samples Requiring Preservation or Filtering:					 10710005 0000			
Doc, Diss. Metals, Diss. Hg → FIP @ Lab								
Layout Staff Initials					Login Staff Initials:		AN	
Date and Time of Layout	LV 4/6/23 1:00							



New Gold Inc. Rainy River Project
ATTN: Garnet Cornell
24 Marr Rd
Barwick ON POW 1A0

Date Received: 13-APR-23
Report Date: 27-APR-23 14:46 (MT)
Version: FINAL

Client Phone: 807-234-8200

Certificate of Analysis

Lab Work Order #: L2750009
Project P.O. #: 4500062842
Job Reference: SURFACE WATER KIT
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-2 TB_SW_20230404							
Sampled By: Client on 11-APR-23 @ 12:00							
Matrix: SURFACEWATER							
Physical Tests							
Color, True	<2.0		2.0	CU		17-APR-23	R5944257
Conductivity (EC)	0.4	<DL	1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	<0.50		0.50	mg/L		26-APR-23	
pH	5.44		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	<0.5	<W	3.0	mg/L		18-APR-23	R5944696
Total Dissolved Solids	<2	<W	10	mg/L		18-APR-23	R5944697
Turbidity	<0.10		0.10	NTU		17-APR-23	R5944298
Anions and Nutrients							
Acidity (as CaCO3)	0.4	<DL	2.0	mg/L		19-APR-23	R5944977
Alkalinity, Total (as CaCO3)	<0.2	<W	2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		17-APR-23	R5944316
Chloride (Cl)	<0.10		0.10	mg/L	15-APR-23	16-APR-23	R5944156
Fluoride (F)	<0.020		0.020	mg/L	15-APR-23	16-APR-23	R5944156
Nitrate (as N)	<0.002	<W	0.020	mg/L		16-APR-23	R5944156
Nitrite (as N)	0.001	<DL	0.010	mg/L		16-APR-23	R5944156
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	12-APR-23	24-APR-23	R5945936
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	15-APR-23	17-APR-23	R5944337
Sulfate (SO4)	<0.05	<W	0.30	mg/L		16-APR-23	R5944156
Cyanides							
Cyanide, Weak Acid Diss	0.0001	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	<0.0002	<W	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0004	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	<0.50		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.0012	<DL	0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	<0.000005	<W	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	<0.000005	<W	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.00006	<DL	0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000005	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.006	<DL	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	<0.0000002	<W	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	<0.005	<W	0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	<0.0000002	<W	0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00016	<DL	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	<0.00005	<W	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	<0.001	<W	0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	<0.00002	<W	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	<0.0002	<W	0.0010	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-2 TB_SW_20230404							
Sampled By: Client on 11-APR-23 @ 12:00							
Matrix: SURFACEWATER							
Total Metals							
Magnesium (Mg)-Total	0.0010	<DL	0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	<0.00002	<W	0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	<0.00002	<W	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.004	<DL	0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	<0.002	<W	0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000008	<DL	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	0.004	<DL	0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	<0.0000005	<W	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	<0.005	<W	0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	<0.00001	<W	0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	<0.05	<W	0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	<0.000001	<W	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.00002	<DL	0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	<0.0000005	<W	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00002	<DL	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	<0.0002	<W	0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	<0.000004	<W	0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					18-APR-23	R5944397
Aluminum (Al)-Dissolved	0.0002	<DL	0.0050	mg/L		18-APR-23	R5944484
Antimony (Sb)-Dissolved	<0.000005	<W	0.00010	mg/L		18-APR-23	R5944484
Arsenic (As)-Dissolved	<0.000005	<W	0.00010	mg/L		18-APR-23	R5944484
Barium (Ba)-Dissolved	0.00006	<DL	0.00010	mg/L		18-APR-23	R5944484
Beryllium (Be)-Dissolved	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944484
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944484
Boron (B)-Dissolved	0.006	<DL	0.010	mg/L		18-APR-23	R5944484
Cadmium (Cd)-Dissolved	<0.0000002	<W	0.0000050	mg/L		18-APR-23	R5944484
Calcium (Ca)-Dissolved	<0.005	<W	0.050	mg/L		18-APR-23	R5944484
Cesium (Cs)-Dissolved	<0.0000002	<W	0.000010	mg/L		18-APR-23	R5944484
Chromium (Cr)-Dissolved	0.00016	<DL	0.00050	mg/L		18-APR-23	R5944484
Cobalt (Co)-Dissolved	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944484
Copper (Cu)-Dissolved	<0.00005	<W	0.00020	mg/L		18-APR-23	R5944484
Iron (Fe)-Dissolved	<0.001	<W	0.010	mg/L		18-APR-23	R5944484
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		18-APR-23	R5944484

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-2 TB_SW_20230404 Sampled By: Client on 11-APR-23 @ 12:00 Matrix: SURFACEWATER							
Dissolved Metals							
Lithium (Li)-Dissolved	<0.0002	<W	0.0010	mg/L		18-APR-23	R5944484
Magnesium (Mg)-Dissolved	<0.0005	<W	0.0050	mg/L		18-APR-23	R5944484
Manganese (Mn)-Dissolved	<0.00002	<W	0.00050	mg/L		18-APR-23	R5944484
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944484
Nickel (Ni)-Dissolved	<0.00002	<W	0.00050	mg/L		18-APR-23	R5944484
Phosphorus (P)-Dissolved	<0.002	<W	0.050	mg/L		18-APR-23	R5944484
Potassium (K)-Dissolved	<0.002	<W	0.050	mg/L		18-APR-23	R5944484
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		18-APR-23	R5944484
Selenium (Se)-Dissolved	<0.000002	<W	0.000050	mg/L		18-APR-23	R5944484
Silicon (Si)-Dissolved	<0.002	<W	0.050	mg/L		18-APR-23	R5944484
Silver (Ag)-Dissolved	<0.0000005	<W	0.000050	mg/L		18-APR-23	R5944484
Sodium (Na)-Dissolved	<0.005	<W	0.050	mg/L		18-APR-23	R5944484
Strontium (Sr)-Dissolved	<0.00001	<W	0.0010	mg/L		18-APR-23	R5944484
Sulfur (S)-Dissolved	<0.05	<W	0.50	mg/L		18-APR-23	R5944484
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944484
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		18-APR-23	R5944484
Thorium (Th)-Dissolved	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944484
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944484
Titanium (Ti)-Dissolved	<0.00002	<W	0.00030	mg/L		18-APR-23	R5944484
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944484
Uranium (U)-Dissolved	<0.0000005	<W	0.000010	mg/L		18-APR-23	R5944484
Vanadium (V)-Dissolved	<0.00002	<W	0.00050	mg/L		18-APR-23	R5944484
Zinc (Zn)-Dissolved	<0.0002	<W	0.0010	mg/L		18-APR-23	R5944484
Zirconium (Zr)-Dissolved	<0.000004	<W	0.00020	mg/L		18-APR-23	R5944484
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		14-APR-23	R5944759
Chemical Oxygen Demand	<10		10	mg/L	15-APR-23	17-APR-23	R5944302
Oil and Grease, Total	<0.2	<W	1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
Report Remarks : Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.							
L2750009-3 SW27_SW_20230404 Sampled By: Client on 11-APR-23 @ 09:25 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	12.92		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	4.61		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.1		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	70.5		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	242		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	115		0.50			17-APR-23	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-3 SW27_SW_20230404							
Sampled By: Client on 11-APR-23 @ 09:25							
Matrix: SURFACEWATER							
Physical Tests							
pH	7.88		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	13.5		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	172		13	mg/L		14-APR-23	R5944128
Turbidity	19.9		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	6.4		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	111		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.084	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	7.51		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.039		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.350		0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.003	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	0.882		0.050	mg/L	13-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0335		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	9.35		0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0008	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	14.7		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	15.7		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.914		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000115	<T	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.000895	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0241		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000040	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000020	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.012	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000352	<T	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	29.5		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.000131		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00166	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000574	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00255	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	1.20		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00096	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0038	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	11.8		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.231		0.00050	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-3 SW27_SW_20230404							
Sampled By: Client on 11-APR-23 @ 09:25							
Matrix: SURFACEWATER							
Total Metals							
Mercury (Hg)-Total	0.000005	<T	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000590	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00182	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.096		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	3.45		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00481		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000158	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	5.57		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000135	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	3.15		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0630		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	3.35		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000010	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000014	<T	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000096	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00005	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.0259		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000018	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000801	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00264	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0106		0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000464		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0672		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000105	<T	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000660	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0177		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000012	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.010		0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000158	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	27.5		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000076	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000202	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00135	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.225		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00018	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0024	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	11.2		0.0050	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-3 SW27_SW_20230404 Sampled By: Client on 11-APR-23 @ 09:25 Matrix: SURFACEWATER							
Dissolved Metals							
Manganese (Mn)-Dissolved	0.116		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000575	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00090	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.052		0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	3.21		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00271		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000164	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	3.94		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000040	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	3.23		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0593		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	3.40		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	0.000015	<DL	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000092	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00772		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000010	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000778	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00058	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0046	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000488		0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.0		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	48		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	2.6		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-4 SW21A_SW_20230404 Sampled By: Client on 11-APR-23 @ 10:00 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	9.06		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.15		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.19		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	55.5		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	271		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	125		0.50			17-APR-23	
pH	7.70		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	31.5		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	174		13	mg/L		14-APR-23	R5944128

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-4 SW21A_SW_20230404							
Sampled By: Client on 11-APR-23 @ 10:00							
Matrix: SURFACEWATER							
Physical Tests							
Turbidity	13.9		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	13.6		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	143		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.184	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	10.5		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.039		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.288		0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.004	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	1.05		0.050	mg/L	13-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0325		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	8.70		0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0008	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	14.5		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	15.2		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.446		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000065	<DL	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.000895	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0248		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000024	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000015	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.014	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000230	<T	0.000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	28.6		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.0000556		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00862	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000812	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00150	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	1.42		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00074	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0050	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	13.4		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.295		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.00123	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00170	<T	0.00050	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-4 SW21A_SW_20230404							
Sampled By: Client on 11-APR-23 @ 10:00							
Matrix: SURFACEWATER							
Total Metals							
Phosphorus (P)-Total	0.142		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	4.64		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00556		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000122	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	5.19		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000045	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	4.86		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0800		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	3.10		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000015	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000006	<DL	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000082	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00002	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.0125		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000024	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000708	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00240	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0048	<T	0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000336		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0198	<T	0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000065	<DL	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000630	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0186		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000006	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.014		0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000046	<DL	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	28.6		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000028	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00010	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000100	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00075	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.318		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00010	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0042	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	13.1		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.00780		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000715	<T	0.000050	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-4 SW21A_SW_20230404 Sampled By: Client on 11-APR-23 @ 10:00 Matrix: SURFACEWATER							
Dissolved Metals							
Nickel (Ni)-Dissolved	0.00090	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.050		0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	4.36		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00473		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000116	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	4.44		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000015	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	4.93		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0752		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	3.05		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000020	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00152		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000012	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000686	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00046	<DL	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0008	<DL	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000296	<T	0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.8		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	51		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	1.0		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-5 SW22A_SW_20230404 Sampled By: Client on 11-APR-23 @ 10:50 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	11.23		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.33		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.35		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	64.9		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	251		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	116		0.50	mg/L		26-APR-23	
pH	7.82		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	13.0		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	168		13	mg/L		14-APR-23	R5944128
Turbidity	16.5		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	7.0		2.0	mg/L		14-APR-23	R5944116

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-5 SW22A_SW_20230404							
Sampled By: Client on 11-APR-23 @ 10:50							
Matrix: SURFACEWATER							
Anions and Nutrients							
Alkalinity, Total (as CaCO3)	122		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.112	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	8.33		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.040		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.324		0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.004	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	0.885		0.050	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0335		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	9.40		0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0009	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	14.9		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	16.1		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.767		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000100	<T	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.000850	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0235		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000034	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000020	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.012	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000328	<T	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	28.2		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.000113		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00148	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000636	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00215	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	1.23		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00084	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0038	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	12.5		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.224		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000635	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00172	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.114		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	3.96		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00516		0.00020	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-5 SW22A_SW_20230404							
Sampled By: Client on 11-APR-23 @ 10:50							
Matrix: SURFACEWATER							
Total Metals							
Selenium (Se)-Total	0.000160	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	5.34		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000085	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	3.56		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0674		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	3.35		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000010	<T	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000094	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00003	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.0223		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000020	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000780	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00234	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0086	<T	0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000452		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0610		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000100	<T	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000640	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0176		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.010		0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000142	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	27.4		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000058	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00018	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000150	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00115	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.249		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00018	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0028	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	11.6		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.0739		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000615	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00090	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.042	<DL	0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	3.68		0.050	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-5 SW22A_SW_20230404 Sampled By: Client on 11-APR-23 @ 10:50 Matrix: SURFACEWATER							
Dissolved Metals							
Rubidium (Rb)-Dissolved	0.00333		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000154	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	3.95		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000025	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	3.71		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0632		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	3.35		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	0.000005	<DL	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	0.000001	<DL	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000070	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00654		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000010	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000763	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00062	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0034	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000352		0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.7		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	53		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	3.6		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		27-APR-23	R5946996
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-6 SW10_SW_20230404 Sampled By: Client on 11-APR-23 @ 11:45 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	12.79		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.47		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.22		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	81.5		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	193		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	78.8		0.50	mg/L		26-APR-23	
pH	7.70		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	44.5		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	126		13	mg/L		14-APR-23	R5944128
Turbidity	15.3		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	5.8		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	73.0		2.0	mg/L		15-APR-23	R5944136

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-6 SW10_SW_20230404							
Sampled By: Client on 11-APR-23 @ 11:45							
Matrix: SURFACEWATER							
Anions and Nutrients							
Ammonia, Total (as N)	0.204	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	11.9		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.033		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.760		0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.007	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	1.20		0.050	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.146		0.010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	5.10		0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0009	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0011	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	14.2		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	17.2		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.949		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000060	<DL	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.000795	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0203		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000036	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000015	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.014	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000324	<T	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	18.1		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.000124		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00186	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000708	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00230	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	1.26		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00088	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0044	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	8.95		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.130		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.00113	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00188	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.266		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	6.27		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00831		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000132	<T	0.000050	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-6 SW10_SW_20230404							
Sampled By: Client on 11-APR-23 @ 11:45							
Matrix: SURFACEWATER							
Total Metals							
Silicon (Si)-Total	4.91		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000110	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	4.72		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0503		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	1.75		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000005	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000014	<T	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000098	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00004	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.0284		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000020	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000543	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00292	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0082	<T	0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000452		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0554		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000055	<DL	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000645	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0134		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000006	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.012		0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000060	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	17.7		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000044	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00014	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000092	<DL	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00145	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.165		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00012	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0034	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	8.41		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.00154		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.00109	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00088	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.190		0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	6.09		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00623		0.00020	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-6 SW10_SW_20230404 Sampled By: Client on 11-APR-23 @ 11:45 Matrix: SURFACEWATER							
Dissolved Metals							
Selenium (Se)-Dissolved	0.000126	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	3.01		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000025	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	4.89		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0472		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	1.80		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000044	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00416		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000460	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00078	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0020	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000280	<T	0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	3.9		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	55		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	1.4		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-7 SW06_SW_20230404 Sampled By: Client on 11-APR-23 @ 12:00 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	12.92		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.61		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.1		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	70.9		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	243		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	114		0.50	mg/L		26-APR-23	
pH	7.88		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	15.5		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	172		13	mg/L		14-APR-23	R5944128
Turbidity	21.4		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	4.6		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	109		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.082	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	7.46		0.10	mg/L	14-APR-23	14-APR-23	R5944120

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-7 SW06_SW_20230404							
Sampled By: Client on 11-APR-23 @ 12:00							
Matrix: SURFACEWATER							
Anions and Nutrients							
Fluoride (F)	0.038		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.354		0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.004	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	0.859		0.050	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0325		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	9.35		0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0008	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0008	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.6		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	17.0		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.794		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000120	<T	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.000835	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0237		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000034	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000020	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.010	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000348	<T	0.000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	28.5		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.000111		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00154	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000558	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00235	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	1.10		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00094	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0032	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	11.4		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.221		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000590	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00172	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.092		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	3.43		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00460		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000150	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	5.20		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000130	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	3.12		0.050	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-7 SW06_SW_20230404							
Sampled By: Client on 11-APR-23 @ 12:00							
Matrix: SURFACEWATER							
Total Metals							
Strontium (Sr)-Total	0.0610		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	3.35		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000015	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000014	<T	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000094	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00005	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.0218		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000018	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000807	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00236	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0110		0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000476		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0658		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000105	<T	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000640	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0174		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.010		0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000160	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	27.4		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000070	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00022	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000186	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00135	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.212		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00018	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0024	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	11.1		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.109		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000570	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00094	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.060		0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	3.15		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00264		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000146	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	3.68		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000020	<DL	0.000050	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-7 SW06_SW_20230404 Sampled By: Client on 11-APR-23 @ 12:00 Matrix: SURFACEWATER							
Dissolved Metals							
Sodium (Na)-Dissolved	3.19		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0583		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	3.25		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000092	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00738		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000761	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00064	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0044	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000432		0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.5		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	59		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	2.4		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-8 SW28A_SW_20230404 Sampled By: Client on 11-APR-23 @ 12:10 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	10.34		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.14		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.35		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	101		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	234		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	123		0.50	mg/L		26-APR-23	
pH	7.82		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	6.0		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	162		13	mg/L		14-APR-23	R5944128
Turbidity	5.70		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	8.6		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	136		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.156	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	2.73		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.044		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.096	<T	0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.002	<DL	0.010	mg/L		14-APR-23	R5944120

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-8 SW28A_SW_20230404							
Sampled By: Client on 11-APR-23 @ 12:10							
Matrix: SURFACEWATER							
Anions and Nutrients							
Total Kjeldahl Nitrogen	1.06		0.050	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0085		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	2.15	<T	0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0008	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0009	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	22.7		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	22.7		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.231		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000055	<DL	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.00102	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0188		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000016	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000010	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.010	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000236	<T	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	28.7		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.0000330		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00062	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000558	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00125	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	1.05		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00050	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0032	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	12.7		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.256		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000530	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00112	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.038	<DL	0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	1.96		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00242		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000158	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	4.39		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000050	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	1.62		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0616		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	0.95		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000015	<DL	0.00020	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-8 SW28A_SW_20230404							
Sampled By: Client on 11-APR-23 @ 12:10							
Matrix: SURFACEWATER							
Total Metals							
Thallium (Tl)-Total	0.000005	<DL	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000038	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00002	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.00642		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000695	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00102	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0032	<T	0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000212		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0430		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000060	<DL	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000905	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0154		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000010	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.010		0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000120	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	27.9		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000046	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00024	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000132	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00090	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.623		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00018	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0028	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	12.9		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.0212		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000510	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00090	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.020	<DL	0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	1.89		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00206		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000164	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	4.07		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000020	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	2.16		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0591		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	1.00		0.50	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-8 SW28A_SW_20230404 Sampled By: Client on 11-APR-23 @ 12:10 Matrix: SURFACEWATER							
Dissolved Metals							
Tellurium (Te)-Dissolved	0.000005	<DL	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000040	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00306		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000004	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000684	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00050	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0014	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000296	<T	0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.5		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	74		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	2.4		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-9 SW25_SW_20230404 Sampled By: Client on 11-APR-23 @ 14:00 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	10.7		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.59		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	2.25		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	64.9		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	243		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	122		0.50	mg/L		26-APR-23	
pH	7.92		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	98.5		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	196		13	mg/L		14-APR-23	R5944128
Turbidity	123		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	3.8		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	138		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.098	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	6.13		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.038		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.222	<T	0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.003	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	0.45		0.10	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0034		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	5.35		0.30	mg/L		14-APR-23	R5944120

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-9 SW25_SW_20230404							
Sampled By: Client on 11-APR-23 @ 14:00							
Matrix: SURFACEWATER							
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0008	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0007	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	16.1		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	18.1		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	2.83		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000135	<T	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.00157	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0413		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000116	<T	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000040	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.010	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000592	<T	0.000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	36.1		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.000483		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00534	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.00141	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00525	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	3.57		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00232	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0052	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	13.3		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.271		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	0.000010	<T	0.000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000580	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00448	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.124		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	2.91		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00793		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000148	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	10.4		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000260	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	2.43		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0681		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	1.90		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000020	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000049	<T	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000508		0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00008	<DL	0.00010	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-9 SW25_SW_20230404							
Sampled By: Client on 11-APR-23 @ 14:00							
Matrix: SURFACEWATER							
Total Metals							
Titanium (Ti)-Total	0.0844		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000026	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000801	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00786	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0190		0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000896		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0628		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000100	<T	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000665	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0182		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.008	<DL	0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000160	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	30.8		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000048	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00022	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000242	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00130	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.169		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00024	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0020	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	10.9		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.119		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000565	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00094	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.020	<DL	0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	2.20		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00144		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000154	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	3.94		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000030	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	2.39		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0590		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	1.95		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	0.000005	<DL	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	0.000003	<DL	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000238		0.00010	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-9 SW25_SW_20230404 Sampled By: Client on 11-APR-23 @ 14:00 Matrix: SURFACEWATER							
Dissolved Metals							
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00946		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	0.000010	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000700	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00066	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0032	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000516		0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.9		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	59		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	1.0		1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-10 SW26_SW_20230404 Sampled By: Client on 11-APR-23 @ 15:00 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	11.8		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.76		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.94		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	65.7		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	237		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	116		0.50	mg/L		26-APR-23	
pH	7.93		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	47.0		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	166		13	mg/L		14-APR-23	R5944128
Turbidity	39.3		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	4.0		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	116		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.082	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	6.41		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.038		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.204	<T	0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.003	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	0.38		0.10	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0054		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	6.80		0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0001	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-10 SW26_SW_20230404							
Sampled By: Client on 11-APR-23 @ 15:00							
Matrix: SURFACEWATER							
Cyanides							
Cyanide, Free	0.0006	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.9		0.50	mg/L	14-APR-23	20-APR-23	R5945536
Total Organic Carbon	16.8		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	1.53		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000130	<T	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.00117	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0298		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000056	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	0.000025	<DL	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.010	<T	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000404	<T	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	30.8		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.000235		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00284	<T	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000988	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00345	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	2.04		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00154	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0040	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	12.2		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.321		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	0.000005	<T	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000590	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00274	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.088		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	2.63		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00487		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000150	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	6.92		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000215	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	2.50		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0638		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	2.40		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000020	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000023	<T	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000190		0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00005	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.0420		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000022	<DL	0.00010	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-10 SW26_SW_20230404							
Sampled By: Client on 11-APR-23 @ 15:00							
Matrix: SURFACEWATER							
Total Metals							
Uranium (U)-Total	0.000835	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00436	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0200		0.0030	mg/L		18-APR-23	R5944483
Zirconium (Zr)-Total	0.000584		0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0738		0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000110	<T	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000655	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.0171		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.008	<DL	0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000108	<T	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	28.4		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000066	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00020	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000136	<T	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00135	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.188		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	0.00020	<T	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0020	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	10.9		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.0552		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000565	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00094	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.020	<DL	0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	2.23		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00145		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000162	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	3.72		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000045	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	2.45		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0604		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	2.35		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	0.000010	<DL	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	0.000002	<DL	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000100		0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00862		0.00030	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-10 SW26_SW_20230404 Sampled By: Client on 11-APR-23 @ 15:00 Matrix: SURFACEWATER							
Dissolved Metals							
Tungsten (W)-Dissolved	0.000010	<DL	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000773	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00058	<T	0.00050	mg/L		18-APR-23	R5944576
Zinc (Zn)-Dissolved	0.0052	<T	0.0010	mg/L		18-APR-23	R5944576
Zirconium (Zr)-Dissolved	0.000488		0.00020	mg/L		18-APR-23	R5944576
Aggregate Organics							
Biochemical Oxygen Demand	2.0		2.0	mg/L		13-APR-23	R5944517
Chemical Oxygen Demand	53		10	mg/L	13-APR-23	17-APR-23	R5944302
Oil and Grease, Total	0.6	<DL	1.0	mg/L	19-APR-23	19-APR-23	R5944717
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750009-11 SW29_SW_20230404 Sampled By: Client on 11-APR-23 @ 15:30 Matrix: SURFACEWATER							
Field Tests							
Dissolved Oxygen, Client Supplied	9.39		0	mg/L		16-APR-23	R5944137
pH, Client Supplied	7.14		0.10	pH		16-APR-23	R5944137
Temperature, Client Supplied	.7		0	Degree C		16-APR-23	R5944137
Physical Tests							
Color, True	55.3		2.0	CU		13-APR-23	R5943800
Conductivity (EC)	165		1.0	uS/cm		15-APR-23	R5944136
Hardness (as CaCO3)	81.9		0.50			17-APR-23	
pH	7.60		0.10	pH		15-APR-23	R5944136
Total Suspended Solids	4.5		3.0	mg/L		14-APR-23	R5944127
Total Dissolved Solids	100		13	mg/L		14-APR-23	R5944128
Turbidity	2.52		0.10	NTU		13-APR-23	R5943797
Anions and Nutrients							
Acidity (as CaCO3)	8.4		2.0	mg/L		14-APR-23	R5944116
Alkalinity, Total (as CaCO3)	75.8		2.0	mg/L		15-APR-23	R5944136
Ammonia, Total (as N)	0.100	<T	0.0050	mg/L		13-APR-23	R5944196
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		17-APR-23	
Chloride (Cl)	1.72		0.10	mg/L	14-APR-23	14-APR-23	R5944120
Fluoride (F)	0.024		0.020	mg/L	14-APR-23	14-APR-23	R5944120
Nitrate (as N)	0.778		0.020	mg/L		14-APR-23	R5944120
Nitrite (as N)	0.007	<DL	0.010	mg/L		14-APR-23	R5944120
Total Kjeldahl Nitrogen	0.773		0.050	mg/L	12-APR-23	18-APR-23	R5944919
Orthophosphate-Dissolved (as P)	0.0104		0.0010	mg/L	14-APR-23	17-APR-23	R5944337
Sulfate (SO4)	4.85	<T	0.30	mg/L		14-APR-23	R5944120
Cyanides							
Cyanide, Weak Acid Diss	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Total	0.0010	<DL	0.0020	mg/L		20-APR-23	R5945436
Cyanide, Free	0.0006	<DL	0.0020	mg/L		20-APR-23	R5945436
Organic / Inorganic Carbon							
Dissolved Organic Carbon	14.3		0.50	mg/L	14-APR-23	20-APR-23	R5945536

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-11 SW29_SW_20230404							
Sampled By: Client on 11-APR-23 @ 15:30							
Matrix: SURFACEWATER							
Organic / Inorganic Carbon							
Total Organic Carbon	14.2		0.50	mg/L		20-APR-23	R5945596
Total Metals							
Aluminum (Al)-Total	0.131		0.0050	mg/L		18-APR-23	R5944483
Antimony (Sb)-Total	0.000035	<DL	0.00010	mg/L		18-APR-23	R5944483
Arsenic (As)-Total	0.000490	<T	0.00010	mg/L		18-APR-23	R5944483
Barium (Ba)-Total	0.0112		0.00010	mg/L		18-APR-23	R5944483
Beryllium (Be)-Total	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944483
Bismuth (Bi)-Total	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944483
Boron (B)-Total	0.008	<DL	0.010	mg/L		18-APR-23	R5944483
Cadmium (Cd)-Total	0.0000112	<T	0.0000050	mg/L		18-APR-23	R5944483
Calcium (Ca)-Total	18.1		0.050	mg/L		18-APR-23	R5944483
Cesium (Cs)-Total	0.0000170		0.000010	mg/L		18-APR-23	R5944483
Chromium (Cr)-Total	0.00046	<DL	0.00050	mg/L		18-APR-23	R5944483
Cobalt (Co)-Total	0.000314	<T	0.00010	mg/L		18-APR-23	R5944483
Copper (Cu)-Total	0.00075	<T	0.00050	mg/L		18-APR-23	R5944483
Iron (Fe)-Total	0.354		0.010	mg/L		18-APR-23	R5944483
Lead (Pb)-Total	0.00012	<T	0.000050	mg/L		18-APR-23	R5944483
Lithium (Li)-Total	0.0022	<T	0.0010	mg/L		18-APR-23	R5944483
Magnesium (Mg)-Total	8.86		0.0050	mg/L		18-APR-23	R5944483
Manganese (Mn)-Total	0.166		0.00050	mg/L		18-APR-23	R5944483
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944376
Molybdenum (Mo)-Total	0.000315	<T	0.000050	mg/L		18-APR-23	R5944483
Nickel (Ni)-Total	0.00080	<T	0.00050	mg/L		18-APR-23	R5944483
Phosphorus (P)-Total	0.054		0.050	mg/L		18-APR-23	R5944483
Potassium (K)-Total	2.13		0.050	mg/L		18-APR-23	R5944483
Rubidium (Rb)-Total	0.00301		0.00020	mg/L		18-APR-23	R5944483
Selenium (Se)-Total	0.000096	<T	0.000050	mg/L		18-APR-23	R5944483
Silicon (Si)-Total	4.14		0.10	mg/L		18-APR-23	R5944483
Silver (Ag)-Total	0.0000010	<DL	0.000050	mg/L		18-APR-23	R5944483
Sodium (Na)-Total	1.58		0.050	mg/L		18-APR-23	R5944483
Strontium (Sr)-Total	0.0409		0.0010	mg/L		18-APR-23	R5944483
Sulfur (S)-Total	1.65		0.50	mg/L		18-APR-23	R5944483
Tellurium (Te)-Total	0.000010	<DL	0.00020	mg/L		18-APR-23	R5944483
Thallium (Tl)-Total	0.000002	<DL	0.000010	mg/L		18-APR-23	R5944483
Thorium (Th)-Total	0.000022	<DL	0.00010	mg/L		18-APR-23	R5944483
Tin (Sn)-Total	0.00001	<DL	0.00010	mg/L		18-APR-23	R5944483
Titanium (Ti)-Total	0.00432		0.00030	mg/L		18-APR-23	R5944483
Tungsten (W)-Total	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944483
Uranium (U)-Total	0.000130	<T	0.000010	mg/L		18-APR-23	R5944483
Vanadium (V)-Total	0.00062	<T	0.00050	mg/L		18-APR-23	R5944483
Zinc (Zn)-Total	0.0024	<DL	0.0030	mg/L		18-APR-23	R5944483

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750009-11 SW29_SW_20230404							
Sampled By: Client on 11-APR-23 @ 15:30							
Matrix: SURFACEWATER							
Total Metals							
Zirconium (Zr)-Total	0.000132	<DL	0.00020	mg/L		18-APR-23	R5944483
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					18-APR-23	R5944398
Aluminum (Al)-Dissolved	0.0110	<T	0.0050	mg/L		18-APR-23	R5944576
Antimony (Sb)-Dissolved	0.000040	<DL	0.00010	mg/L		18-APR-23	R5944576
Arsenic (As)-Dissolved	0.000425	<T	0.00010	mg/L		18-APR-23	R5944576
Barium (Ba)-Dissolved	0.00962		0.00010	mg/L		18-APR-23	R5944576
Beryllium (Be)-Dissolved	0.000008	<DL	0.00010	mg/L		18-APR-23	R5944576
Bismuth (Bi)-Dissolved	<0.000005	<W	0.000050	mg/L		18-APR-23	R5944576
Boron (B)-Dissolved	0.008	<DL	0.010	mg/L		18-APR-23	R5944576
Cadmium (Cd)-Dissolved	0.0000034	<DL	0.0000050	mg/L		18-APR-23	R5944576
Calcium (Ca)-Dissolved	18.5		0.050	mg/L		18-APR-23	R5944576
Cesium (Cs)-Dissolved	0.0000008	<DL	0.000010	mg/L		18-APR-23	R5944576
Chromium (Cr)-Dissolved	0.00008	<DL	0.00050	mg/L		18-APR-23	R5944576
Cobalt (Co)-Dissolved	0.000070	<DL	0.00010	mg/L		18-APR-23	R5944576
Copper (Cu)-Dissolved	0.00055	<T	0.00020	mg/L		18-APR-23	R5944576
Iron (Fe)-Dissolved	0.118		0.010	mg/L		18-APR-23	R5944576
Lead (Pb)-Dissolved	<0.00002	<W	0.000050	mg/L		18-APR-23	R5944576
Lithium (Li)-Dissolved	0.0022	<T	0.0010	mg/L		18-APR-23	R5944576
Magnesium (Mg)-Dissolved	8.69		0.0050	mg/L		18-APR-23	R5944576
Manganese (Mn)-Dissolved	0.0164		0.00050	mg/L		18-APR-23	R5944576
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		17-APR-23	R5944377
Molybdenum (Mo)-Dissolved	0.000285	<T	0.000050	mg/L		18-APR-23	R5944576
Nickel (Ni)-Dissolved	0.00064	<T	0.00050	mg/L		18-APR-23	R5944576
Phosphorus (P)-Dissolved	0.032	<DL	0.050	mg/L		18-APR-23	R5944576
Potassium (K)-Dissolved	2.09		0.050	mg/L		18-APR-23	R5944576
Rubidium (Rb)-Dissolved	0.00278		0.00020	mg/L		18-APR-23	R5944576
Selenium (Se)-Dissolved	0.000150	<T	0.000050	mg/L		18-APR-23	R5944576
Silicon (Si)-Dissolved	4.00		0.050	mg/L		18-APR-23	R5944576
Silver (Ag)-Dissolved	0.0000010	<DL	0.000050	mg/L		18-APR-23	R5944576
Sodium (Na)-Dissolved	1.61		0.050	mg/L		18-APR-23	R5944576
Strontium (Sr)-Dissolved	0.0409		0.0010	mg/L		18-APR-23	R5944576
Sulfur (S)-Dissolved	1.90		0.50	mg/L		18-APR-23	R5944576
Tellurium (Te)-Dissolved	<0.000005	<W	0.00020	mg/L		18-APR-23	R5944576
Thallium (Tl)-Dissolved	<0.000001	<W	0.000010	mg/L		18-APR-23	R5944576
Thorium (Th)-Dissolved	0.000016	<DL	0.00010	mg/L		18-APR-23	R5944576
Tin (Sn)-Dissolved	<0.00001	<W	0.00010	mg/L		18-APR-23	R5944576
Titanium (Ti)-Dissolved	0.00046		0.00030	mg/L		18-APR-23	R5944576
Tungsten (W)-Dissolved	<0.000002	<W	0.00010	mg/L		18-APR-23	R5944576
Uranium (U)-Dissolved	0.000117	<T	0.000010	mg/L		18-APR-23	R5944576
Vanadium (V)-Dissolved	0.00030	<DL	0.00050	mg/L		18-APR-23	R5944576

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Ammonia, Total (as N)	MS-B	L2750009-10, -11, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Orthophosphate-Dissolved (as P)	MS-B	L2750009-10, -11, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Orthophosphate-Dissolved (as P)	MS-B	L2750009-2
Matrix Spike	Total Organic Carbon	MS-B	L2750009-10, -11, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACY-MISA-TB	Effluent	Acidity (as CaCO ₃)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-MISA-TB	Effluent	Alkalinity, Total (as CaCO ₃)	APHA 2320 B-Auto-Pot. Titration
This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.			
BOD-TB	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B- BIOCHEMICAL OXYGEN DEMAND
All forms of biochemical oxygen demand (BOD) are determined by diluting and incubating a sample for a specified time period, and measuring the oxygen depletion using a dissolved oxygen meter. Dissolved BOD (SOLUBLE) is determined by filtering the sample through a glass fibre filter prior to dilution. Carbonaceous BOD (CBOD) is determined by adding a nitrification inhibitor to the diluted sample prior to incubation.			
CL-L-IC-N-TB	Water	Chloride in Water by IC (Low Level)	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
CN-FREE-MISA-CFA-WT	Effluent	Free Cyanide by Continuous Flow Analyzer	ASTM D7237-10 (modified)
This analysis is carried out using procedures adapted from ASTM Method 7237 "Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection". Free cyanide is determined by in-line gas diffusion at pH 6 with final determination by colourimetric analysis.			
CN-T-MISA-CFA-WT	Effluent	Total Cyanide by CFA	ISO 14403-2:2012 (modified)
This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by colourimetric analysis.			
Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.			
CN-WAD-MISA-CFA-WT	Effluent	Weak Acid Dissociable Cyanide by CFA	APHA 4500-CN CYANIDE (modified)
This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.			
COD-TB	Water	Chemical Oxygen Demand	APHA 5220D
This analysis is carried out using procedures adapted from APHA Method 5220 "Chemical Oxygen Demand (COD)". Chemical oxygen demand is determined using the closed reflux colourimetric method.			
COLOUR-TB	Water	Colour, True	APHA 2120 C
True Colour in aqueous matrices is analyzed using colourimetric detection. This is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using a platinum-cobalt standard.			
DO-CLIENT-TB	Water	Dissolved Oxygen, Client Supplied	Result supplied by Client
DOC-WT	Effluent	Dissolved Organic Carbon for MISA	APHA 5310 B-Instrumental
EC-MISA-TB	Effluent	Conductivity (EC)	APHA 2510 B-ELECTRODE
This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.			
F-IC-N-TB	Water	Fluoride in Water by IC	EPA 300.1 (mod)

Reference Information

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

HARDNESS-CALC-TB	Effluent	Hardness (as CaCO ₃)	CALCULATION
------------------	----------	----------------------------------	-------------

HG-DIS-WT	Effluent	Mercury (Hg)-Dissolved for MISA	SW846 7470A
-----------	----------	---------------------------------	-------------

HG-TOT-WT	Effluent	Mercury (Hg)-Total for MISA	SW846 7470A
-----------	----------	-----------------------------	-------------

MET-D-MISA-MS-WT	Effluent	Diss. Metals in Effluent by ICPMS (MISA)	EPA 200.8
------------------	----------	--	-----------

The concentration of metals determined on an filtered effluent sample for the MISA regulation. The samples are analyzed directly (undigested) by ICP-MS.

MET-T-MISA-MS-WT	Effluent	Total Metals by ICPMS	EPA 200.8
------------------	----------	-----------------------	-----------

The concentration of metals determined on an unfiltered effluent sample for the MISA regulation. The samples are digested in acid and analyzed by ICP-MS.

NH3-MISA-F-TB	Effluent	Ammonia by Discrete Analyzer	catnr 157/158 062217/99321057 (modified)
---------------	----------	------------------------------	--

Ammonia is determined by Flow-injection analysis with fluorescence detection

NH3-UNION-CALC-TB	Effluent	Un-ionized ammonia	Calculation
-------------------	----------	--------------------	-------------

NO2-MISA-IC-TB	Effluent	Nitrite in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-MISA-IC-TB	Effluent	Nitrate in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT	Effluent	Oil and Grease, Total for MISA	APHA 5520 B-Hexane Gravimetric
------------	----------	--------------------------------	--------------------------------

PH-CLIENT-TB	Water	pH	Result supplied by Client
--------------	-------	----	---------------------------

PH-MISA-TB	Effluent	pH	APHA 4500-H-ELECTRODE
------------	----------	----	-----------------------

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

PO4-DO-COL-TB	Water	Dissolved Orthophosphate	APHA 4500-P B, F, G (modified)
---------------	-------	--------------------------	--------------------------------

Phosphorus in aqueous matrices is analyzed using discrete Analyzer with colourimetric detection.

RADIO-RADIUM226-SR	Water	Radium 226	CANMET 1986
--------------------	-------	------------	-------------

SO4-MISA-IC-TB	Effluent	Sulfate in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

TDS-MISA-TB	Effluent	Total Dissolved Solids	APHA 2540 C (modified)
-------------	----------	------------------------	------------------------

Aqueous matrices are analyzed using gravimetry and evaporation

TEMP-CLIENT-TB	Water	Temperature	Result supplied by Client
----------------	-------	-------------	---------------------------

TKN-F-TB	Water	TKN in Water by Fluorescence	catnr 157/158, 062818/99334821
----------	-------	------------------------------	--------------------------------

Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection

TOC-WT	Water	Total Organic Carbon	APHA 5310B
--------	-------	----------------------	------------

Sample is injected into a heated reaction chamber which is packed with an oxidative catalyst. The water is vaporized and the organic carbon is oxidized to carbon dioxide. The carbon dioxide is transported in a carrier gas and is measured by a non-dispersive infrared detector.

TSS-MISA-TB	Effluent	Total Suspended Solids	APHA 2540 D (modified)
-------------	----------	------------------------	------------------------

Reference Information

Aqueous matrices are analyzed using gravimetry

TURBIDITY-TB Water Turbidity APHA 2130 B-Nephelometer

Aqueous matrices are analyzed using nephelometry with the light scatter measured at a 90° angle.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SR	Saskatchewan Research Council - Saskatoon, Saskatchewan, Can
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 1 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BOD-TB								
	Water							
Batch	R5944517							
WG3782716-3	DUP	L2750009-3						
Biochemical Oxygen Demand		2.0	2.4		mg/L	18	30	13-APR-23
WG3782716-2	LCS							
Biochemical Oxygen Demand			97.6		%		85-115	13-APR-23
WG3782716-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	13-APR-23
Batch	R5944759							
WG3782768-2	LCS							
Biochemical Oxygen Demand			105.0		%		85-115	14-APR-23
WG3782768-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	14-APR-23
CL-L-IC-N-TB								
	Water							
Batch	R5944120							
WG3782747-3	DUP	L2750009-3						
Chloride (Cl)		7.51	7.41		mg/L	1.4	20	14-APR-23
WG3782747-2	LCS							
Chloride (Cl)			105.1		%		90-110	14-APR-23
WG3782747-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	14-APR-23
WG3782747-4	MS	L2750009-4						
Chloride (Cl)			106.1		%		75-125	14-APR-23
Batch	R5944156							
WG3782795-3	DUP	L2750009-2						
Chloride (Cl)		<0.10	<0.10	RPD-NA	mg/L	N/A	20	16-APR-23
WG3782795-2	LCS							
Chloride (Cl)			103.9		%		90-110	16-APR-23
WG3782795-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	16-APR-23
WG3782795-4	MS	L2750030-1						
Chloride (Cl)			110.8		%		75-125	16-APR-23
COD-TB								
	Water							
Batch	R5944302							
WG3782721-3	DUP	L2750009-3						
Chemical Oxygen Demand		48	55		mg/L	15	20	17-APR-23
WG3782786-3	DUP	L2750009-2						
Chemical Oxygen Demand		<10	<10	RPD-NA	mg/L	N/A	20	17-APR-23
WG3782721-2	LCS							



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 2 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
COD-TB								
	Water							
Batch	R5944302							
WG3782721-2	LCS							
Chemical Oxygen Demand			99.8		%		85-115	17-APR-23
WG3782786-2	LCS							
Chemical Oxygen Demand			96.6		%		85-115	17-APR-23
WG3782721-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	17-APR-23
WG3782786-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	17-APR-23
WG3782721-4	MS	L2750009-4						
Chemical Oxygen Demand			98.9		%		75-125	17-APR-23
WG3782786-4	MS	L2750036-1						
Chemical Oxygen Demand			101.9		%		75-125	17-APR-23
COLOUR-TB								
	Water							
Batch	R5943800							
WG3782720-3	DUP	L2750009-9						
Color, True		64.9	63.2		CU	2.7	20	13-APR-23
WG3782720-2	LCS							
Color, True			109.4		%		85-115	13-APR-23
WG3782720-1	MB							
Color, True			<2.0		CU		2	13-APR-23
Batch	R5944257							
WG3782796-3	DUP	L2750009-2						
Color, True		<2.0	<2.0	RPD-NA	CU	N/A	20	17-APR-23
WG3782796-2	LCS							
Color, True			98.3		%		85-115	17-APR-23
WG3782796-1	MB							
Color, True			<2.0		CU		2	17-APR-23
F-IC-N-TB								
	Water							
Batch	R5944120							
WG3782747-3	DUP	L2750009-3						
Fluoride (F)		0.039	0.037		mg/L	4.6	20	14-APR-23
WG3782747-2	LCS							
Fluoride (F)			103.7		%		90-110	14-APR-23
WG3782747-1	MB							
Fluoride (F)			<0.020		mg/L		0.02	14-APR-23
WG3782747-4	MS	L2750009-4						
Fluoride (F)			105.8		%		75-125	14-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 3 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F-IC-N-TB								
	Water							
Batch	R5944156							
WG3782795-3	DUP	L2750009-2						
Fluoride (F)		<0.020	<0.020	RPD-NA	mg/L	N/A	20	16-APR-23
WG3782795-2	LCS							
Fluoride (F)			102.0		%		90-110	16-APR-23
WG3782795-1	MB							
Fluoride (F)			<0.020		mg/L		0.02	16-APR-23
PO4-DO-COL-TB								
	Water							
Batch	R5944337							
WG3782746-3	DUP	L2750009-3						
Orthophosphate-Dissolved (as P)		0.0335	0.0332		mg/L	1.0	20	17-APR-23
WG3782794-3	DUP	L2750009-2						
Orthophosphate-Dissolved (as P)		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	17-APR-23
WG3782746-2	LCS							
Orthophosphate-Dissolved (as P)			102.6		%		80-120	17-APR-23
WG3782794-2	LCS							
Orthophosphate-Dissolved (as P)			100.8		%		80-120	17-APR-23
WG3782746-1	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	17-APR-23
WG3782794-1	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	17-APR-23
WG3782746-4	MS	L2750009-4						
Orthophosphate-Dissolved (as P)			N/A	MS-B	%		-	17-APR-23
WG3782794-4	MS	L2750036-1						
Orthophosphate-Dissolved (as P)			N/A	MS-B	%		-	17-APR-23
TKN-F-TB								
	Water							
Batch	R5944919							
WG3782719-3	DUP	L2750009-3						
Total Kjeldahl Nitrogen		0.882	0.841		mg/L	4.8	20	18-APR-23
WG3782719-2	LCS							
Total Kjeldahl Nitrogen			90.5		%		75-125	18-APR-23
WG3782719-1	MB							
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	18-APR-23
WG3782719-4	MS	L2750009-4						
Total Kjeldahl Nitrogen			111.3		%		70-130	18-APR-23
TOC-WT								
	Water							



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 5 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ACY-MISA-TB		Effluent						
Batch	R5944977							
WG3782792-1	MB							
Acidity (as CaCO3)			2.4		mg/L		3	19-APR-23
ALK-MISA-TB		Effluent						
Batch	R5944136							
WG3782744-3	DUP	L2750009-3						
Alkalinity, Total (as CaCO3)		111	113		mg/L	1.2	20	15-APR-23
Alkalinity, Phenolphthalein		<0.2	<0.2	RPD-NA	mg/L	N/A	25	15-APR-23
WG3782793-3	DUP	L2750009-2						
Alkalinity, Total (as CaCO3)		<0.2	<0.2	RPD-NA	mg/L	N/A	20	15-APR-23
Alkalinity, Phenolphthalein		<0.2	<0.2	RPD-NA	mg/L	N/A	25	15-APR-23
WG3782744-2	LCS							
Alkalinity, Total (as CaCO3)			100.5		%		85-115	15-APR-23
WG3782793-2	LCS							
Alkalinity, Total (as CaCO3)			112.9		%		85-115	15-APR-23
WG3782744-1	MB							
Alkalinity, Total (as CaCO3)			0.4		mg/L		2	15-APR-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	15-APR-23
WG3782793-1	MB							
Alkalinity, Total (as CaCO3)			<0.2		mg/L		2	15-APR-23
Alkalinity, Phenolphthalein			<0.2		mg/L		2	15-APR-23
CN-FREE-MISA-CFA-WT		Effluent						
Batch	R5945436							
WG3783028-3	DUP	L2750009-3						
Cyanide, Free		0.0008	0.0008	RPD-NA	mg/L	N/A	20	20-APR-23
WG3783028-2	LCS							
Cyanide, Free			103.6		%		80-120	20-APR-23
WG3783028-1	MB							
Cyanide, Free			0.0003		mg/L		0.002	20-APR-23
WG3783028-4	MS	L2750009-3						
Cyanide, Free			109.6		%		75-125	20-APR-23
CN-T-MISA-CFA-WT		Effluent						
Batch	R5945436							
WG3783028-3	DUP	L2750009-3						
Cyanide, Total		0.0010	0.0012	RPD-NA	mg/L	N/A	20	20-APR-23
WG3783028-2	LCS							
Cyanide, Total			100.7		%		80-120	20-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 6 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-T-MISA-CFA-WT								
	Effluent							
Batch	R5945436							
WG3783028-1	MB							
Cyanide, Total			<0.0002		mg/L		0.002	20-APR-23
WG3783028-4	MS	L2750009-3						
Cyanide, Total			101.4		%		75-125	20-APR-23
CN-WAD-MISA-CFA-WT								
	Effluent							
Batch	R5945436							
WG3783028-3	DUP	L2750009-3						
Cyanide, Weak Acid Diss		0.0007	0.0012	RPD-NA	mg/L	N/A	20	20-APR-23
WG3783028-2	LCS							
Cyanide, Weak Acid Diss			101.3		%		80-120	20-APR-23
WG3783028-1	MB							
Cyanide, Weak Acid Diss			<0.0001		mg/L		0.002	20-APR-23
WG3783028-4	MS	L2750009-3						
Cyanide, Weak Acid Diss			103.1		%		75-125	20-APR-23
DOC-WT								
	Effluent							
Batch	R5945536							
WG3782866-3	DUP	L2750009-3						
Dissolved Organic Carbon		14.7	16.3		mg/L	10	25	20-APR-23
WG3782866-2	LCS							
Dissolved Organic Carbon			94.1		%		70-130	20-APR-23
WG3782866-1	MB							
Dissolved Organic Carbon			<0.50		mg/L		0.5	20-APR-23
EC-MISA-TB								
	Effluent							
Batch	R5944136							
WG3782744-3	DUP	L2750009-3						
Conductivity (EC)		242	242		uS/cm	0.0	10	15-APR-23
WG3782793-3	DUP	L2750009-2						
Conductivity (EC)		0.4	0.4	RPD-NA	uS/cm	N/A	10	15-APR-23
WG3782744-2	LCS							
Conductivity (EC)			99.1		%		90-110	15-APR-23
WG3782793-2	LCS							
Conductivity (EC)			98.0		%		90-110	15-APR-23
WG3782744-1	MB							
Conductivity (EC)			0.6		uS/cm		2	15-APR-23
WG3782793-1	MB							
Conductivity (EC)			<0.2		uS/cm		2	15-APR-23
HG-DIS-WT								
	Effluent							



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 7 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-DIS-WT		Effluent						
Batch	R5944377							
WG3782834-3	DUP	L2750009-2						
Mercury (Hg)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	17-APR-23
WG3782834-2	LCS							
Mercury (Hg)-Dissolved			95.7		%		80-120	17-APR-23
WG3782834-1	MB							
Mercury (Hg)-Dissolved			<0.000005		mg/L		0.000005	17-APR-23
WG3782834-4	MS	L2750009-3						
Mercury (Hg)-Dissolved			94.5		%		70-130	17-APR-23
HG-TOT-WT		Effluent						
Batch	R5944376							
WG3782835-3	DUP	L2750009-2						
Mercury (Hg)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	17-APR-23
WG3782835-2	LCS							
Mercury (Hg)-Total			107.0		%		80-120	17-APR-23
WG3782835-1	MB							
Mercury (Hg)-Total			<0.000005		mg/L		0.000005	17-APR-23
WG3782835-4	MS	L2750009-3						
Mercury (Hg)-Total			96.6		%		70-130	17-APR-23
MET-D-MISA-MS-WT		Effluent						
Batch	R5944484							
WG3782845-4	DUP	WG3782845-3						
Aluminum (Al)-Dissolved		0.0002	0.0004	RPD-NA	mg/L	N/A	20	18-APR-23
Antimony (Sb)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-APR-23
Arsenic (As)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-APR-23
Barium (Ba)-Dissolved		0.00006	0.00004	RPD-NA	mg/L	N/A	20	18-APR-23
Beryllium (Be)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	18-APR-23
Bismuth (Bi)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-APR-23
Boron (B)-Dissolved		0.006	0.006	RPD-NA	mg/L	N/A	20	18-APR-23
Cadmium (Cd)-Dissolved		<0.0000002	<0.0000002	RPD-NA	mg/L	N/A	20	18-APR-23
Calcium (Ca)-Dissolved		<0.005	<0.005	RPD-NA	mg/L	N/A	20	18-APR-23
Cesium (Cs)-Dissolved		<0.0000002	<0.0000002	RPD-NA	mg/L	N/A	25	18-APR-23
Chromium (Cr)-Dissolved		0.00016	0.00016	RPD-NA	mg/L	N/A	20	18-APR-23
Cobalt (Co)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	18-APR-23
Copper (Cu)-Dissolved		<0.00005	<0.00005	RPD-NA	mg/L	N/A	20	18-APR-23
Iron (Fe)-Dissolved		<0.001	<0.001	RPD-NA	mg/L	N/A	20	18-APR-23
Lead (Pb)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	18-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 8 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch	R5944484							
WG3782845-4	DUP	WG3782845-3						
Lithium (Li)-Dissolved		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	18-APR-23
Magnesium (Mg)-Dissolved		<0.0005	<0.0005	RPD-NA	mg/L	N/A	20	18-APR-23
Manganese (Mn)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	18-APR-23
Molybdenum (Mo)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-APR-23
Nickel (Ni)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	18-APR-23
Phosphorus (P)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	25	18-APR-23
Potassium (K)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	20	18-APR-23
Rubidium (Rb)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Selenium (Se)-Dissolved		<0.000002	0.000002	RPD-NA	mg/L	N/A	20	18-APR-23
Silicon (Si)-Dissolved		<0.002	<0.002	RPD-NA	mg/L	N/A	25	18-APR-23
Silver (Ag)-Dissolved		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	20	18-APR-23
Sodium (Na)-Dissolved		<0.005	<0.005	RPD-NA	mg/L	N/A	20	18-APR-23
Strontium (Sr)-Dissolved		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	18-APR-23
Sulfur (S)-Dissolved		<0.05	<0.05	RPD-NA	mg/L	N/A	25	18-APR-23
Tellurium (Te)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	18-APR-23
Thallium (Tl)-Dissolved		<0.000001	<0.000001	RPD-NA	mg/L	N/A	20	18-APR-23
Thorium (Th)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Tin (Sn)-Dissolved		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	18-APR-23
Titanium (Ti)-Dissolved		<0.00002	0.00002	RPD-NA	mg/L	N/A	20	18-APR-23
Tungsten (W)-Dissolved		<0.000002	<0.000002	RPD-NA	mg/L	N/A	20	18-APR-23
Uranium (U)-Dissolved		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	20	18-APR-23
Vanadium (V)-Dissolved		<0.00002	<0.00002	RPD-NA	mg/L	N/A	20	18-APR-23
Zinc (Zn)-Dissolved		<0.0002	<0.0002	RPD-NA	mg/L	N/A	20	18-APR-23
Zirconium (Zr)-Dissolved		<0.000004	<0.000004	RPD-NA	mg/L	N/A	20	18-APR-23
WG3782845-1	MB							
Aluminum (Al)-Dissolved			0.0006		mg/L		0.005	18-APR-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0001	18-APR-23
Arsenic (As)-Dissolved			<0.000005		mg/L		0.0001	18-APR-23
Barium (Ba)-Dissolved			<0.00002		mg/L		0.0001	18-APR-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Bismuth (Bi)-Dissolved			<0.000005		mg/L		0.00005	18-APR-23
Boron (B)-Dissolved			<0.002		mg/L		0.01	18-APR-23
Cadmium (Cd)-Dissolved			0.0000008		mg/L		0.000005	18-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 9 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch	R5944484							
WG3782845-1	MB							
Calcium (Ca)-Dissolved			<0.005		mg/L		0.05	18-APR-23
Cesium (Cs)-Dissolved			<0.0000002		mg/L		0.00001	18-APR-23
Chromium (Cr)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Copper (Cu)-Dissolved			<0.00005		mg/L		0.0002	18-APR-23
Iron (Fe)-Dissolved			<0.001		mg/L		0.01	18-APR-23
Lead (Pb)-Dissolved			<0.00002		mg/L		0.00005	18-APR-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.001	18-APR-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.005	18-APR-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Molybdenum (Mo)-Dissolved			<0.000005		mg/L		0.00005	18-APR-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Phosphorus (P)-Dissolved			<0.002		mg/L		0.05	18-APR-23
Potassium (K)-Dissolved			<0.002		mg/L		0.05	18-APR-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	18-APR-23
Selenium (Se)-Dissolved			<0.000002		mg/L		0.00005	18-APR-23
Silicon (Si)-Dissolved			<0.002		mg/L		0.05	18-APR-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.00005	18-APR-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.05	18-APR-23
Strontium (Sr)-Dissolved			<0.00001		mg/L		0.001	18-APR-23
Sulfur (S)-Dissolved			<0.05		mg/L		0.5	18-APR-23
Tellurium (Te)-Dissolved			<0.000005		mg/L		0.0002	18-APR-23
Thallium (Tl)-Dissolved			<0.000001		mg/L		0.00001	18-APR-23
Thorium (Th)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Tin (Sn)-Dissolved			<0.00001		mg/L		0.0001	18-APR-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.0003	18-APR-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.00001	18-APR-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.001	18-APR-23
Zirconium (Zr)-Dissolved			<0.000004		mg/L		0.0002	18-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 10 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT		Effluent						
Batch	R5944576							
WG3782846-4	DUP	WG3782846-3						
Aluminum (Al)-Dissolved		0.0672	0.0698		mg/L	3.6	20	18-APR-23
Antimony (Sb)-Dissolved		0.000105	0.000105		mg/L	0.3	20	18-APR-23
Arsenic (As)-Dissolved		0.000660	0.000670		mg/L	1.4	20	18-APR-23
Barium (Ba)-Dissolved		0.0177	0.0173		mg/L	2.2	20	18-APR-23
Beryllium (Be)-Dissolved		0.000012	0.000008	RPD-NA	mg/L	N/A	20	18-APR-23
Bismuth (Bi)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	18-APR-23
Boron (B)-Dissolved		0.010	0.010	RPD-NA	mg/L	N/A	20	18-APR-23
Cadmium (Cd)-Dissolved		0.0000158	0.0000140		mg/L	12	20	18-APR-23
Calcium (Ca)-Dissolved		27.5	27.0		mg/L	1.6	20	18-APR-23
Cesium (Cs)-Dissolved		0.0000076	0.0000070	RPD-NA	mg/L	N/A	25	18-APR-23
Chromium (Cr)-Dissolved		0.00020	0.00020	RPD-NA	mg/L	N/A	20	18-APR-23
Cobalt (Co)-Dissolved		0.000202	0.000188		mg/L	6.8	20	18-APR-23
Copper (Cu)-Dissolved		0.00135	0.00135		mg/L	2.1	20	18-APR-23
Iron (Fe)-Dissolved		0.225	0.219		mg/L	2.6	20	18-APR-23
Lead (Pb)-Dissolved		0.00018	0.00020		mg/L	2.1	20	18-APR-23
Lithium (Li)-Dissolved		0.0024	0.0022		mg/L	4.5	20	18-APR-23
Magnesium (Mg)-Dissolved		11.2	11.3		mg/L	0.6	20	18-APR-23
Manganese (Mn)-Dissolved		0.116	0.114		mg/L	1.1	20	18-APR-23
Molybdenum (Mo)-Dissolved		0.000575	0.000605		mg/L	4.9	20	18-APR-23
Nickel (Ni)-Dissolved		0.00090	0.00090		mg/L	0.1	20	18-APR-23
Phosphorus (P)-Dissolved		0.052	0.054		mg/L	2.9	25	18-APR-23
Potassium (K)-Dissolved		3.21	3.21		mg/L	0.1	20	18-APR-23
Rubidium (Rb)-Dissolved		0.00271	0.00275		mg/L	1.3	25	18-APR-23
Selenium (Se)-Dissolved		0.000164	0.000156		mg/L	5.0	20	18-APR-23
Silicon (Si)-Dissolved		3.94	3.75		mg/L	4.9	25	18-APR-23
Silver (Ag)-Dissolved		0.0000040	0.0000025	RPD-NA	mg/L	N/A	20	18-APR-23
Sodium (Na)-Dissolved		3.23	3.22		mg/L	0.3	20	18-APR-23
Strontium (Sr)-Dissolved		0.0593	0.0594		mg/L	0.1	20	18-APR-23
Sulfur (S)-Dissolved		3.40	3.35		mg/L	0.8	25	18-APR-23
Tellurium (Te)-Dissolved		0.000015	0.000015	RPD-NA	mg/L	N/A	25	18-APR-23
Thallium (Tl)-Dissolved		0.000002	0.000001	RPD-NA	mg/L	N/A	20	18-APR-23
Thorium (Th)-Dissolved		0.000092	0.000092	RPD-NA	mg/L	N/A	25	18-APR-23
Tin (Sn)-Dissolved		<0.00001	<0.00001		mg/L			18-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 11 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-MS-WT								
	Effluent							
Batch	R5944576							
WG3782846-4 DUP		WG3782846-3						
Tin (Sn)-Dissolved		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	18-APR-23
Titanium (Ti)-Dissolved		0.00772	0.00770		mg/L	0.5	20	18-APR-23
Tungsten (W)-Dissolved		0.000010	0.000010	RPD-NA	mg/L	N/A	20	18-APR-23
Uranium (U)-Dissolved		0.000778	0.000786		mg/L	1.0	20	18-APR-23
Vanadium (V)-Dissolved		0.00058	0.00058		mg/L	0.7	20	18-APR-23
Zinc (Zn)-Dissolved		0.0046	0.0046		mg/L	1.0	20	18-APR-23
Zirconium (Zr)-Dissolved		0.000488	0.000568		mg/L	15	20	18-APR-23
WG3782846-1 MB								
Aluminum (Al)-Dissolved			<0.0002		mg/L		0.005	18-APR-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0001	18-APR-23
Arsenic (As)-Dissolved			0.000005		mg/L		0.0001	18-APR-23
Barium (Ba)-Dissolved			<0.00002		mg/L		0.0001	18-APR-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Bismuth (Bi)-Dissolved			<0.000005		mg/L		0.00005	18-APR-23
Boron (B)-Dissolved			<0.002		mg/L		0.01	18-APR-23
Cadmium (Cd)-Dissolved			<0.0000002		mg/L		0.000005	18-APR-23
Calcium (Ca)-Dissolved			<0.005		mg/L		0.05	18-APR-23
Cesium (Cs)-Dissolved			0.0000006		mg/L		0.00001	18-APR-23
Chromium (Cr)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Copper (Cu)-Dissolved			<0.00005		mg/L		0.0002	18-APR-23
Iron (Fe)-Dissolved			<0.001		mg/L		0.01	18-APR-23
Lead (Pb)-Dissolved			<0.00002		mg/L		0.00005	18-APR-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.001	18-APR-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.005	18-APR-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Molybdenum (Mo)-Dissolved			<0.000005		mg/L		0.00005	18-APR-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Phosphorus (P)-Dissolved			<0.002		mg/L		0.05	18-APR-23
Potassium (K)-Dissolved			<0.002		mg/L		0.05	18-APR-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	18-APR-23
Selenium (Se)-Dissolved			<0.000002		mg/L		0.00005	18-APR-23
Silicon (Si)-Dissolved			0.014		mg/L		0.05	18-APR-23
							0.00005	



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 12 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
------	--------	-----------	--------	-----------	-------	-----	-------	----------

MET-D-MISA-MS-WT Effluent

Batch R5944576

WG3782846-1 MB

Silver (Ag)-Dissolved			<0.0000005		mg/L		0.00005	18-APR-23
Sodium (Na)-Dissolved			0.010		mg/L		0.05	18-APR-23
Strontium (Sr)-Dissolved			<0.00001		mg/L		0.001	18-APR-23
Sulfur (S)-Dissolved			<0.05		mg/L		0.5	18-APR-23
Tellurium (Te)-Dissolved			<0.000005		mg/L		0.0002	18-APR-23
Thallium (Tl)-Dissolved			<0.000001		mg/L		0.00001	18-APR-23
Thorium (Th)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Tin (Sn)-Dissolved			<0.00001		mg/L		0.0001	18-APR-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.0003	18-APR-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.0001	18-APR-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.00001	18-APR-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.0005	18-APR-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.001	18-APR-23
Zirconium (Zr)-Dissolved			<0.000004		mg/L		0.0002	18-APR-23

MET-T-MISA-MS-WT Effluent

Batch R5944483

WG3782844-4 DUP

WG3782844-3

Aluminum (Al)-Total		0.0012	0.0016	RPD-NA	mg/L	N/A	25	18-APR-23
Antimony (Sb)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	18-APR-23
Arsenic (As)-Total		<0.000005	0.000005	RPD-NA	mg/L	N/A	25	18-APR-23
Barium (Ba)-Total		0.00006	0.00006	RPD-NA	mg/L	N/A	25	18-APR-23
Beryllium (Be)-Total		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Bismuth (Bi)-Total		0.000005	<0.000005	RPD-NA	mg/L	N/A	25	18-APR-23
Boron (B)-Total		0.006	0.006	RPD-NA	mg/L	N/A	25	18-APR-23
Cadmium (Cd)-Total		<0.0000002	<0.0000002	RPD-NA	mg/L	N/A	25	18-APR-23
Calcium (Ca)-Total		<0.005	<0.005	RPD-NA	mg/L	N/A	25	18-APR-23
Cesium (Cs)-Total		<0.0000002	<0.0000002	RPD-NA	mg/L	N/A	25	18-APR-23
Chromium (Cr)-Total		0.00016	0.00014	RPD-NA	mg/L	N/A	25	18-APR-23
Cobalt (Co)-Total		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Copper (Cu)-Total		<0.00005	<0.00005	RPD-NA	mg/L	N/A	25	18-APR-23
Iron (Fe)-Total		<0.001	<0.001	RPD-NA	mg/L	N/A	25	18-APR-23
Lead (Pb)-Total		<0.00002	<0.00002	RPD-NA	mg/L	N/A	25	18-APR-23
Lithium (Li)-Total		<0.0002	<0.0002	RPD-NA	mg/L	N/A	25	18-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 13 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT		Effluent						
Batch	R5944483							
WG3782844-4	DUP	WG3782844-3						
Magnesium (Mg)-Total		0.0010	0.0005	RPD-NA	mg/L	N/A	25	18-APR-23
Manganese (Mn)-Total		<0.00002	<0.00002	RPD-NA	mg/L	N/A	25	18-APR-23
Molybdenum (Mo)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	18-APR-23
Nickel (Ni)-Total		<0.00002	<0.00002	RPD-NA	mg/L	N/A	25	18-APR-23
Phosphorus (P)-Total		0.004	<0.002	RPD-NA	mg/L	N/A	25	18-APR-23
Potassium (K)-Total		<0.002	<0.002	RPD-NA	mg/L	N/A	25	18-APR-23
Rubidium (Rb)-Total		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Selenium (Se)-Total		0.000008	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Silicon (Si)-Total		0.004	0.004	RPD-NA	mg/L	N/A	25	18-APR-23
Silver (Ag)-Total		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	25	18-APR-23
Sodium (Na)-Total		<0.005	<0.005	RPD-NA	mg/L	N/A	25	18-APR-23
Strontium (Sr)-Total		<0.00001	0.00001	RPD-NA	mg/L	N/A	25	18-APR-23
Sulfur (S)-Total		<0.05	<0.05	RPD-NA	mg/L	N/A	25	18-APR-23
Tellurium (Te)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	25	18-APR-23
Thallium (Tl)-Total		<0.000001	<0.000001	RPD-NA	mg/L	N/A	25	18-APR-23
Thorium (Th)-Total		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Tin (Sn)-Total		<0.00001	0.00001	RPD-NA	mg/L	N/A	25	18-APR-23
Titanium (Ti)-Total		0.00002	0.00004	RPD-NA	mg/L	N/A	25	18-APR-23
Tungsten (W)-Total		<0.000002	<0.000002	RPD-NA	mg/L	N/A	25	18-APR-23
Uranium (U)-Total		<0.0000005	<0.0000005	RPD-NA	mg/L	N/A	25	18-APR-23
Vanadium (V)-Total		0.00002	0.00002	RPD-NA	mg/L	N/A	25	18-APR-23
Zinc (Zn)-Total		<0.0002	<0.0002	RPD-NA	mg/L	N/A	25	18-APR-23
Zirconium (Zr)-Total		<0.000004	<0.000004	RPD-NA	mg/L	N/A	25	18-APR-23
WG3782844-1	MB							
Aluminum (Al)-Total			0.0012		mg/L		0.005	18-APR-23
Antimony (Sb)-Total			0.000020		mg/L		0.0001	18-APR-23
Arsenic (As)-Total			0.000005		mg/L		0.0001	18-APR-23
Barium (Ba)-Total			<0.00002		mg/L		0.0001	18-APR-23
Beryllium (Be)-Total			<0.000002		mg/L		0.0001	18-APR-23
Bismuth (Bi)-Total			<0.000005		mg/L		0.00005	18-APR-23
Boron (B)-Total			<0.002		mg/L		0.01	18-APR-23
Cadmium (Cd)-Total			<0.0000002		mg/L		0.000005	18-APR-23
Calcium (Ca)-Total			<0.005		mg/L		0.05	18-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 14 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-MS-WT		Effluent						
Batch	R5944483							
WG3782844-1 MB								
Cesium (Cs)-Total			<0.0000002		mg/L		0.00001	18-APR-23
Chromium (Cr)-Total			<0.00002		mg/L		0.0005	18-APR-23
Cobalt (Co)-Total			<0.000002		mg/L		0.0001	18-APR-23
Copper (Cu)-Total			<0.00005		mg/L		0.0005	18-APR-23
Iron (Fe)-Total			<0.001		mg/L		0.01	18-APR-23
Lead (Pb)-Total			<0.00002		mg/L		0.00005	18-APR-23
Lithium (Li)-Total			<0.0002		mg/L		0.001	18-APR-23
Magnesium (Mg)-Total			<0.0005		mg/L		0.005	18-APR-23
Manganese (Mn)-Total			<0.00002		mg/L		0.0005	18-APR-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.00005	18-APR-23
Nickel (Ni)-Total			<0.00002		mg/L		0.0005	18-APR-23
Phosphorus (P)-Total			0.004		mg/L		0.05	18-APR-23
Potassium (K)-Total			<0.002		mg/L		0.05	18-APR-23
Rubidium (Rb)-Total			<0.000002		mg/L		0.0002	18-APR-23
Selenium (Se)-Total			0.000006		mg/L		0.00005	18-APR-23
Silicon (Si)-Total			0.032		mg/L		0.1	18-APR-23
Silver (Ag)-Total			0.0000025		mg/L		0.00005	18-APR-23
Sodium (Na)-Total			0.010		mg/L		0.05	18-APR-23
Strontium (Sr)-Total			<0.00001		mg/L		0.001	18-APR-23
Sulfur (S)-Total			<0.05		mg/L		0.5	18-APR-23
Tellurium (Te)-Total			<0.000005		mg/L		0.0002	18-APR-23
Thallium (Tl)-Total			<0.000001		mg/L		0.00001	18-APR-23
Thorium (Th)-Total			0.000002		mg/L		0.0001	18-APR-23
Tin (Sn)-Total			<0.00001		mg/L		0.0001	18-APR-23
Titanium (Ti)-Total			<0.00002		mg/L		0.0003	18-APR-23
Tungsten (W)-Total			<0.000002		mg/L		0.0001	18-APR-23
Uranium (U)-Total			<0.0000005		mg/L		0.00001	18-APR-23
Vanadium (V)-Total			<0.00002		mg/L		0.0005	18-APR-23
Zinc (Zn)-Total			<0.0002		mg/L		0.003	18-APR-23
Zirconium (Zr)-Total			<0.000004		mg/L		0.0002	18-APR-23

NH3-MISA-F-TB Effluent



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 15 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NH3-MISA-F-TB								
	Effluent							
Batch	R5944196							
WG3782717-3	DUP	L2750009-3						
Ammonia, Total (as N)		0.084	0.080		mg/L	2.8	20	13-APR-23
WG3782717-2	LCS							
Ammonia, Total (as N)			103.6		%		85-115	13-APR-23
WG3782717-1	MB							
Ammonia, Total (as N)			<0.002		mg/L		0.005	13-APR-23
WG3782717-4	MS	L2750009-4						
Ammonia, Total (as N)			N/A	MS-B	%		-	13-APR-23
Batch	R5944316							
WG3782784-3	DUP	L2750009-2						
Ammonia, Total (as N)		<0.002	<0.002	RPD-NA	mg/L	N/A	20	17-APR-23
WG3782784-2	LCS							
Ammonia, Total (as N)			103.0		%		85-115	17-APR-23
WG3782784-1	MB							
Ammonia, Total (as N)			<0.002		mg/L		0.005	17-APR-23
WG3782784-4	MS	L2750010-1						
Ammonia, Total (as N)			116.3		%		75-125	17-APR-23
NO2-MISA-IC-TB								
	Effluent							
Batch	R5944120							
WG3782747-3	DUP	L2750009-3						
Nitrite (as N)		0.003	0.003	RPD-NA	mg/L	N/A	20	14-APR-23
WG3782747-2	LCS							
Nitrite (as N)			106.7		%		90-110	14-APR-23
WG3782747-1	MB							
Nitrite (as N)			<0.001		mg/L		0.01	14-APR-23
WG3782747-4	MS	L2750009-4						
Nitrite (as N)			97.6		%		75-125	14-APR-23
Batch	R5944156							
WG3782795-3	DUP	L2750009-2						
Nitrite (as N)		0.001	0.001	RPD-NA	mg/L	N/A	20	16-APR-23
WG3782795-2	LCS							
Nitrite (as N)			104.0		%		90-110	16-APR-23
WG3782795-1	MB							
Nitrite (as N)			<0.001		mg/L		0.01	16-APR-23
NO3-MISA-IC-TB								
	Effluent							



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 16 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NO3-MISA-IC-TB		Effluent						
Batch	R5944120							
WG3782747-3	DUP	L2750009-3						
Nitrate (as N)		0.350	0.344		mg/L	2.0	20	14-APR-23
WG3782747-2	LCS							
Nitrate (as N)			105.2		%		90-110	14-APR-23
WG3782747-1	MB							
Nitrate (as N)			<0.002		mg/L		0.02	14-APR-23
WG3782747-4	MS	L2750009-4						
Nitrate (as N)			105.5		%		75-125	14-APR-23
Batch	R5944156							
WG3782795-3	DUP	L2750009-2						
Nitrate (as N)		<0.002	<0.002	RPD-NA	mg/L	N/A	20	16-APR-23
WG3782795-2	LCS							
Nitrate (as N)			102.3		%		90-110	16-APR-23
WG3782795-1	MB							
Nitrate (as N)			0.006		mg/L		0.02	16-APR-23
WG3782795-4	MS	L2750030-1						
Nitrate (as N)			109.5		%		75-125	16-APR-23
OGG-TOT-WT		Effluent						
Batch	R5944717							
WG3782889-2	LCS							
Oil and Grease, Total			100.1		%		50-150	19-APR-23
WG3782889-1	MB							
Oil and Grease, Total			1.0		mg/L		1	19-APR-23
PH-MISA-TB		Effluent						
Batch	R5944136							
WG3782744-3	DUP	L2750009-3						
pH		7.88	7.89	J	pH	0.01	0.2	15-APR-23
WG3782793-3	DUP	L2750009-2						
pH		5.44	5.38	J	pH	0.06	0.2	15-APR-23
WG3782744-2	LCS							
pH			7.02		pH		6.9-7.1	15-APR-23
WG3782793-2	LCS							
pH			6.94		pH		6.9-7.1	15-APR-23
SO4-MISA-IC-TB		Effluent						



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 17 of 20

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
SO4-MISA-IC-TB								
	Effluent							
Batch	R5944120							
WG3782747-3	DUP	L2750009-3						
Sulfate (SO4)		9.35	9.15		mg/L	2.4	20	14-APR-23
WG3782747-2	LCS							
Sulfate (SO4)			106.7		%		90-110	14-APR-23
WG3782747-1	MB							
Sulfate (SO4)			<0.05		mg/L		0.3	14-APR-23
WG3782747-4	MS	L2750009-4						
Sulfate (SO4)			106.6		%		75-125	14-APR-23
Batch	R5944156							
WG3782795-3	DUP	L2750009-2						
Sulfate (SO4)		<0.05	<0.05	RPD-NA	mg/L	N/A	20	16-APR-23
WG3782795-2	LCS							
Sulfate (SO4)			105.6		%		90-110	16-APR-23
WG3782795-1	MB							
Sulfate (SO4)			<0.05		mg/L		0.3	16-APR-23
WG3782795-4	MS	L2750030-1						
Sulfate (SO4)			111.2		%		75-125	16-APR-23
TDS-MISA-TB								
	Effluent							
Batch	R5944128							
WG3782733-2	LCS							
Total Dissolved Solids			97.6		%		85-115	14-APR-23
WG3782733-1	MB							
Total Dissolved Solids			4		mg/L		10	14-APR-23
Batch	R5944697							
WG3782857-2	LCS							
Total Dissolved Solids			97.6		%		85-115	18-APR-23
WG3782857-1	MB							
Total Dissolved Solids			2		mg/L		10	18-APR-23
TSS-MISA-TB								
	Effluent							
Batch	R5944127							
WG3782749-2	LCS							
Total Suspended Solids			100.2		%		85-115	14-APR-23
WG3782749-1	MB							
Total Suspended Solids			<0.5		mg/L		3	14-APR-23



Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Page 18 of 20

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TSS-MISA-TB								
	Effluent							
Batch	R5944696							
WG3782858-2	LCS							
Total Suspended Solids			97.5		%		85-115	18-APR-23
WG3782858-1	MB							
Total Suspended Solids			<0.5		mg/L		3	18-APR-23

Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 19 of 20

Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L2750009

Report Date: 27-APR-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 20 of 20

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Colour, True	2	11-APR-23 12:00	15-APR-23 16:00	3	4	days	EHT
Turbidity	2	11-APR-23 12:00	17-APR-23 14:19	3	6	days	EHT
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	2	11-APR-23 12:00	20-APR-23 00:00	7	9	days	EHT
	3	11-APR-23 09:25	20-APR-23 00:00	7	9	days	EHT
	4	11-APR-23 10:00	20-APR-23 00:00	7	9	days	EHT
	5	11-APR-23 10:50	20-APR-23 00:00	7	9	days	EHT
	6	11-APR-23 11:45	20-APR-23 00:00	7	9	days	EHT
	7	11-APR-23 12:00	20-APR-23 00:00	7	9	days	EHT
	8	11-APR-23 12:10	20-APR-23 00:00	7	8	days	EHT
	9	11-APR-23 14:00	20-APR-23 00:00	7	8	days	EHT
	10	11-APR-23 15:00	20-APR-23 00:00	7	8	days	EHT
	11	11-APR-23 15:30	20-APR-23 00:00	7	8	days	EHT

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2750009 were received on 13-APR-23 09:30.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

SRC Group # 2023-4461

Apr 27, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Apr-18-2023

Client P.O.: L2750009

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-4461

Apr 27, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023010538	Client PO #:	L2750009
Date Sampled:	Apr 11, 2023	Date Received:	Apr 18, 2023
Sample Matrix:	WATER		
Description:	04/11/2023 SW22A_SW_20230404 L2750009-5		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 11.3 °C upon receipt.

SRC Group # 2023-4461

Apr 27, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105



12750009 COFC



12750009

Project Name: Rainy River						Containers										Number of Containers	Comments
Location: Chapple						SW Kit	Re-226 Bottle										
Project Number:						Filtered											
Project Manager:						N	N										
PO Number:						Preservatives											
Project:																	
Turn Around Time (days): 10 Business Days																	
Shipping Company:																	
Shipping Date: 4/13/2023 10:06:00 AM																	
COC Number: ALS-450294214																	
Sample Code	DO	PH	TEMP	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE										
1 FB_SW_20230404				04/04/2023 12:00	SW	X										11	
2 TB_SW_20230404				04/05/2023 12:00	SW	X										11	
3 SW27_SW_20230404	12.92	7.61	0.1	04/11/2023 09:25	SW	X										11	
4 SW21A_SW_20230404	9.06	7.15	0.19	04/11/2023 10:00	SW	X										11	
5 SW22A_SW_20230404	11.23	7.33	0.35	04/11/2023 10:50	SW	X										12	
SW22A_SW_20230404	11.23	7.33	0.35	04/11/2023 10:50	SW		X									12	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	4/13/2023 10:06:00 AM	Method of Shipment: Courier On Ice: yes / no <i>Ice Pack</i> Shipped: Air/Ground	<i>Temps:</i> - 7.6 - 9.0 - 8.3	Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by <i>Ashlyn Smith</i>	<i>13-Apr-23</i> <i>9:30</i>	Lab Name: ALS Thunder Bay Lab Phone:		

3 Coolers Manitoulin 3302347653



Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 4/13/2023 10:06:00 AM COC Number: ALS-450294214						Containers Filtered		SW Kit	Ra-226 Bottle								Number of Containers	Comments
						N	N											
						NG-SW-P-TB	RA226-MMER-BE											
Sample Code	DO	PH	TEMP	Date and Time	Matrix													
SW10_SW_20230404	12.79	7.47	0.22	04/11/2023 11:45	SW	X								11				
SW06_SW_20230404	12.92	7.61	0.1	04/11/2023 12:00	SW	X								11				
SW28A_SW_20230404	10.34	7.14	0.35	04/11/2023 12:10	SW	X								11				
SW25_SW_20230404	10.7	7.59	2.25	04/11/2023 14:00	SW	X								11				
SW26_SW_20230404	11.8	7.76	0.94	04/11/2023 15:00	SW	X								11				
SW29_SW_20230404	9.39	7.14	0.7	04/11/2023 15:30	SW	X								11				

6
7
8
9
10
11

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	4/13/2023 10:06:00 AM	Method of Shipment: Courier On Ice: yes / no <i>Ice pack</i> Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	7.6 °C 9.0 °C 8.3 °C	
Received by	<i>AS 13-APR-23 9:30</i>			Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

3 Solars Manitoulin



Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input checked="" type="checkbox"/> No
Are samples for human consumption / use? Yes <input checked="" type="checkbox"/> No
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments Identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	4/13/2023 10:06:00 AM	Method of Shipment: Courier On Ice: yes / no		
Received by	AS 13-Apr-23 9:30	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form



SAMPLE INTAKE				ACCOUNT INFO VERIFICATION				
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO	Confirmed all as accurate as per CoC, Sample Remarks or PM				
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO	Client <input checked="" type="checkbox"/> Office	Work Contact <input checked="" type="checkbox"/>	Quote <input checked="" type="checkbox"/>		
Client: <u>New Gold</u>				RECEIPT DETAIL				
SAMPLE RECEIPT INFORMATION				Project <input checked="" type="checkbox"/>	PO <input checked="" type="checkbox"/>	Site/LSD <input checked="" type="checkbox"/>		
Mode of Delivery: <u>Courier</u>		Drop Off		Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	No	
COURIER <u>Manitowish</u>				Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	NA	
Waybill Number <u>3302347657</u>				Sample Remarks checked		<input checked="" type="radio"/> Yes		
Shipment Cost		Collect? <input checked="" type="radio"/> Y <input type="radio"/> N		Submission Issues communicated		<input checked="" type="radio"/> Yes	NA	
Temperature <u>83, 1.6, 9.0</u>	Cooler Count		<u>3</u>	Sample Info communicated via Remarks		Yes	<input checked="" type="radio"/> NA	
Cooling Method		None	Ice	VERIFICATION CHECKLIST				
			<input checked="" type="radio"/> Ice Packs	Sample Name entered as per CoC		<input checked="" type="checkbox"/>		
SAMPLE MATRIX/BOTTLE INFORMATION				Sampling Date and time entered as per CoC				
Matrix: <input checked="" type="radio"/> Water	<input type="radio"/> Soil	<input type="radio"/> Air	<input type="radio"/> Biota	<input type="radio"/> Other	Containers selected in order of CoC			<input checked="" type="checkbox"/>
DW Schedule 24 Bottles Correct?			Yes	<input checked="" type="radio"/> No	Sales items from QUOTE ONLY (and/or verified as correct)			<input checked="" type="checkbox"/>
DW Metals pH Check <2			Yes	<input checked="" type="radio"/> No	Field Data/Calc Codes removed if not on CoC			<input checked="" type="checkbox"/>
Bottle Types:		Sample Count		Bottle Allocation Verified				<input checked="" type="checkbox"/>
Green/white				Guideline added or auto-allocated				<input checked="" type="checkbox"/>
Orange/black				Due dates updated				<input checked="" type="checkbox"/>
Warm red/green/white				VALIDATION				
Warm red/white				Validation errors or checks		<input checked="" type="radio"/> Yes	No	
Yellow/black				Internal CoC created		<input checked="" type="radio"/> Yes	NA	
Purple/white				Login Comments: <u>FB & TB not received, client contacted logging in placeholders while waiting for response.</u>				
Light blue/white								
Others (detail)								
Comments on Samples and Bottles:								
Samples Requiring Preservation or Filtering:								
Layout Staff Initials		<u>APS 13-Apr-23 14:30</u>		Login Staff Initials:		<u>APS</u>		



New Gold Inc. Rainy River Project
ATTN: Garnet Cornell
24 Marr Rd
Barwick ON POW 1A0

Date Received: 04-MAY-23
Report Date: 19-MAY-23 10:49 (MT)
Version: FINAL

Client Phone: 807-234-8200

Certificate of Analysis

Lab Work Order #: L2750391
Project P.O. #: 4500062842
Job Reference: SURFACE WATER
C of C Numbers:
Legal Site Desc:

Christine Paradis
Project Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1081 Barton Street, Thunder Bay, ON P7B 5N3 Canada | Phone: +1 807 623 6463 | Fax: +1 807 623 7598
ALS CANADA LTD Part of the ALS Group An ALS Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-1 SW20_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 09:35							
Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	10.7		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.36		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	5.49		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	103		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	196		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	85.9		0.51	mg/L		09-MAY-23	
pH	7.83		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	5.0		3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	142		13	mg/L		05-MAY-23	R5949343
Turbidity	6.43		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.4	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	77.4		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.016	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	13.1		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.035		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.008	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.885		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0019		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	4.40	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0003	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0018	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	17.9		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	19.7		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.254		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000060	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00053	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0150		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000159	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0120	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000009	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	19.0		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000285		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00072	<DL	0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-1 SW20_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 09:35							
Matrix: SW							
Total Metals							
Cobalt (Co)-Total	0.000140	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00106	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.345		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00015	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0036	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	9.21		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0096		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000470	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00122	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.23		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00171		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000120	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.50		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	7.15		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0524		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	1.8		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000010	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00005	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00628		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000298	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00100	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0030	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000312	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0226	<T	0.0050	mg/L		05-MAY-23	R5949720
Antimony (Sb)-Dissolved	0.000055	<DL	0.00060	mg/L		05-MAY-23	R5949720
Arsenic (As)-Dissolved	0.000499	<DL	0.0010	mg/L		05-MAY-23	R5949720
Barium (Ba)-Dissolved	0.0122		0.010	mg/L		05-MAY-23	R5949720
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		05-MAY-23	R5949720
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		05-MAY-23	R5949720
Boron (B)-Dissolved	0.0130	<DL	0.050	mg/L		05-MAY-23	R5949720
Cadmium (Cd)-Dissolved	0.0000030	<DL	0.000017	mg/L		05-MAY-23	R5949720
Calcium (Ca)-Dissolved	19.6		0.20	mg/L		05-MAY-23	R5949720
Cesium (Cs)-Dissolved	0.0000030	<DL	0.000010	mg/L		05-MAY-23	R5949720

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-1 SW20_SW_20230502 Sampled By: Client on 02-MAY-23 @ 09:35 Matrix: SW							
Dissolved Metals							
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		05-MAY-23	R5949720
Cobalt (Co)-Dissolved	0.000082	<DL	0.00050	mg/L		05-MAY-23	R5949720
Copper (Cu)-Dissolved	0.00086	<DL	0.0010	mg/L		05-MAY-23	R5949720
Iron (Fe)-Dissolved	0.114		0.020	mg/L		05-MAY-23	R5949720
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		05-MAY-23	R5949720
Lithium (Li)-Dissolved	0.0032	<DL	0.050	mg/L		05-MAY-23	R5949720
Magnesium (Mg)-Dissolved	8.98		0.020	mg/L		05-MAY-23	R5949720
Manganese (Mn)-Dissolved	0.00746		0.0010	mg/L		05-MAY-23	R5949720
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000392	<DL	0.0010	mg/L		05-MAY-23	R5949720
Nickel (Ni)-Dissolved	0.00094	<DL	0.0020	mg/L		05-MAY-23	R5949720
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		05-MAY-23	R5949720
Potassium (K)-Dissolved	1.24		0.50	mg/L		05-MAY-23	R5949720
Rubidium (Rb)-Dissolved	0.00103		0.00020	mg/L		05-MAY-23	R5949720
Selenium (Se)-Dissolved	0.000125	<T	0.000050	mg/L		05-MAY-23	R5949720
Silicon (Si)-Dissolved	2.09		0.050	mg/L		05-MAY-23	R5949720
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		05-MAY-23	R5949720
Sodium (Na)-Dissolved	7.07		0.10	mg/L		05-MAY-23	R5949720
Strontium (Sr)-Dissolved	0.0479		0.0010	mg/L		05-MAY-23	R5949720
Sulfur (S)-Dissolved	1.6		0.50	mg/L		05-MAY-23	R5949720
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		05-MAY-23	R5949720
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		05-MAY-23	R5949720
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		05-MAY-23	R5949720
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		05-MAY-23	R5949720
Titanium (Ti)-Dissolved	0.00058	<DL	0.0020	mg/L		05-MAY-23	R5949720
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		05-MAY-23	R5949720
Uranium (U)-Dissolved	0.000240	<DL	0.0050	mg/L		05-MAY-23	R5949720
Vanadium (V)-Dissolved	0.00050	<DL	0.0010	mg/L		05-MAY-23	R5949720
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		05-MAY-23	R5949720
Zirconium (Zr)-Dissolved	0.000286	<DL	0.0010	mg/L		05-MAY-23	R5949720
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	51		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.4	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Radiological Parameters							
Radium-226	0.008		0.005	Bq/L		16-MAY-23	R5951837
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-2 SW10_SW_20230502 Sampled By: Client on 02-MAY-23 @ 10:10 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	13.83		0	mg/L		04-MAY-23	R5948816

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-2 SW10_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 10:10							
Matrix: SW							
Field Tests							
pH, Client Supplied	7.56		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	5.93		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	146		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	177		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	84.7		0.51	mg/L		09-MAY-23	
pH	7.82		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	10.0		3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	144		13	mg/L		05-MAY-23	R5949343
Turbidity	9.89		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.4	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	75.4		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.016	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	9.27		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.036		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.004	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.04		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0034		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	4.15	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0014	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0010	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	24.6		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	26.1		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.319		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000050	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00074	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0156		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000181	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0110	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000012	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	18.1		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000350		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00072	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000245	<DL	0.00050	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-2 SW10_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 10:10							
Matrix: SW							
Total Metals							
Copper (Cu)-Total	0.00122	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.539		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00020	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0038	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	9.41		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0206		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000385	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00138	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.31		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00176		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000130	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.68		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	5.02		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0485		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	1.6		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000005	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00762		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000403	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00125	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0035	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000352	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0384		0.0050	mg/L		05-MAY-23	R5949720
Antimony (Sb)-Dissolved	0.000055	<DL	0.00060	mg/L		05-MAY-23	R5949720
Arsenic (As)-Dissolved	0.000684	<DL	0.0010	mg/L		05-MAY-23	R5949720
Barium (Ba)-Dissolved	0.0122		0.010	mg/L		05-MAY-23	R5949720
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		05-MAY-23	R5949720
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		05-MAY-23	R5949720
Boron (B)-Dissolved	0.0115	<DL	0.050	mg/L		05-MAY-23	R5949720
Cadmium (Cd)-Dissolved	0.0000050	<DL	0.000017	mg/L		05-MAY-23	R5949720
Calcium (Ca)-Dissolved	18.8		0.20	mg/L		05-MAY-23	R5949720
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		05-MAY-23	R5949720
Chromium (Cr)-Dissolved	0.00026	<DL	0.0010	mg/L		05-MAY-23	R5949720

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-2 SW10_SW_20230502 Sampled By: Client on 02-MAY-23 @ 10:10 Matrix: SW							
Dissolved Metals							
Cobalt (Co)-Dissolved	0.000124	<DL	0.00050	mg/L		05-MAY-23	R5949720
Copper (Cu)-Dissolved	0.00098	<DL	0.0010	mg/L		05-MAY-23	R5949720
Iron (Fe)-Dissolved	0.199		0.020	mg/L		05-MAY-23	R5949720
Lead (Pb)-Dissolved	0.00004	<DL	0.000050	mg/L		05-MAY-23	R5949720
Lithium (Li)-Dissolved	0.0030	<DL	0.050	mg/L		05-MAY-23	R5949720
Magnesium (Mg)-Dissolved	9.17		0.020	mg/L		05-MAY-23	R5949720
Manganese (Mn)-Dissolved	0.0160		0.0010	mg/L		05-MAY-23	R5949720
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000382	<DL	0.0010	mg/L		05-MAY-23	R5949720
Nickel (Ni)-Dissolved	0.00104	<DL	0.0020	mg/L		05-MAY-23	R5949720
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		05-MAY-23	R5949720
Potassium (K)-Dissolved	1.33		0.50	mg/L		05-MAY-23	R5949720
Rubidium (Rb)-Dissolved	0.00108		0.00020	mg/L		05-MAY-23	R5949720
Selenium (Se)-Dissolved	0.000130	<T	0.000050	mg/L		05-MAY-23	R5949720
Silicon (Si)-Dissolved	2.21		0.050	mg/L		05-MAY-23	R5949720
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		05-MAY-23	R5949720
Sodium (Na)-Dissolved	4.91		0.10	mg/L		05-MAY-23	R5949720
Strontium (Sr)-Dissolved	0.0478		0.0010	mg/L		05-MAY-23	R5949720
Sulfur (S)-Dissolved	1.6		0.50	mg/L		05-MAY-23	R5949720
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		05-MAY-23	R5949720
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		05-MAY-23	R5949720
Thorium (Th)-Dissolved	0.00004	<DL	0.00010	mg/L		05-MAY-23	R5949720
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		05-MAY-23	R5949720
Titanium (Ti)-Dissolved	0.00086	<DL	0.0020	mg/L		05-MAY-23	R5949720
Tungsten (W)-Dissolved	0.000002	<DL	0.010	mg/L		05-MAY-23	R5949720
Uranium (U)-Dissolved	0.000363	<DL	0.0050	mg/L		05-MAY-23	R5949720
Vanadium (V)-Dissolved	0.00064	<DL	0.0010	mg/L		05-MAY-23	R5949720
Zinc (Zn)-Dissolved	0.0012	<DL	0.0030	mg/L		05-MAY-23	R5949720
Zirconium (Zr)-Dissolved	0.000306	<DL	0.0010	mg/L		05-MAY-23	R5949720
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	67		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.2	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-3 SW16_SW_20230502 Sampled By: Client on 02-MAY-23 @ 10:10 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	11.3		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.01		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	5.47		0	Degree C		04-MAY-23	R5948816
Physical Tests							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-3 SW16_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 10:10							
Matrix: SW							
Physical Tests							
Color, True	83.9		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	73.6		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	31.9		0.51	mg/L		09-MAY-23	
pH	7.48		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	22.5		3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	74		13	mg/L		05-MAY-23	R5949343
Turbidity	18.7		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.0	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	30.0		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.114	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	2.57		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.029		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.110	<T	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	0.002	<DL	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.619		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0026		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	3.35	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0010	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0007	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.7		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	17.0		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.624		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000050	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00063	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0149		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000340	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0075	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000013	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	9.21		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.000110		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00144		0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000370	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00186	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.835		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00040	<T	0.000050	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-3 SW16_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 10:10							
Matrix: SW							
Total Metals							
Lithium (Li)-Total	0.0018	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	3.27		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0238		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000195	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00172	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.03		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00283		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000130	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	3.69		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000006	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	2.41		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0245		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	1.2		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000010	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00011		0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.0184		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000155	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00185	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0035	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000492	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0468		0.0050	mg/L		05-MAY-23	R5949720
Antimony (Sb)-Dissolved	0.000055	<DL	0.00060	mg/L		05-MAY-23	R5949720
Arsenic (As)-Dissolved	0.000468	<DL	0.0010	mg/L		05-MAY-23	R5949720
Barium (Ba)-Dissolved	0.00856	<DL	0.010	mg/L		05-MAY-23	R5949720
Beryllium (Be)-Dissolved	0.000014	<DL	0.0010	mg/L		05-MAY-23	R5949720
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		05-MAY-23	R5949720
Boron (B)-Dissolved	0.0075	<DL	0.050	mg/L		05-MAY-23	R5949720
Cadmium (Cd)-Dissolved	0.0000060	<DL	0.000017	mg/L		05-MAY-23	R5949720
Calcium (Ca)-Dissolved	8.39		0.20	mg/L		05-MAY-23	R5949720
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		05-MAY-23	R5949720
Chromium (Cr)-Dissolved	0.00025	<DL	0.0010	mg/L		05-MAY-23	R5949720
Cobalt (Co)-Dissolved	0.000066	<DL	0.00050	mg/L		05-MAY-23	R5949720
Copper (Cu)-Dissolved	0.00118	<T	0.0010	mg/L		05-MAY-23	R5949720
Iron (Fe)-Dissolved	0.128		0.020	mg/L		05-MAY-23	R5949720

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-3 SW16_SW_20230502 Sampled By: Client on 02-MAY-23 @ 10:10 Matrix: SW							
Dissolved Metals							
Lead (Pb)-Dissolved	0.00007	<T	0.000050	mg/L		05-MAY-23	R5949720
Lithium (Li)-Dissolved	0.0008	<DL	0.050	mg/L		05-MAY-23	R5949720
Magnesium (Mg)-Dissolved	2.65		0.020	mg/L		05-MAY-23	R5949720
Manganese (Mn)-Dissolved	0.00808		0.0010	mg/L		05-MAY-23	R5949720
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000148	<DL	0.0010	mg/L		05-MAY-23	R5949720
Nickel (Ni)-Dissolved	0.00074	<DL	0.0020	mg/L		05-MAY-23	R5949720
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		05-MAY-23	R5949720
Potassium (K)-Dissolved	0.87		0.50	mg/L		05-MAY-23	R5949720
Rubidium (Rb)-Dissolved	0.00127		0.00020	mg/L		05-MAY-23	R5949720
Selenium (Se)-Dissolved	0.000150	<T	0.000050	mg/L		05-MAY-23	R5949720
Silicon (Si)-Dissolved	2.55		0.050	mg/L		05-MAY-23	R5949720
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		05-MAY-23	R5949720
Sodium (Na)-Dissolved	2.26		0.10	mg/L		05-MAY-23	R5949720
Strontium (Sr)-Dissolved	0.0212		0.0010	mg/L		05-MAY-23	R5949720
Sulfur (S)-Dissolved	1.0		0.50	mg/L		05-MAY-23	R5949720
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		05-MAY-23	R5949720
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		05-MAY-23	R5949720
Thorium (Th)-Dissolved	0.00006	<DL	0.00010	mg/L		05-MAY-23	R5949720
Tin (Sn)-Dissolved	0.000055	<DL	0.0010	mg/L		05-MAY-23	R5949720
Titanium (Ti)-Dissolved	0.00072	<DL	0.0020	mg/L		05-MAY-23	R5949720
Tungsten (W)-Dissolved	0.000006	<DL	0.010	mg/L		05-MAY-23	R5949720
Uranium (U)-Dissolved	0.000114	<DL	0.0050	mg/L		05-MAY-23	R5949720
Vanadium (V)-Dissolved	0.00040	<DL	0.0010	mg/L		05-MAY-23	R5949720
Zinc (Zn)-Dissolved	0.0020	<DL	0.0030	mg/L		05-MAY-23	R5949720
Zirconium (Zr)-Dissolved	0.000244	<DL	0.0010	mg/L		05-MAY-23	R5949720
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	39		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.2	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-4 SW28A_SW_20230502 Sampled By: Client on 02-MAY-23 @ 10:40 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	14.35		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.57		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	6.77		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	125		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	163		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	87.9		0.51	mg/L		09-MAY-23	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-4 SW28A_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 10:40							
Matrix: SW							
Physical Tests							
pH	7.89		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	1.5	<DL	3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	130		13	mg/L		05-MAY-23	R5949343
Turbidity	2.29		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.4	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	83.8		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.014	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	1.89		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.035		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.002	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.21		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0029		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	1.50	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0010	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0007	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	22.9		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	25.6		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.0568		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000035	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00077	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0119		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000085	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0080	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000004	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	19.5		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000055	<DL	0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00028	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000115	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00056	<DL	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.648		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00007	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0028	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	9.70		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0082		0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-4 SW28A_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 10:40							
Matrix: SW							
Total Metals							
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000315	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00082	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	0.99		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00169		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000130	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.80		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	1.19		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0413		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	0.8		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00137	<DL	0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000255	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00055	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0005	<DL	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000160	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0198	<T	0.0050	mg/L		05-MAY-23	R5949720
Antimony (Sb)-Dissolved	0.000040	<DL	0.00060	mg/L		05-MAY-23	R5949720
Arsenic (As)-Dissolved	0.000754	<DL	0.0010	mg/L		05-MAY-23	R5949720
Barium (Ba)-Dissolved	0.0109		0.010	mg/L		05-MAY-23	R5949720
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		05-MAY-23	R5949720
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		05-MAY-23	R5949720
Boron (B)-Dissolved	0.0075	<DL	0.050	mg/L		05-MAY-23	R5949720
Cadmium (Cd)-Dissolved	0.0000030	<DL	0.000017	mg/L		05-MAY-23	R5949720
Calcium (Ca)-Dissolved	19.7		0.20	mg/L		05-MAY-23	R5949720
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		05-MAY-23	R5949720
Chromium (Cr)-Dissolved	0.00017	<DL	0.0010	mg/L		05-MAY-23	R5949720
Cobalt (Co)-Dissolved	0.000092	<DL	0.00050	mg/L		05-MAY-23	R5949720
Copper (Cu)-Dissolved	0.00050	<DL	0.0010	mg/L		05-MAY-23	R5949720
Iron (Fe)-Dissolved	0.545		0.020	mg/L		05-MAY-23	R5949720
Lead (Pb)-Dissolved	0.00004	<DL	0.000050	mg/L		05-MAY-23	R5949720
Lithium (Li)-Dissolved	0.0022	<DL	0.050	mg/L		05-MAY-23	R5949720
Magnesium (Mg)-Dissolved	9.39		0.020	mg/L		05-MAY-23	R5949720

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-4 SW28A_SW_20230502 Sampled By: Client on 02-MAY-23 @ 10:40 Matrix: SW							
Dissolved Metals							
Manganese (Mn)-Dissolved	0.00358		0.0010	mg/L		05-MAY-23	R5949720
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000298	<DL	0.0010	mg/L		05-MAY-23	R5949720
Nickel (Ni)-Dissolved	0.00074	<DL	0.0020	mg/L		05-MAY-23	R5949720
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		05-MAY-23	R5949720
Potassium (K)-Dissolved	1.05		0.50	mg/L		05-MAY-23	R5949720
Rubidium (Rb)-Dissolved	0.00170		0.00020	mg/L		05-MAY-23	R5949720
Selenium (Se)-Dissolved	0.000135	<T	0.000050	mg/L		05-MAY-23	R5949720
Silicon (Si)-Dissolved	2.84		0.050	mg/L		05-MAY-23	R5949720
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		05-MAY-23	R5949720
Sodium (Na)-Dissolved	1.21		0.10	mg/L		05-MAY-23	R5949720
Strontium (Sr)-Dissolved	0.0399		0.0010	mg/L		05-MAY-23	R5949720
Sulfur (S)-Dissolved	0.6		0.50	mg/L		05-MAY-23	R5949720
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		05-MAY-23	R5949720
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		05-MAY-23	R5949720
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		05-MAY-23	R5949720
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		05-MAY-23	R5949720
Titanium (Ti)-Dissolved	0.00044	<DL	0.0020	mg/L		05-MAY-23	R5949720
Tungsten (W)-Dissolved	0.000002	<DL	0.010	mg/L		05-MAY-23	R5949720
Uranium (U)-Dissolved	0.000237	<DL	0.0050	mg/L		05-MAY-23	R5949720
Vanadium (V)-Dissolved	0.00042	<DL	0.0010	mg/L		05-MAY-23	R5949720
Zinc (Zn)-Dissolved	0.0008	<DL	0.0030	mg/L		05-MAY-23	R5949720
Zirconium (Zr)-Dissolved	0.000176	<DL	0.0010	mg/L		05-MAY-23	R5949720
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	65		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.4	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-5 SW02_SW_20230502 Sampled By: Client on 02-MAY-23 @ 11:10 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	12.05		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.18		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	6.03		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	106		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	91.0		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	51.4		0.51	mg/L		09-MAY-23	
pH	7.55		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	2.5	<DL	3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	90		13	mg/L		05-MAY-23	R5949343

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-5 SW02_SW_20230502 Sampled By: Client on 02-MAY-23 @ 11:10 Matrix: SW							
Physical Tests							
Turbidity	0.93		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.8	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	47.2		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.012	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	0.28		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.020		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.008	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.838		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	0.65	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0002	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	19.5		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	21.7		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.0540		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000035	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00046	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.00665	<DL	0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000064	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0065	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000002	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	11.3		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000030	<DL	0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00030	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000060	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00046	<DL	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.130		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00007	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0014	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	5.28		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0074		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000195	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00048	<DL	0.0020	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-5 SW02_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 11:10							
Matrix: SW							
Total Metals							
Phosphorus (P)-Total	<0.005	<W	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	0.47	<DL	0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00104		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000100	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.30		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	0.865		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0186	<T	0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	0.2	<DL	0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00001	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00114	<DL	0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.0000350	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00035	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0005	<DL	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000106	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0276	<T	0.0050	mg/L		05-MAY-23	R5949720
Antimony (Sb)-Dissolved	0.000045	<DL	0.00060	mg/L		05-MAY-23	R5949720
Arsenic (As)-Dissolved	0.000432	<DL	0.0010	mg/L		05-MAY-23	R5949720
Barium (Ba)-Dissolved	0.00615	<DL	0.010	mg/L		05-MAY-23	R5949720
Beryllium (Be)-Dissolved	0.000006	<DL	0.0010	mg/L		05-MAY-23	R5949720
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		05-MAY-23	R5949720
Boron (B)-Dissolved	0.0065	<DL	0.050	mg/L		05-MAY-23	R5949720
Cadmium (Cd)-Dissolved	0.0000020	<DL	0.000017	mg/L		05-MAY-23	R5949720
Calcium (Ca)-Dissolved	11.9		0.20	mg/L		05-MAY-23	R5949720
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		05-MAY-23	R5949720
Chromium (Cr)-Dissolved	0.00011	<DL	0.0010	mg/L		05-MAY-23	R5949720
Cobalt (Co)-Dissolved	0.000046	<DL	0.00050	mg/L		05-MAY-23	R5949720
Copper (Cu)-Dissolved	0.00044	<DL	0.0010	mg/L		05-MAY-23	R5949720
Iron (Fe)-Dissolved	0.0870		0.020	mg/L		05-MAY-23	R5949720
Lead (Pb)-Dissolved	0.00003	<DL	0.000050	mg/L		05-MAY-23	R5949720
Lithium (Li)-Dissolved	0.0010	<DL	0.050	mg/L		05-MAY-23	R5949720
Magnesium (Mg)-Dissolved	5.25		0.020	mg/L		05-MAY-23	R5949720
Manganese (Mn)-Dissolved	0.00442		0.0010	mg/L		05-MAY-23	R5949720
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000182	<DL	0.0010	mg/L		05-MAY-23	R5949720

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-5 SW02_SW_20230502 Sampled By: Client on 02-MAY-23 @ 11:10 Matrix: SW							
Dissolved Metals							
Nickel (Ni)-Dissolved	0.00038	<DL	0.0020	mg/L		05-MAY-23	R5949720
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		05-MAY-23	R5949720
Potassium (K)-Dissolved	0.49	<DL	0.50	mg/L		05-MAY-23	R5949720
Rubidium (Rb)-Dissolved	0.00102		0.00020	mg/L		05-MAY-23	R5949720
Selenium (Se)-Dissolved	0.000110	<T	0.000050	mg/L		05-MAY-23	R5949720
Silicon (Si)-Dissolved	2.38		0.050	mg/L		05-MAY-23	R5949720
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		05-MAY-23	R5949720
Sodium (Na)-Dissolved	0.900		0.10	mg/L		05-MAY-23	R5949720
Strontium (Sr)-Dissolved	0.0183	<T	0.0010	mg/L		05-MAY-23	R5949720
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		05-MAY-23	R5949720
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		05-MAY-23	R5949720
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		05-MAY-23	R5949720
Thorium (Th)-Dissolved	0.00001	<DL	0.00010	mg/L		05-MAY-23	R5949720
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		05-MAY-23	R5949720
Titanium (Ti)-Dissolved	0.00042	<DL	0.0020	mg/L		05-MAY-23	R5949720
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		05-MAY-23	R5949720
Uranium (U)-Dissolved	0.0000220	<DL	0.0050	mg/L		05-MAY-23	R5949720
Vanadium (V)-Dissolved	0.00022	<DL	0.0010	mg/L		05-MAY-23	R5949720
Zinc (Zn)-Dissolved	0.0008	<DL	0.0030	mg/L		05-MAY-23	R5949720
Zirconium (Zr)-Dissolved	0.000120	<DL	0.0010	mg/L		05-MAY-23	R5949720
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	55		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	1.0		1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-6 SW17_SW_20230502 Sampled By: Client on 02-MAY-23 @ 11:30 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	11.04		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.19		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	6.26		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	111		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	91.6		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	43.9		0.51	mg/L		09-MAY-23	
pH	7.56		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	24.0		3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	96		13	mg/L		05-MAY-23	R5949343
Turbidity	20.4		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.2	<DL	2.0	mg/L		08-MAY-23	R5949737

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-6 SW17_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 11:30							
Matrix: SW							
Anions and Nutrients							
Alkalinity, Total (as CaCO3)	38.6		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.014	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	2.29		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.032		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.110	<T	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.768		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0023		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	4.85	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0010	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0005	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	18.9		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	21.1		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.701		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000075	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00072	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0173		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000363	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0085	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000021	<T	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	11.7		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.000119		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00152		0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000445	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00178	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.957		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00046	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0024	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	4.48		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0304		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000230	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00186	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.030	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.17		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00314		0.00020	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-6 SW17_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 11:30							
Matrix: SW							
Total Metals							
Selenium (Se)-Total	0.000145	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	4.02		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000005	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	2.41		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0279		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	1.8		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000015	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00011		0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.0199		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000206	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00215	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0035	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000592	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0552		0.0050	mg/L		05-MAY-23	R5949720
Antimony (Sb)-Dissolved	0.000080	<DL	0.00060	mg/L		05-MAY-23	R5949720
Arsenic (As)-Dissolved	0.000516	<DL	0.0010	mg/L		05-MAY-23	R5949720
Barium (Ba)-Dissolved	0.0109		0.010	mg/L		05-MAY-23	R5949720
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		05-MAY-23	R5949720
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		05-MAY-23	R5949720
Boron (B)-Dissolved	0.0070	<DL	0.050	mg/L		05-MAY-23	R5949720
Cadmium (Cd)-Dissolved	0.0000085	<DL	0.000017	mg/L		05-MAY-23	R5949720
Calcium (Ca)-Dissolved	10.9		0.20	mg/L		05-MAY-23	R5949720
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		05-MAY-23	R5949720
Chromium (Cr)-Dissolved	0.00026	<DL	0.0010	mg/L		05-MAY-23	R5949720
Cobalt (Co)-Dissolved	0.000078	<DL	0.00050	mg/L		05-MAY-23	R5949720
Copper (Cu)-Dissolved	0.00110	<T	0.0010	mg/L		05-MAY-23	R5949720
Iron (Fe)-Dissolved	0.155		0.020	mg/L		05-MAY-23	R5949720
Lead (Pb)-Dissolved	0.00005	<T	0.000050	mg/L		05-MAY-23	R5949720
Lithium (Li)-Dissolved	0.0012	<DL	0.050	mg/L		05-MAY-23	R5949720
Magnesium (Mg)-Dissolved	4.05		0.020	mg/L		05-MAY-23	R5949720
Manganese (Mn)-Dissolved	0.00956		0.0010	mg/L		05-MAY-23	R5949720
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000198	<DL	0.0010	mg/L		05-MAY-23	R5949720
Nickel (Ni)-Dissolved	0.00084	<DL	0.0020	mg/L		05-MAY-23	R5949720
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		05-MAY-23	R5949720
Potassium (K)-Dissolved	1.05		0.50	mg/L		05-MAY-23	R5949720

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-6 SW17_SW_20230502 Sampled By: Client on 02-MAY-23 @ 11:30 Matrix: SW							
Dissolved Metals							
Rubidium (Rb)-Dissolved	0.00155		0.00020	mg/L		05-MAY-23	R5949720
Selenium (Se)-Dissolved	0.000135	<T	0.000050	mg/L		05-MAY-23	R5949720
Silicon (Si)-Dissolved	2.78		0.050	mg/L		05-MAY-23	R5949720
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		05-MAY-23	R5949720
Sodium (Na)-Dissolved	2.51		0.10	mg/L		05-MAY-23	R5949720
Strontium (Sr)-Dissolved	0.0250		0.0010	mg/L		05-MAY-23	R5949720
Sulfur (S)-Dissolved	1.6		0.50	mg/L		05-MAY-23	R5949720
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		05-MAY-23	R5949720
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		05-MAY-23	R5949720
Thorium (Th)-Dissolved	0.00007	<DL	0.00010	mg/L		05-MAY-23	R5949720
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		05-MAY-23	R5949720
Titanium (Ti)-Dissolved	0.00084	<DL	0.0020	mg/L		05-MAY-23	R5949720
Tungsten (W)-Dissolved	0.000002	<DL	0.010	mg/L		05-MAY-23	R5949720
Uranium (U)-Dissolved	0.000153	<DL	0.0050	mg/L		05-MAY-23	R5949720
Vanadium (V)-Dissolved	0.00048	<DL	0.0010	mg/L		05-MAY-23	R5949720
Zinc (Zn)-Dissolved	0.0006	<DL	0.0030	mg/L		05-MAY-23	R5949720
Zirconium (Zr)-Dissolved	0.000244	<DL	0.0010	mg/L		05-MAY-23	R5949720
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	54		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.8	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-7 FB_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:00 Matrix: SW							
Physical Tests							
Color, True	<2.0		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	0.2	<DL	1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	<0.51		0.51	mg/L		09-MAY-23	
pH	5.51		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	<0.5	<W	3.0	mg/L		05-MAY-23	R5949344
Total Dissolved Solids	2	<DL	10	mg/L		05-MAY-23	R5949343
Turbidity	0.11		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	<0.2	<W	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	1.0	<DL	2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		10-MAY-23	R5950496
Chloride (Cl)	<0.10		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	<0.020		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.004	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-7 FB_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:00 Matrix: SW							
Anions and Nutrients							
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	0.10	<DL	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	<0.0002	<W	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	<0.0001	<W	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	02-MAY-23	09-MAY-23	R5950038
Total Organic Carbon	<0.50		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	<0.000005	<W	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	<0.0000001	<W	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0175	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000001	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	0.012	<DL	0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	<0.0000005	<W	0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00014	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	<0.000005	<W	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	<0.0005	<W	0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	<0.00001	<W	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	<0.0002	<W	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	0.0002	<DL	0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	<0.0002	<W	0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00002	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	<0.005	<W	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	<0.01	<W	0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	<0.000002	<W	0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	0.130		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	0.020	<DL	0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.000015	<DL	0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	<0.2	<W	0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-7 FB_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 12:00							
Matrix: SW							
Total Metals							
Thorium (Th)-Total	<0.00001	<W	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	<0.00001	<W	0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	<0.0000005	<W	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	<0.00005	<W	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	<0.0005	<W	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0004	<DL	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	<0.000005	<W	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.0000020	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.000010	<DL	0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000002	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0175	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	<0.0000005	<W	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	0.010	<DL	0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00008	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	<0.000002	<W	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.0010	<DL	0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	<0.0002	<W	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	<0.0005	<W	0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	<0.00002	<W	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	<0.01	<W	0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	<0.000005	<W	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	0.140		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	0.025	<DL	0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-7 FB_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:00 Matrix: SW							
Dissolved Metals							
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	<0.00001	<W	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000030	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	<0.00002	<W	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	<0.0000005	<W	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0002	<DL	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	<10		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.6	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-8 SW06_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:00 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	13.53		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	8		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	11.43		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	62.8		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	272		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	139		0.51	mg/L		09-MAY-23	
pH	8.10		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	2.5	<DL	3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	172		13	mg/L		05-MAY-23	R5949341
Turbidity	4.15		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.0	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	123		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.014	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	9.76		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.043		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.010	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.780		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0064		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	10.3		0.30	mg/L		05-MAY-23	R5949345
Cyanides							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-8 SW06_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 12:00							
Matrix: SW							
Cyanides							
Cyanide, Weak Acid Diss	0.0005	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	<0.0001	<W	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	14.9		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	15.2		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.112		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000110	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00066	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0175		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000086	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0105	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000009	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	34.3		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000140		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00036	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000125	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00122	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.414		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00029	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0034	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	12.1		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0212		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.000540	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00106	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.66		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00169		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000130	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	3.05		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	3.77		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0687		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	3.6		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-8 SW06_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 12:00							
Matrix: SW							
Total Metals							
Titanium (Ti)-Total	0.00298		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000955	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00070	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0055	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000240	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0100	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000115	<DL	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000629	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0173		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000004	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0100	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000065	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	34.7		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00013	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000092	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00106	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.249		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00016	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0036	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	12.6		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0179		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000564	<DL	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00088	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	1.70		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00149		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000100	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.92		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	3.87		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.0713		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	3.8		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	0.000002	<DL	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-8 SW06_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:00 Matrix: SW							
Dissolved Metals							
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00028	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000980	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00044	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0044	<T	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000196	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	46		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.6	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-9 SW15_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:45 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	9.22		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.49		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	8.08		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	178		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	243		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	111		0.51	mg/L		09-MAY-23	
pH	7.77		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	20.5		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	194		13	mg/L		05-MAY-23	R5949341
Turbidity	17.3		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.6	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	71.0		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.036	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	5.08		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.038		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.278		0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.30		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0018		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	42.2		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0007	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0008	<DL	0.0020	mg/L		10-MAY-23	R5950759

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-9 SW15_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 12:45							
Matrix: SW							
Cyanides							
Cyanide, Free	0.0005	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	32.6		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	30.7		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.519		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000775	<T	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00089	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0203		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000333	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0170	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000017	<T	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	26.6		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000890		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00114		0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000475	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00162	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.751		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00039	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0052	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	10.3		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0302		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.00105	<T	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00178	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.025	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	3.64		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00342		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000175	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	3.66		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000004	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	8.31		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0862		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	14.0		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000010	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00011		0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00003	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.0172		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-9 SW15_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 12:45							
Matrix: SW							
Total Metals							
Uranium (U)-Total	0.000671	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00185	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0040	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000646	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.129		0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000760	<T	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000822	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0185		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000024	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	0.000006	<DL	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0165	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000270	<T	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	27.2		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000100		0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00033	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000308	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00136	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.304		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00033	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0056	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	10.5		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0284		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	0.000005	<T	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000902	<DL	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00130	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	0.005	<DL	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	3.66		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00235		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000155	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.87		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	8.38		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.0828		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	14.0		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00009	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000015	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00280		0.0020	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-9 SW15_SW_20230502 Sampled By: Client on 02-MAY-23 @ 12:45 Matrix: SW							
Dissolved Metals							
Tungsten (W)-Dissolved	0.000006	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000629	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00094	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0224	DTC	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000558	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	86		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.8	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-10 SW23_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:25 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	9.43		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.44		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	7.81		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	140		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	316		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	137		0.51	mg/L		09-MAY-23	
pH	7.80		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	14.5		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	224		20	mg/L		05-MAY-23	R5949341
Turbidity	10.6		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	2.0		2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	83.2		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.038	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	7.55		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.047		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.352		0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	0.004	<DL	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.30		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0018		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	63.1		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0003	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	25.7		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-10 SW23_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:25 Matrix: SW							
Organic / Inorganic Carbon							
Total Organic Carbon	27.8		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.307		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.00102	<T	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00085	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0198		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000162	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0200	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000014	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	31.1		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000465		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00072	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000395	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00158	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.549		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00024	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0052	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	12.4		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0388		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949316
Molybdenum (Mo)-Total	0.00134	<T	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00160	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	5.10		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00339		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000175	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.71		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	12.1		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.111		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	20.4		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000005	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00006	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.0101		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000600	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00130	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0035	<T	0.0030	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-10 SW23_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:25							
Matrix: SW							
Total Metals							
Zirconium (Zr)-Total	0.000352	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0386		0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.00117	<T	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000770	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0189		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0235	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000085	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	35.1		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000065	<DL	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00019	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000254	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00116	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.166		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00007	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0064	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	12.0		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0296		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.00151	<T	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00116	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	5.09		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00280		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000180	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.22		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	12.3		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.125		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	20.8		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00076	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000008	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000621	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00060	<DL	0.0010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-10 SW23_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:25 Matrix: SW							
Dissolved Metals							
Zinc (Zn)-Dissolved	0.0022	<DL	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000280	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	69		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Radiological Parameters							
Radium-226	0.006		0.005	Bq/L		16-MAY-23	R5951837
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-11 SW26_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:25 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	13.5		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	8.13		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	8.51		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	133		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	286		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	147		0.51	mg/L		09-MAY-23	
pH	8.14		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	3.0		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	188		13	mg/L		05-MAY-23	R5949341
Turbidity	3.70		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	140		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.010	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	10.6		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.040		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.006	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.715		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0054		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	13.7		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0003	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.3		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	16.8		0.50	mg/L		09-MAY-23	R5950036

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-11 SW26_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:25							
Matrix: SW							
Organic / Inorganic Carbon							
Total Metals							
Aluminum (Al)-Total	0.0924		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000100	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00070	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0173		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000108	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0090	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000007	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	34.3		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000140		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00034	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000105	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00120	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.475		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00031	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0028	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	14.3		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0152		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.000510	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00092	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.59		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00161		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000105	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.74		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	4.34		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0766		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	4.2		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00031	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00285		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.00116	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00065	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0065	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000210	<DL	0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-11 SW26_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:25							
Matrix: SW							
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0086	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000110	<DL	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000674	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0177		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000006	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0100	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000065	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	36.7		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00014	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000084	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00108	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.275		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00017	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0040	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	13.5		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0133		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000534	<DL	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00088	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	1.67		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00139		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000110	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.63		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	4.20		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.0776		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	4.6		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00030	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.00117	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00040	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0054	<T	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000186	<DL	0.0010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-11 SW26_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:25 Matrix: SW							
Dissolved Metals							
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	41		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Parameter Exceeded Recommended Holding Time Prior to Analysis							
L2750391-12 SW24_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:45 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	8.85		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.42		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	7.89		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	89.2		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	427		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	171		0.51	mg/L		09-MAY-23	
pH	7.84		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	14.0		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	296		20	mg/L		05-MAY-23	R5949341
Turbidity	9.47		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	2.0		2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	88.0		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.086	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	10.5		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.056		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.562		0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	0.004	<DL	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.34		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0011		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	108		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0011	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0008	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	23.6		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	25.8		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.302		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.00203	<T	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00086	<DL	0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-12 SW24_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:45							
Matrix: SW							
Total Metals							
Barium (Ba)-Total	0.0211		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000195	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0265	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000015	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	43.2		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000810		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00084	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000525	<T	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00162	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.555		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00024	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0056	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	14.0		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0410		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.00227	<T	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00174	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.010	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	8.97		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00494		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000205	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.80		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	21.1		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.181		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	36.4		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00004	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000005	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00006	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.0102		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	0.00001	<DL	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000815	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00125	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0040	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000362	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0364		0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.00223	<T	0.00060	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-12 SW24_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:45							
Matrix: SW							
Dissolved Metals							
Arsenic (As)-Dissolved	0.000792	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0209		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000010	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0305	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000095	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	46.2		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000375		0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00013	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000380	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00128	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.154		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00006	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0074	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	13.6		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0305		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.00242	<T	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00134	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	9.04		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00453		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000190	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.26		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	20.7		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.186		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	36.2		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	0.000002	<DL	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00068	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000014	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000760	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00060	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0028	<DL	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000252	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	79		10	mg/L	06-MAY-23	08-MAY-23	R5949616

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-12 SW24_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:45 Matrix: SW							
Aggregate Organics							
Oil and Grease, Total	0.2	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Radiological Parameters							
Radium-226	0.009		0.005	Bq/L		16-MAY-23	R5951837
Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-13 SW21A_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:50 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	12.11		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.78		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	9.26		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	60.3		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	314		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	152		0.51	mg/L		09-MAY-23	
pH	7.99		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	8.5		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	196		20	mg/L		05-MAY-23	R5949341
Turbidity	6.16		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.4	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	113		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.016	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	9.86		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.048		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.256		0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.04		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0028		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	40.8		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0008	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	18.7		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	21.8		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.183		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000225	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00085	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0206		0.010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-13 SW21A_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:50							
Matrix: SW							
Total Metals							
Beryllium (Be)-Total	0.0000130	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0230	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000008	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	31.8		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000235		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00050	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000190	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00118	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.324		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00012	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0076	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	14.9		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0298		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.00118	<T	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00124	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	2.24		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00184		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000195	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.03		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	8.63		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.118		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	12.8		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00522		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000813	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00105	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0015	<DL	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000280	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0114	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000230	<DL	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000838	<DL	0.0010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-13 SW21A_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 13:50							
Matrix: SW							
Dissolved Metals							
Barium (Ba)-Dissolved	0.0203		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000014	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0235	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000040	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	35.2		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000020	<DL	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000128	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00102	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.118		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0082	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	15.5		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0255		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.00112	<T	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00112	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	2.30		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00140		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000180	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	1.68		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	9.07		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.124		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	13.0		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000015	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00044	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000008	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000800	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00058	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000260	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	55		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.4	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-13 SW21A_SW_20230502 Sampled By: Client on 02-MAY-23 @ 13:50 Matrix: SW Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-14 SW27_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:15 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	25.89		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.8		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	8.42		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	76.7		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	313		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	164		0.51	mg/L		09-MAY-23	
pH	8.10		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	4.0		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	182		20	mg/L		05-MAY-23	R5949341
Turbidity	4.11		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.2	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	187		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.010	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	10.4		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.050		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.004	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.888		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0042		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	16.5		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0002	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.2		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	16.8		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.103		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000095	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00063	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0201		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000109	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0105	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000006	<DL	0.000017	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-14 SW27_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:15							
Matrix: SW							
Total Metals							
Calcium (Ca)-Total	38.2		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000120		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00036	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000150	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00124	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.367		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00020	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0042	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	15.5		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0320		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.000560	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00100	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	<0.005	<W	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.73		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00146		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000130	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.88		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	4.63		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0844		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	5.6		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00300		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.00124	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00080	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0040	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000234	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0072	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000100	<DL	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000616	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0196		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000006	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0120	<DL	0.050	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-14 SW27_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:15 Matrix: SW							
Dissolved Metals							
Cadmium (Cd)-Dissolved	0.0000055	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	39.9		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00011	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000104	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00108	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.210		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00011	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0050	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	15.6		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0283		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000562	<DL	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00090	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	1.71		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00123		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000100	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.71		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	4.74		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.0859		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	5.8		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00026	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.00127	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00048	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0038	<T	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000216	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	41		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.4	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-15 SW29_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:25 Matrix: SW							
Field Tests							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-15 SW29_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:25							
Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	8.52		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.32		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	9.85		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	94.4		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	146		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	82.7		0.51	mg/L		09-MAY-23	
pH	7.80		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	2.5	<DL	3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	108		13	mg/L		05-MAY-23	R5949341
Turbidity	1.06		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	1.4	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	73.8		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.010	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	0.91		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.036		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.004	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.06		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0017		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	3.15	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0002	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	18.7		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	19.5		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.0350		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000045	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00044	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.00952	<DL	0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000098	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0095	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000003	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	17.1		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000020	<DL	0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00028	<DL	0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-15 SW29_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:25							
Matrix: SW							
Total Metals							
Cobalt (Co)-Total	0.000075	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00060	<DL	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.0990		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00003	<DL	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0026	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	8.35		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0116		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.000385	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00078	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	<0.005	<W	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	0.74		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.000856		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000135	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.07		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000001	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	1.42		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0400		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	1.2		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00092	<DL	0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.000124	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00045	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0010	<DL	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000202	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0180	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000050	<DL	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000438	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.00982	<DL	0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0095	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000030	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	18.6		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-15 SW29_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:25 Matrix: SW							
Dissolved Metals							
Chromium (Cr)-Dissolved	0.00014	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000072	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00062	<DL	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.0825		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00002	<DL	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0028	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	8.84		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0108		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000388	<DL	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00076	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	0.74		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.000866		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000115	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.10		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	1.47		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.0419		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	1.2		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000015	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00042	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000108	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00036	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0014	<DL	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000234	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	51		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.2	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-16 SW03_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:45 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	9.74		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.61		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	8.93		0	Degree C		04-MAY-23	R5948816

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-16 SW03_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:45							
Matrix: SW							
Field Tests							
Physical Tests							
Color, True	94.2		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	505		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	203		0.51	mg/L		09-MAY-23	
pH	7.93		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	16.0		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	340		20	mg/L		05-MAY-23	R5949341
Turbidity	7.93		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	2.0		2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	108		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.068	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	14.4		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.064		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.630		0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	0.008	<DL	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.16		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0013		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	128		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0010	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0008	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	20.2		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	21.5		0.50	mg/L		09-MAY-23	R5950036
Total Metals							
Aluminum (Al)-Total	0.259		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.00246	<T	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00089	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0253		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000196	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0370	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000014	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	53.5		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000735		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00062	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000510	<T	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00186	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.428		0.020	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-16 SW03_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:45							
Matrix: SW							
Total Metals							
Lead (Pb)-Total	0.00019	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0090	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	15.9		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0294		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.00296	<T	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00178	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	9.75		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00544		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000235	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	2.24		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	24.9		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.226		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	43.0		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00006	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	0.000005	<DL	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00005	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00851		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	0.00002	<DL	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.00102	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00120	<T	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0040	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000372	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0644		0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.00242	<T	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000897	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0245		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000014	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0340	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000135	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	53.8		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000430		0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00023	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000452	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00172	<T	0.0010	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-16 SW03_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:45 Matrix: SW							
Dissolved Metals							
Iron (Fe)-Dissolved	0.222		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00015	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0080	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	16.6		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0289		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.00268	<T	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00152	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	10.3		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00499		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000205	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	1.78		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	25.2		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.233		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	41.4		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	0.000002	<DL	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00005	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000030	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00178	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000016	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.00100	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00072	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0050	<T	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000354	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	60		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-17 SW22A_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:45 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	13.42		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	7.67		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	9.09		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	70.9		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	610		1.0	uS/cm		05-MAY-23	R5949337

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-17 SW22A_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:45							
Matrix: SW							
Physical Tests							
Hardness (as CaCO3)	243		0.51	mg/L		09-MAY-23	
pH	8.01		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	8.5		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	400		20	mg/L		05-MAY-23	R5949341
Turbidity	5.23		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	2.0		2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	113		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.154	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	0.001	<DL	0.010	mg/L		11-MAY-23	
Chloride (Cl)	18.1		0.20	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.052		0.040	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.786		0.040	mg/L		05-MAY-23	R5949345
Nitrite (as N)	0.003	<DL	0.020	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	1.26		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0032		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	171		0.60	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0008	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0006	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.7		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	15.5		0.50	mg/L		09-MAY-23	R5950037
Total Metals							
Aluminum (Al)-Total	0.133		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.00339	<T	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00082	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0244		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000066	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0425	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000013	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	60.3		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.000124		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00040	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000560	<T	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00154	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.262		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00011	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0088	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	17.9		0.020	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-17 SW22A_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 14:45							
Matrix: SW							
Total Metals							
Manganese (Mn)-Total	0.0300		0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.00386	<T	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00176	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.015	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	13.3		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00685		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000285	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	1.98		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	33.0		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.285		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	57.4		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00008	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00476		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	0.00003	<DL	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.00129	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00080	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0060	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000224	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0082	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.00336	<T	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000800	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0249		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	0.000016	<DL	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0415	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000085	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	66.5		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.000102		0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00011	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000478	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00132	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.0935		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00003	<DL	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0096	<DL	0.050	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-17 SW22A_SW_20230502 Sampled By: Client on 02-MAY-23 @ 14:45 Matrix: SW							
Dissolved Metals							
Magnesium (Mg)-Dissolved	18.6		0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	0.0241		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.00364	<T	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00152	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	13.2		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00648		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000290	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	1.77		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000020	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	32.9		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.293		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	55.4		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	0.00001	<DL	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	0.000010	<DL	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000005	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00034	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000020	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.00125	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00046	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0044	<T	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000210	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	42		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	0.2	<DL	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Radiological Parameters							
Radium-226	<0.005		0.005	Bq/L		16-MAY-23	R5951837
Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-18 SW25_SW_20230502 Sampled By: Client on 02-MAY-23 @ 15:20 Matrix: SW							
Field Tests							
Dissolved Oxygen, Client Supplied	13.53		0	mg/L		04-MAY-23	R5948816
pH, Client Supplied	8		0.10	pH		04-MAY-23	R5948816
Temperature, Client Supplied	11.43		0	Degree C		04-MAY-23	R5948816
Physical Tests							
Color, True	64.5		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	268		1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	140		0.51	mg/L		09-MAY-23	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-18 SW25_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 15:20							
Matrix: SW							
Physical Tests							
pH	8.13		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	4.5		3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	170		13	mg/L		05-MAY-23	R5949341
Turbidity	4.88		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	120		2.0	mg/L		05-MAY-23	R5949337
Ammonia, Total (as N)	0.014	<T	0.0050	mg/L		10-MAY-23	R5950496
Ammonia, Un-ionized (as N)	<0.001	<W	0.010	mg/L		11-MAY-23	
Chloride (Cl)	9.63		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	0.043		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.010	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	0.003	<DL	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	0.720		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	0.0063		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	10.3		0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	0.0004	<DL	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	15.1		0.50	mg/L	06-MAY-23	11-MAY-23	R5950937
Total Organic Carbon	16.1		0.50	mg/L		09-MAY-23	R5950037
Total Metals							
Aluminum (Al)-Total	0.120		0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	0.000100	<DL	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	0.00067	<DL	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.0170		0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	0.0000066	<DL	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0095	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	0.000007	<DL	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	34.2		0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	0.0000165		0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00038	<DL	0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000130	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	0.00128	<T	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.442		0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	0.00030	<T	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	0.0024	<DL	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	12.8		0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	0.0218		0.0010	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-18 SW25_SW_20230502							
Sampled By: Client on 02-MAY-23 @ 15:20							
Matrix: SW							
Total Metals							
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.000565	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00102	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.005	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	1.68		0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.00171		0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	0.000110	<T	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	3.02		0.10	mg/L		08-MAY-23	R5949796
Silver (Ag)-Total	0.000002	<DL	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	3.91		0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	0.0703		0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	3.6		0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	0.00003	<DL	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	0.00377		0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	0.00102	<DL	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00075	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	0.0060	<T	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	0.000218	<DL	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	LAB					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0104	<T	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	0.000110	<DL	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.000637	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.0173		0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000008	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0095	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000065	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	34.4		0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	0.0000010	<DL	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00016	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	0.000094	<DL	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	0.00108	<T	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.236		0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	0.00015	<T	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	0.0034	<DL	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	13.0		0.020	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-18 SW25_SW_20230502 Sampled By: Client on 02-MAY-23 @ 15:20 Matrix: SW							
Dissolved Metals							
Manganese (Mn)-Dissolved	0.0182		0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	0.000536	<DL	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	0.00088	<DL	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	1.74		0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	0.00148		0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000120	<T	0.000050	mg/L		08-MAY-23	R5949822
Silicon (Si)-Dissolved	2.87		0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	0.0000010	<DL	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	4.00		0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	0.0718		0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	3.6		0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	0.00002	<DL	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	0.00034	<DL	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	0.000004	<DL	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	0.000945	<DL	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	0.00044	<DL	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0044	<T	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	0.000198	<DL	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	38		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676
Report Remarks : Exceeded Recommended Holding Time Prior to Analysis							
L2750391-19 TB_SW_20230502 Sampled By: Client on 03-MAY-23 Matrix: SW							
Physical Tests							
Color, True	<2.0		2.0	CU		04-MAY-23	R5948961
Conductivity (EC)	0.2	<DL	1.0	uS/cm		05-MAY-23	R5949337
Hardness (as CaCO3)	<0.51		0.51	mg/L		09-MAY-23	
pH	5.47		0.10	pH		05-MAY-23	R5949337
Total Suspended Solids	2.0	<DL	3.0	mg/L		05-MAY-23	R5949339
Total Dissolved Solids	<2	<W	10	mg/L		05-MAY-23	R5949341
Turbidity	0.14		0.10	NTU		05-MAY-23	R5949179
Anions and Nutrients							
Acidity (as CaCO3)	0.8	<DL	2.0	mg/L		08-MAY-23	R5949737
Alkalinity, Total (as CaCO3)	1.2	<DL	2.0	mg/L		05-MAY-23	R5949337

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-19 TB_SW_20230502 Sampled By: Client on 03-MAY-23 Matrix: SW							
Anions and Nutrients							
Ammonia, Total (as N)	<0.002	<W	0.0050	mg/L		10-MAY-23	R5950496
Chloride (Cl)	0.16		0.10	mg/L	04-MAY-23	05-MAY-23	R5949345
Fluoride (F)	<0.020		0.020	mg/L	04-MAY-23	05-MAY-23	R5949345
Nitrate (as N)	0.004	<DL	0.020	mg/L		05-MAY-23	R5949345
Nitrite (as N)	<0.001	<W	0.010	mg/L		05-MAY-23	R5949345
Total Kjeldahl Nitrogen	<0.050		0.050	mg/L	06-MAY-23	09-MAY-23	R5950058
Orthophosphate-Dissolved (as P)	<0.0010		0.0010	mg/L	04-MAY-23	08-MAY-23	R5949561
Sulfate (SO4)	0.30	<T	0.30	mg/L		05-MAY-23	R5949345
Cyanides							
Cyanide, Weak Acid Diss	<0.0001	<W	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Total	<0.0002	<W	0.0020	mg/L		10-MAY-23	R5950759
Cyanide, Free	<0.0001	<W	0.0020	mg/L		10-MAY-23	R5950759
Organic / Inorganic Carbon							
Dissolved Organic Carbon	<0.50		0.50	mg/L	03-MAY-23	09-MAY-23	R5950038
Total Organic Carbon	<0.50		0.50	mg/L		09-MAY-23	R5950037
Total Metals							
Aluminum (Al)-Total	<0.0002	<W	0.0050	mg/L		08-MAY-23	R5949796
Antimony (Sb)-Total	<0.000005	<W	0.00060	mg/L		08-MAY-23	R5949796
Arsenic (As)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Barium (Ba)-Total	0.00005	<DL	0.010	mg/L		08-MAY-23	R5949796
Beryllium (Be)-Total	<0.0000001	<W	0.0010	mg/L		08-MAY-23	R5949796
Bismuth (Bi)-Total	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949796
Boron (B)-Total	0.0060	<DL	0.050	mg/L		08-MAY-23	R5949796
Cadmium (Cd)-Total	<0.000001	<W	0.000017	mg/L		08-MAY-23	R5949796
Calcium (Ca)-Total	0.002	<DL	0.20	mg/L		08-MAY-23	R5949796
Cesium (Cs)-Total	<0.0000005	<W	0.000010	mg/L		08-MAY-23	R5949796
Chromium (Cr)-Total	0.00304		0.0010	mg/L		08-MAY-23	R5949796
Cobalt (Co)-Total	0.000025	<DL	0.00050	mg/L		08-MAY-23	R5949796
Copper (Cu)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Iron (Fe)-Total	0.0140	<DL	0.020	mg/L		08-MAY-23	R5949796
Lead (Pb)-Total	<0.00001	<W	0.000050	mg/L		08-MAY-23	R5949796
Lithium (Li)-Total	<0.0002	<W	0.050	mg/L		08-MAY-23	R5949796
Magnesium (Mg)-Total	0.0008	<DL	0.020	mg/L		08-MAY-23	R5949796
Manganese (Mn)-Total	<0.0002	<W	0.0010	mg/L		08-MAY-23	R5949796
Mercury (Hg)-Total	<0.000005	<W	0.0000050	mg/L		05-MAY-23	R5949317
Molybdenum (Mo)-Total	0.000010	<DL	0.0010	mg/L		08-MAY-23	R5949796
Nickel (Ni)-Total	0.00104	<DL	0.0020	mg/L		08-MAY-23	R5949796
Phosphorus (P)-Total	0.020	<DL	0.050	mg/L		08-MAY-23	R5949796
Potassium (K)-Total	<0.01	<W	0.50	mg/L		08-MAY-23	R5949796
Rubidium (Rb)-Total	0.000002	<DL	0.00020	mg/L		08-MAY-23	R5949796
Selenium (Se)-Total	<0.000005	<W	0.000050	mg/L		08-MAY-23	R5949796
Silicon (Si)-Total	0.004	<DL	0.10	mg/L		08-MAY-23	R5949796

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-19 TB_SW_20230502							
Sampled By: Client on 03-MAY-23							
Matrix: SW							
Total Metals							
Silver (Ag)-Total	<0.000001	<W	0.00010	mg/L		08-MAY-23	R5949796
Sodium (Na)-Total	<0.005	<W	0.10	mg/L		08-MAY-23	R5949796
Strontium (Sr)-Total	<0.000005	<W	0.0010	mg/L		08-MAY-23	R5949796
Sulfur (S)-Total	<0.2	<W	0.50	mg/L		08-MAY-23	R5949796
Tellurium (Te)-Total	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949796
Thallium (Tl)-Total	<0.000005	<W	0.00030	mg/L		08-MAY-23	R5949796
Thorium (Th)-Total	<0.00001	<W	0.00010	mg/L		08-MAY-23	R5949796
Tin (Sn)-Total	0.00002	<DL	0.0010	mg/L		08-MAY-23	R5949796
Titanium (Ti)-Total	<0.00001	<W	0.0020	mg/L		08-MAY-23	R5949796
Tungsten (W)-Total	<0.00001	<W	0.010	mg/L		08-MAY-23	R5949796
Uranium (U)-Total	<0.0000005	<W	0.0050	mg/L		08-MAY-23	R5949796
Vanadium (V)-Total	0.00005	<DL	0.0010	mg/L		08-MAY-23	R5949796
Zinc (Zn)-Total	<0.0005	<W	0.0030	mg/L		08-MAY-23	R5949796
Zirconium (Zr)-Total	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949796
Dissolved Metals							
Dissolved Metals Filtration Location	FIELD					05-MAY-23	R5949099
Aluminum (Al)-Dissolved	0.0016	<DL	0.0050	mg/L		08-MAY-23	R5949822
Antimony (Sb)-Dissolved	<0.000005	<W	0.00060	mg/L		08-MAY-23	R5949822
Arsenic (As)-Dissolved	0.0000022	<DL	0.0010	mg/L		08-MAY-23	R5949822
Barium (Ba)-Dissolved	0.000055	<DL	0.010	mg/L		08-MAY-23	R5949822
Beryllium (Be)-Dissolved	0.000002	<DL	0.0010	mg/L		08-MAY-23	R5949822
Bismuth (Bi)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Boron (B)-Dissolved	0.0060	<DL	0.050	mg/L		08-MAY-23	R5949822
Cadmium (Cd)-Dissolved	0.0000010	<DL	0.000017	mg/L		08-MAY-23	R5949822
Calcium (Ca)-Dissolved	<0.002	<W	0.20	mg/L		08-MAY-23	R5949822
Cesium (Cs)-Dissolved	<0.0000005	<W	0.000010	mg/L		08-MAY-23	R5949822
Chromium (Cr)-Dissolved	0.00014	<DL	0.0010	mg/L		08-MAY-23	R5949822
Cobalt (Co)-Dissolved	<0.000002	<W	0.00050	mg/L		08-MAY-23	R5949822
Copper (Cu)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Iron (Fe)-Dissolved	0.0005	<DL	0.020	mg/L		08-MAY-23	R5949822
Lead (Pb)-Dissolved	<0.00001	<W	0.000050	mg/L		08-MAY-23	R5949822
Lithium (Li)-Dissolved	<0.0002	<W	0.050	mg/L		08-MAY-23	R5949822
Magnesium (Mg)-Dissolved	<0.0005	<W	0.020	mg/L		08-MAY-23	R5949822
Manganese (Mn)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Mercury (Hg)-Dissolved	<0.000005	<W	0.0000050	mg/L		08-MAY-23	R5949458
Molybdenum (Mo)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Nickel (Ni)-Dissolved	<0.00002	<W	0.0020	mg/L		08-MAY-23	R5949822
Phosphorus (P)-Dissolved	<0.005	<W	0.050	mg/L		08-MAY-23	R5949822
Potassium (K)-Dissolved	<0.01	<W	0.50	mg/L		08-MAY-23	R5949822
Rubidium (Rb)-Dissolved	<0.000002	<W	0.00020	mg/L		08-MAY-23	R5949822
Selenium (Se)-Dissolved	0.000010	<DL	0.000050	mg/L		08-MAY-23	R5949822

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2750391-19 TB_SW_20230502 Sampled By: Client on 03-MAY-23 Matrix: SW							
Dissolved Metals							
Silicon (Si)-Dissolved	0.005	<DL	0.050	mg/L		08-MAY-23	R5949822
Silver (Ag)-Dissolved	<0.0000005	<W	0.00010	mg/L		08-MAY-23	R5949822
Sodium (Na)-Dissolved	<0.005	<W	0.10	mg/L		08-MAY-23	R5949822
Strontium (Sr)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Sulfur (S)-Dissolved	<0.2	<W	0.50	mg/L		08-MAY-23	R5949822
Tellurium (Te)-Dissolved	<0.00001	<W	0.0010	mg/L		08-MAY-23	R5949822
Thallium (Tl)-Dissolved	<0.000002	<W	0.00030	mg/L		08-MAY-23	R5949822
Thorium (Th)-Dissolved	<0.00001	<W	0.00010	mg/L		08-MAY-23	R5949822
Tin (Sn)-Dissolved	0.000010	<DL	0.0010	mg/L		08-MAY-23	R5949822
Titanium (Ti)-Dissolved	<0.00002	<W	0.0020	mg/L		08-MAY-23	R5949822
Tungsten (W)-Dissolved	<0.000002	<W	0.010	mg/L		08-MAY-23	R5949822
Uranium (U)-Dissolved	<0.0000005	<W	0.0050	mg/L		08-MAY-23	R5949822
Vanadium (V)-Dissolved	<0.00002	<W	0.0010	mg/L		08-MAY-23	R5949822
Zinc (Zn)-Dissolved	0.0004	<DL	0.0030	mg/L		08-MAY-23	R5949822
Zirconium (Zr)-Dissolved	<0.000002	<W	0.0010	mg/L		08-MAY-23	R5949822
Aggregate Organics							
Biochemical Oxygen Demand	<2.0		2.0	mg/L		04-MAY-23	R5949839
Chemical Oxygen Demand	<10		10	mg/L	06-MAY-23	08-MAY-23	R5949616
Oil and Grease, Total	<0.2	<W	1.0	mg/L	11-MAY-23	11-MAY-23	R5950676

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L2750391-10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2750391-10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Potassium (K)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2750391-10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2750391-10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -7, -8, -9
Matrix Spike	Sulfur (S)-Dissolved	MS-B	L2750391-1, -2, -3, -4, -5, -6
Matrix Spike	Total Organic Carbon	MS-B	L2750391-1, -10, -11, -12, -13, -14, -15, -16, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Total Organic Carbon	MS-B	L2750391-17, -18, -19

Sample Parameter Qualifier key listed:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACY-MISA-TB	Effluent	Acidity (as CaCO ₃)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-MISA-TB	Effluent	Alkalinity, Total (as CaCO ₃)	APHA 2320 B-Auto-Pot. Titration
This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.			
BOD-TB	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B- BIOCHEMICAL OXYGEN DEMAND
All forms of biochemical oxygen demand (BOD) are determined by diluting and incubating a sample for a specified time period, and measuring the oxygen depletion using a dissolved oxygen meter. Dissolved BOD (SOLUBLE) is determined by filtering the sample through a glass fibre filter prior to dilution. Carbonaceous BOD (CBOD) is determined by adding a nitrification inhibitor to the diluted sample prior to incubation.			
CL-L-IC-N-TB	Water	Chloride in Water by IC (Low Level)	EPA 300.1 (mod)
Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.			
CN-FREE-MISA-CFA-WT	Effluent	Free Cyanide by Continuous Flow Analyzer	ASTM D7237-10 (modified)
This analysis is carried out using procedures adapted from ASTM Method 7237 "Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection". Free cyanide is determined by in-line gas diffusion at pH 6 with final determination by colourimetric analysis.			
CN-T-MISA-CFA-WT	Effluent	Total Cyanide by CFA	ISO 14403-2:2012 (modified)
This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by colourimetric analysis.			
Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.			
CN-WAD-MISA-CFA-WT	Effluent	Weak Acid Dissociable Cyanide by CFA	APHA 4500-CN CYANIDE (modified)
This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.			
COD-TB	Water	Chemical Oxygen Demand	APHA 5220D

Reference Information

This analysis is carried out using procedures adapted from APHA Method 5220 "Chemical Oxygen Demand (COD)". Chemical oxygen demand is determined using the closed reflux colourimetric method.

COLOUR-TB	Water	Colour, True	APHA 2120 C
-----------	-------	--------------	-------------

True Colour in aqueous matrices is analyzed using colourimetric detection. This is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using a platinum-cobalt standard.

DO-CLIENT-TB	Water	Dissolved Oxygen, Client Supplied	Result supplied by Client
--------------	-------	-----------------------------------	---------------------------

DOC-WT	Effluent	Dissolved Organic Carbon for MISA	APHA 5310 B-Instrumental
--------	----------	-----------------------------------	--------------------------

EC-MISA-TB	Effluent	Conductivity (EC)	APHA 2510 B-ELECTRODE
------------	----------	-------------------	-----------------------

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

F-IC-N-TB	Water	Fluoride in Water by IC	EPA 300.1 (mod)
-----------	-------	-------------------------	-----------------

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

HARDNESS-CALC-TB	Effluent	Hardness (as CaCO ₃)	CALCULATION
------------------	----------	----------------------------------	-------------

HG-DIS-WT	Effluent	Mercury (Hg)-Dissolved for MISA	SW846 7470A
-----------	----------	---------------------------------	-------------

HG-TOT-WT	Effluent	Mercury (Hg)-Total for MISA	SW846 7470A
-----------	----------	-----------------------------	-------------

MET-D-MISA-TB	Effluent	Dissolved Metals in Water (MISA)	APHA 3030B/6020B (mod)
---------------	----------	----------------------------------	------------------------

Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

MET-T-MISA-TB	Effluent	Total Metals in Water (MISA)	EPA 200.2/6020B (mod)
---------------	----------	------------------------------	-----------------------

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

NH3-MISA-F-TB	Effluent	Ammonia by Discrete Analyzer	catnr 157/158 062217/99321057 (modified)
---------------	----------	------------------------------	--

Ammonia is determined by Flow-injection analysis with fluorescence detection

NH3-UNION-CALC-TB	Effluent	Un-ionized ammonia	Calculation
-------------------	----------	--------------------	-------------

NO2-MISA-IC-TB	Effluent	Nitrite in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-MISA-IC-TB	Effluent	Nitrate in Water by IC	EPA 300.1 (mod)
----------------	----------	------------------------	-----------------

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT	Effluent	Oil and Grease, Total for MISA	APHA 5520 B-Hexane Gravimetric
------------	----------	--------------------------------	--------------------------------

PH-CLIENT-TB	Water	pH	Result supplied by Client
--------------	-------	----	---------------------------

PH-MISA-TB	Effluent	pH	APHA 4500-H-ELECTRODE
------------	----------	----	-----------------------

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

PO4-DO-COL-TB	Water	Dissolved Orthophosphate	APHA 4500-P B, F, G (modified)
---------------	-------	--------------------------	--------------------------------

Phosphorus in aqueous matrices is analyzed using discrete Analyzer with colourimetric detection.

RADIO-RADIUM226-SR	Water	Radium 226	CANMET 1986
--------------------	-------	------------	-------------

Reference Information

SO4-MISA-IC-TB	Effluent	Sulfate in Water by IC	EPA 300.1 (mod)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
TDS-MISA-TB	Effluent	Total Dissolved Solids	APHA 2540 C (modified)
Aqueous matrices are analyzed using gravimetry and evaporation			
TEMP-CLIENT-TB	Water	Temperature	Result supplied by Client
TKN-F-TB	Water	TKN in Water by Fluorescence	catnr 157/158, 062818/99334821
Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection			
TOC-WT	Water	Total Organic Carbon	APHA 5310B
Sample is injected into a heated reaction chamber which is packed with an oxidative catalyst. The water is vaporized and the organic carbon is oxidized to carbon dioxide. The carbon dioxide is transported in a carrier gas and is measured by a non-dispersive infrared detector.			
TSS-MISA-TB	Effluent	Total Suspended Solids	APHA 2540 D (modified)
Aqueous matrices are analyzed using gravimetry			
TURBIDITY-TB	Water	Turbidity	APHA 2130 B-Nephelometer
Aqueous matrices are analyzed using nephelometry with the light scatter measured at a 90° angle.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SR	Saskatchewan Research Council - Saskatoon, Saskatchewan, Can
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 1 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BOD-TB								
	Water							
Batch	R5949839							
WG3783748-3	DUP	L2750391-1						
Biochemical Oxygen Demand		<2.0	<2.0	RPD-NA	mg/L	N/A	30	04-MAY-23
WG3783748-2	LCS							
Biochemical Oxygen Demand			98.8		%		85-115	04-MAY-23
WG3783748-1	MB							
Biochemical Oxygen Demand			<2.0		mg/L		2	04-MAY-23
CL-L-IC-N-TB								
	Water							
Batch	R5949345							
WG3783749-3	DUP	L2750391-1						
Chloride (Cl)		13.1	13.2		mg/L	0.9	20	05-MAY-23
WG3783749-2	LCS							
Chloride (Cl)			102.0		%		90-110	05-MAY-23
WG3783749-1	MB							
Chloride (Cl)			<0.10		mg/L		0.1	05-MAY-23
WG3783749-4	MS	L2750391-2						
Chloride (Cl)			111.1		%		75-125	05-MAY-23
COD-TB								
	Water							
Batch	R5949616							
WG3783878-3	DUP	L2750391-1						
Chemical Oxygen Demand		51	59		mg/L	13	20	08-MAY-23
WG3783878-2	LCS							
Chemical Oxygen Demand			92.3		%		85-115	08-MAY-23
WG3783878-1	MB							
Chemical Oxygen Demand			<10		mg/L		10	08-MAY-23
WG3783878-4	MS	L2750391-2						
Chemical Oxygen Demand			89.5		%		75-125	08-MAY-23
COLOUR-TB								
	Water							
Batch	R5948961							
WG3783751-3	DUP	L2750391-1						
Color, True		103	105		CU	2.1	20	04-MAY-23
WG3783751-2	LCS							
Color, True			104.1		%		85-115	04-MAY-23
WG3783751-1	MB							
Color, True			<2.0		CU		2	04-MAY-23
F-IC-N-TB								
	Water							



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 2 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F-IC-N-TB								
	Water							
Batch	R5949345							
WG3783749-3	DUP	L2750391-1						
Fluoride (F)		0.035	0.035		mg/L	0.6	20	05-MAY-23
WG3783749-2	LCS							
Fluoride (F)			105.2		%		90-110	05-MAY-23
WG3783749-1	MB							
Fluoride (F)			<0.020		mg/L		0.02	05-MAY-23
WG3783749-4	MS	L2750391-2						
Fluoride (F)			122.4		%		75-125	05-MAY-23
PO4-DO-COL-TB								
	Water							
Batch	R5949561							
WG3783750-3	DUP	L2750391-1						
Orthophosphate-Dissolved (as P)		0.0019	0.0017		mg/L	12	20	08-MAY-23
WG3783750-2	LCS							
Orthophosphate-Dissolved (as P)			95.4		%		80-120	08-MAY-23
WG3783750-1	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	08-MAY-23
WG3783750-4	MS	L2750391-2						
Orthophosphate-Dissolved (as P)			94.2		%		70-130	08-MAY-23
TKN-F-TB								
	Water							
Batch	R5950058							
WG3783876-3	DUP	L2750391-1						
Total Kjeldahl Nitrogen		0.885	1.05		mg/L	17	20	09-MAY-23
WG3783876-2	LCS							
Total Kjeldahl Nitrogen			111.0		%		75-125	09-MAY-23
WG3783876-1	MB							
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	09-MAY-23
WG3783876-4	MS	L2750391-2						
Total Kjeldahl Nitrogen			126.1		%		70-130	09-MAY-23
TOC-WT								
	Water							
Batch	R5950036							
WG3783936-3	DUP	L2750349-1						
Total Organic Carbon		9.21	10.3		mg/L	11	20	09-MAY-23
WG3783936-2	LCS							
Total Organic Carbon			94.0		%		80-120	09-MAY-23
WG3783936-1	MB							
Total Organic Carbon			<0.50		mg/L		0.5	09-MAY-23
WG3783936-4	MS	L2750349-1						



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 3 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TOC-WT								
	Water							
Batch	R5950036							
WG3783936-4 MS		L2750349-1						
Total Organic Carbon			N/A	MS-B	%		-	09-MAY-23
Batch	R5950037							
WG3783937-3 DUP		L2750391-17						
Total Organic Carbon		15.5	16.7		mg/L	7.7	20	09-MAY-23
WG3783937-2 LCS								
Total Organic Carbon			97.9		%		80-120	09-MAY-23
WG3783937-1 MB								
Total Organic Carbon			<0.50		mg/L		0.5	09-MAY-23
WG3783937-4 MS		L2750391-17						
Total Organic Carbon			N/A	MS-B	%		-	09-MAY-23
TURBIDITY-TB								
	Water							
Batch	R5949179							
WG3783812-3 DUP		L2750391-3						
Turbidity		18.7	19.0		NTU	1.6	15	05-MAY-23
WG3783812-2 LCS								
Turbidity			94.5		%		85-115	05-MAY-23
WG3783812-1 MB								
Turbidity			<0.10		NTU		0.1	05-MAY-23
ACY-MISA-TB								
	Effluent							
Batch	R5949737							
WG3783752-3 DUP		L2750391-1						
Acidity (as CaCO3)		1.4	1.4	RPD-NA	mg/L	N/A	20	08-MAY-23
WG3783752-2 LCS								
Acidity (as CaCO3)			114.1		%		85-115	08-MAY-23
WG3783752-1 MB								
Acidity (as CaCO3)			2.0		mg/L		3	08-MAY-23
ALK-MISA-TB								
	Effluent							
Batch	R5949337							
WG3783753-3 DUP		L2750391-1						
Alkalinity, Total (as CaCO3)		77.4	76.6		mg/L	1.0	20	05-MAY-23
Alkalinity, Phenolphthalein		<0.2	<0.2	RPD-NA	mg/L	N/A	25	05-MAY-23
WG3783753-2 LCS								
Alkalinity, Total (as CaCO3)			99.7		%		85-115	05-MAY-23
WG3783753-1 MB								
Alkalinity, Total (as CaCO3)			<0.2		mg/L		2	05-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 4 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ALK-MISA-TB Effluent								
Batch	R5949337							
WG3783753-1 MB	Alkalinity, Phenolphthalein		<0.2		mg/L		2	05-MAY-23
CN-FREE-MISA-CFA-WT Effluent								
Batch	R5950759							
WG3784121-3 DUP	Cyanide, Free	L2750359-1 0.0003	0.0003	RPD-NA	mg/L	N/A	20	10-MAY-23
WG3784121-7 DUP	Cyanide, Free	L2750391-11 0.0003	0.0002	RPD-NA	mg/L	N/A	20	10-MAY-23
WG3784121-2 LCS	Cyanide, Free		96.0		%		80-120	10-MAY-23
WG3784121-6 LCS	Cyanide, Free		92.6		%		80-120	10-MAY-23
WG3784121-1 MB	Cyanide, Free		<0.0001		mg/L		0.002	10-MAY-23
WG3784121-5 MB	Cyanide, Free		0.0003		mg/L		0.002	10-MAY-23
WG3784121-4 MS	Cyanide, Free	L2750359-1	96.5		%		75-125	10-MAY-23
WG3784121-8 MS	Cyanide, Free	L2750391-11	93.2		%		75-125	10-MAY-23
CN-T-MISA-CFA-WT Effluent								
Batch	R5950759							
WG3784121-3 DUP	Cyanide, Total	L2750359-1 0.0006	0.0006	RPD-NA	mg/L	N/A	20	10-MAY-23
WG3784121-7 DUP	Cyanide, Total	L2750391-11 0.0004	0.0004	RPD-NA	mg/L	N/A	20	10-MAY-23
WG3784121-2 LCS	Cyanide, Total		85.3		%		80-120	10-MAY-23
WG3784121-6 LCS	Cyanide, Total		84.5		%		80-120	10-MAY-23
WG3784121-1 MB	Cyanide, Total		<0.0002		mg/L		0.002	10-MAY-23
WG3784121-5 MB	Cyanide, Total		0.0002		mg/L		0.002	10-MAY-23
WG3784121-4 MS	Cyanide, Total	L2750359-1	84.2		%		75-125	10-MAY-23
WG3784121-8 MS		L2750391-11						



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 5 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-T-MISA-CFA-WT Effluent								
Batch R5950759								
WG3784121-8	MS	L2750391-11						
	Cyanide, Total		84.1		%		75-125	10-MAY-23
CN-WAD-MISA-CFA-WT Effluent								
Batch R5950759								
WG3784121-7	DUP	L2750391-11						
	Cyanide, Weak Acid Diss	0.0004	0.0006	RPD-NA	mg/L	N/A	20	10-MAY-23
WG3784121-2	LCS		91.4		%		80-120	10-MAY-23
	Cyanide, Weak Acid Diss							
WG3784121-6	LCS		89.5		%		80-120	10-MAY-23
	Cyanide, Weak Acid Diss							
WG3784121-1	MB		0.0004		mg/L		0.002	10-MAY-23
	Cyanide, Weak Acid Diss							
WG3784121-5	MB		0.0003		mg/L		0.002	10-MAY-23
	Cyanide, Weak Acid Diss							
WG3784121-8	MS	L2750391-11	87.8		%		75-125	10-MAY-23
	Cyanide, Weak Acid Diss							
DOC-WT Effluent								
Batch R5950038								
WG3783948-3	DUP	L2750391-7						
	Dissolved Organic Carbon	<0.50	<0.50	RPD-NA	mg/L	N/A	25	09-MAY-23
WG3783948-2	LCS		97.8		%		70-130	09-MAY-23
	Dissolved Organic Carbon							
WG3783948-1	MB		<0.50		mg/L		0.5	09-MAY-23
	Dissolved Organic Carbon							
Batch R5950937								
WG3784038-3	DUP	L2750391-1						
	Dissolved Organic Carbon	17.9	19.1		mg/L	6.7	25	11-MAY-23
WG3784038-2	LCS		98.3		%		70-130	11-MAY-23
	Dissolved Organic Carbon							
WG3784038-1	MB		<0.50		mg/L		0.5	11-MAY-23
	Dissolved Organic Carbon							
EC-MISA-TB Effluent								
Batch R5949337								
WG3783753-3	DUP	L2750391-1						
	Conductivity (EC)	196	193		uS/cm	1.3	10	05-MAY-23
WG3783753-2	LCS							



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 6 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EC-MISA-TB	Effluent							
Batch R5949337								
WG3783753-2 LCS								
Conductivity (EC)			100.7		%		90-110	05-MAY-23
WG3783753-1 MB								
Conductivity (EC)			1.2		uS/cm		2	05-MAY-23
HG-DIS-WT	Effluent							
Batch R5949458								
WG3783856-3 DUP		L2750391-1						
Mercury (Hg)-Dissolved		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	08-MAY-23
WG3783856-2 LCS								
Mercury (Hg)-Dissolved			86.0		%		80-120	08-MAY-23
WG3783856-1 MB								
Mercury (Hg)-Dissolved			<0.000005		mg/L		0.000005	08-MAY-23
WG3783856-4 MS		L2750391-2						
Mercury (Hg)-Dissolved			98.0		%		70-130	08-MAY-23
HG-TOT-WT	Effluent							
Batch R5949316								
WG3783854-3 DUP		L2750359-1						
Mercury (Hg)-Total		0.000010	0.000010		mg/L	4.0	20	05-MAY-23
WG3783854-2 LCS								
Mercury (Hg)-Total			98.7		%		80-120	05-MAY-23
WG3783854-1 MB								
Mercury (Hg)-Total			<0.000005		mg/L		0.000005	05-MAY-23
WG3783854-4 MS		L2750359-2						
Mercury (Hg)-Total			100.0		%		70-130	05-MAY-23
Batch R5949317								
WG3783855-3 DUP		L2750391-11						
Mercury (Hg)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	05-MAY-23
WG3783855-2 LCS								
Mercury (Hg)-Total			98.6		%		80-120	05-MAY-23
WG3783855-1 MB								
Mercury (Hg)-Total			<0.000005		mg/L		0.000005	05-MAY-23
WG3783855-4 MS		L2750391-12						
Mercury (Hg)-Total			98.3		%		70-130	05-MAY-23

MET-D-MISA-TB Effluent



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 7 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5949720							
WG3783709-2	LCS							
Aluminum (Al)-Dissolved			104.0		%		80-120	05-MAY-23
Antimony (Sb)-Dissolved			104.0		%		80-120	05-MAY-23
Arsenic (As)-Dissolved			107.3		%		80-120	05-MAY-23
Barium (Ba)-Dissolved			93.5		%		80-120	05-MAY-23
Beryllium (Be)-Dissolved			96.8		%		80-120	05-MAY-23
Bismuth (Bi)-Dissolved			99.6		%		80-120	05-MAY-23
Boron (B)-Dissolved			80.1		%		80-120	05-MAY-23
Cadmium (Cd)-Dissolved			95.3		%		80-120	05-MAY-23
Calcium (Ca)-Dissolved			93.4		%		80-120	05-MAY-23
Cesium (Cs)-Dissolved			97.9		%		80-120	05-MAY-23
Chromium (Cr)-Dissolved			101.3		%		80-120	05-MAY-23
Cobalt (Co)-Dissolved			101.9		%		80-120	05-MAY-23
Copper (Cu)-Dissolved			101.6		%		80-120	05-MAY-23
Iron (Fe)-Dissolved			95.6		%		80-120	05-MAY-23
Lead (Pb)-Dissolved			97.5		%		80-120	05-MAY-23
Lithium (Li)-Dissolved			89.1		%		80-120	05-MAY-23
Magnesium (Mg)-Dissolved			112.4		%		80-120	05-MAY-23
Manganese (Mn)-Dissolved			103.7		%		80-120	05-MAY-23
Molybdenum (Mo)-Dissolved			94.1		%		80-120	05-MAY-23
Nickel (Ni)-Dissolved			103.2		%		80-120	05-MAY-23
Phosphorus (P)-Dissolved			101.0		%		70-130	05-MAY-23
Potassium (K)-Dissolved			110.6		%		80-120	05-MAY-23
Rubidium (Rb)-Dissolved			102.8		%		80-120	05-MAY-23
Selenium (Se)-Dissolved			101.9		%		80-120	05-MAY-23
Silicon (Si)-Dissolved			107.7		%		60-140	05-MAY-23
Silver (Ag)-Dissolved			91.9		%		80-120	05-MAY-23
Sodium (Na)-Dissolved			118.8		%		80-120	05-MAY-23
Strontium (Sr)-Dissolved			93.4		%		80-120	05-MAY-23
Sulfur (S)-Dissolved			86.9		%		80-120	05-MAY-23
Tellurium (Te)-Dissolved			96.6		%		80-120	05-MAY-23
Thallium (Tl)-Dissolved			99.0		%		80-120	05-MAY-23
Thorium (Th)-Dissolved			97.3		%		80-120	05-MAY-23
Tin (Sn)-Dissolved			96.2		%		80-120	05-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 8 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5949720							
WG3783709-2	LCS							
Titanium (Ti)-Dissolved			99.9		%		80-120	05-MAY-23
Tungsten (W)-Dissolved			95.7		%		80-120	05-MAY-23
Uranium (U)-Dissolved			96.6		%		80-120	05-MAY-23
Vanadium (V)-Dissolved			103.9		%		80-120	05-MAY-23
Zinc (Zn)-Dissolved			98.8		%		80-120	05-MAY-23
Zirconium (Zr)-Dissolved			92.2		%		80-120	05-MAY-23
WG3783709-1	MB							
Aluminum (Al)-Dissolved			<0.0002		mg/L		0.005	05-MAY-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0006	05-MAY-23
Arsenic (As)-Dissolved			0.0000064		mg/L		0.001	05-MAY-23
Barium (Ba)-Dissolved			0.000015		mg/L		0.01	05-MAY-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.001	05-MAY-23
Bismuth (Bi)-Dissolved			<0.000002		mg/L		0.001	05-MAY-23
Boron (B)-Dissolved			<0.0005		mg/L		0.05	05-MAY-23
Cadmium (Cd)-Dissolved			<0.0000005		mg/L		0.000017	05-MAY-23
Calcium (Ca)-Dissolved			0.010		mg/L		0.2	05-MAY-23
Cesium (Cs)-Dissolved			<0.0000005		mg/L		0.00001	05-MAY-23
Chromium (Cr)-Dissolved			<0.00001		mg/L		0.001	05-MAY-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0005	05-MAY-23
Copper (Cu)-Dissolved			<0.00002		mg/L		0.001	05-MAY-23
Iron (Fe)-Dissolved			0.0025		mg/L		0.02	05-MAY-23
Lead (Pb)-Dissolved			<0.00001		mg/L		0.00005	05-MAY-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.05	05-MAY-23
Magnesium (Mg)-Dissolved			<0.0005		mg/L		0.02	05-MAY-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.001	05-MAY-23
Molybdenum (Mo)-Dissolved			<0.000002		mg/L		0.001	05-MAY-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.002	05-MAY-23
Phosphorus (P)-Dissolved			<0.005		mg/L		0.05	05-MAY-23
Potassium (K)-Dissolved			<0.01		mg/L		0.5	05-MAY-23
Rubidium (Rb)-Dissolved			<0.000002		mg/L		0.0002	05-MAY-23
Selenium (Se)-Dissolved			<0.000005		mg/L		0.00005	05-MAY-23
Silicon (Si)-Dissolved			<0.005		mg/L		0.05	05-MAY-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.0001	05-MAY-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.1	05-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 9 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5949720							
WG3783709-1	MB							
Strontium (Sr)-Dissolved			<0.00002		mg/L		0.001	05-MAY-23
Sulfur (S)-Dissolved			<0.2		mg/L		0.5	05-MAY-23
Tellurium (Te)-Dissolved			<0.00001		mg/L		0.001	05-MAY-23
Thallium (Tl)-Dissolved			<0.000002		mg/L		0.0003	05-MAY-23
Thorium (Th)-Dissolved			<0.00001		mg/L		0.0001	05-MAY-23
Tin (Sn)-Dissolved			<0.000005		mg/L		0.001	05-MAY-23
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.002	05-MAY-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.01	05-MAY-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.005	05-MAY-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.001	05-MAY-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.003	05-MAY-23
Zirconium (Zr)-Dissolved			<0.000002		mg/L		0.001	05-MAY-23
WG3783709-4	MS	L2750351-1						
Aluminum (Al)-Dissolved			113.5		%		70-130	05-MAY-23
Antimony (Sb)-Dissolved			107.6		%		70-130	05-MAY-23
Arsenic (As)-Dissolved			118.2		%		70-130	05-MAY-23
Barium (Ba)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Beryllium (Be)-Dissolved			108.6		%		70-130	05-MAY-23
Bismuth (Bi)-Dissolved			94.5		%		70-130	05-MAY-23
Boron (B)-Dissolved			94.9		%		70-130	05-MAY-23
Cadmium (Cd)-Dissolved			108.4		%		70-130	05-MAY-23
Calcium (Ca)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Cesium (Cs)-Dissolved			108.5		%		70-130	05-MAY-23
Chromium (Cr)-Dissolved			113.6		%		70-130	05-MAY-23
Cobalt (Co)-Dissolved			110.2		%		70-130	05-MAY-23
Copper (Cu)-Dissolved			106.3		%		70-130	05-MAY-23
Iron (Fe)-Dissolved			101.4		%		70-130	05-MAY-23
Lead (Pb)-Dissolved			101.8		%		70-130	05-MAY-23
Lithium (Li)-Dissolved			105.4		%		70-130	05-MAY-23
Magnesium (Mg)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Manganese (Mn)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Molybdenum (Mo)-Dissolved			110.5		%		70-130	05-MAY-23
Nickel (Ni)-Dissolved			109.8		%		70-130	05-MAY-23
Phosphorus (P)-Dissolved			117.7		%		70-130	05-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 10 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5949720							
WG3783709-4	MS	L2750351-1						
Potassium (K)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Rubidium (Rb)-Dissolved			107.9		%		70-130	05-MAY-23
Selenium (Se)-Dissolved			121.9		%		70-130	05-MAY-23
Silicon (Si)-Dissolved			99.2		%		70-130	05-MAY-23
Silver (Ag)-Dissolved			72.2		%		70-130	05-MAY-23
Sodium (Na)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Strontium (Sr)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Sulfur (S)-Dissolved			N/A	MS-B	%		-	05-MAY-23
Tellurium (Te)-Dissolved			115.1		%		70-130	05-MAY-23
Thallium (Tl)-Dissolved			98.7		%		70-130	05-MAY-23
Thorium (Th)-Dissolved			107.5		%		70-130	05-MAY-23
Tin (Sn)-Dissolved			107.8		%		70-130	05-MAY-23
Titanium (Ti)-Dissolved			115.1		%		70-130	05-MAY-23
Tungsten (W)-Dissolved			107.3		%		70-130	05-MAY-23
Uranium (U)-Dissolved			102.2		%		70-130	05-MAY-23
Vanadium (V)-Dissolved			115.4		%		70-130	05-MAY-23
Zinc (Zn)-Dissolved			110.3		%		70-130	05-MAY-23
Zirconium (Zr)-Dissolved			107.2		%		70-130	05-MAY-23
Batch	R5949822							
WG3783709-7	DUP	L2750391-17						
Aluminum (Al)-Dissolved		0.0082	0.0088		mg/L	8.3	20	08-MAY-23
Antimony (Sb)-Dissolved		0.00336	0.00326		mg/L	2.9	20	08-MAY-23
Arsenic (As)-Dissolved		0.000800	0.000814	RPD-NA	mg/L	N/A	20	08-MAY-23
Barium (Ba)-Dissolved		0.0249	0.0248		mg/L	0.4	20	08-MAY-23
Beryllium (Be)-Dissolved		0.000008	0.000008	RPD-NA	mg/L	N/A	20	08-MAY-23
Bismuth (Bi)-Dissolved		0.000016	<0.000002	RPD-NA	mg/L	N/A	20	08-MAY-23
Boron (B)-Dissolved		0.0415	0.0425	RPD-NA	mg/L	N/A	20	08-MAY-23
Cadmium (Cd)-Dissolved		0.0000085	0.0000095	RPD-NA	mg/L	N/A	20	08-MAY-23
Calcium (Ca)-Dissolved		66.5	66.0		mg/L	0.7	20	08-MAY-23
Cesium (Cs)-Dissolved		0.000102	0.0000990		mg/L	2.9	20	08-MAY-23
Chromium (Cr)-Dissolved		0.00011	0.00012	RPD-NA	mg/L	N/A	20	08-MAY-23
Cobalt (Co)-Dissolved		0.000478	0.000488	RPD-NA	mg/L	N/A	20	08-MAY-23
Copper (Cu)-Dissolved		0.00132	0.00138		mg/L	4.6	20	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 11 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5949822							
WG3783709-7	DUP	L2750391-17						
Iron (Fe)-Dissolved		0.0935	0.0935		mg/L	0.1	20	08-MAY-23
Lead (Pb)-Dissolved		0.00003	0.00002	RPD-NA	mg/L	N/A	20	08-MAY-23
Lithium (Li)-Dissolved		0.0096	0.0102	RPD-NA	mg/L	N/A	20	08-MAY-23
Magnesium (Mg)-Dissolved		18.6	18.8		mg/L	0.8	20	08-MAY-23
Manganese (Mn)-Dissolved		0.0241	0.0242		mg/L	0.5	20	08-MAY-23
Molybdenum (Mo)-Dissolved		0.00364	0.00362		mg/L	0.5	20	08-MAY-23
Nickel (Ni)-Dissolved		0.00152	0.00158	RPD-NA	mg/L	N/A	20	08-MAY-23
Phosphorus (P)-Dissolved		<0.005	<0.005	RPD-NA	mg/L	N/A	20	08-MAY-23
Potassium (K)-Dissolved		13.2	13.7		mg/L	4.2	20	08-MAY-23
Rubidium (Rb)-Dissolved		0.00648	0.00643		mg/L	0.8	20	08-MAY-23
Selenium (Se)-Dissolved		0.000290	0.000275		mg/L	6.1	20	08-MAY-23
Silicon (Si)-Dissolved		1.77	1.75		mg/L	0.9	20	08-MAY-23
Silver (Ag)-Dissolved		0.0000020	0.0000010	RPD-NA	mg/L	N/A	20	08-MAY-23
Sodium (Na)-Dissolved		32.9	33.5		mg/L	1.7	20	08-MAY-23
Strontium (Sr)-Dissolved		0.293	0.283		mg/L	3.5	20	08-MAY-23
Sulfur (S)-Dissolved		55.4	56.2		mg/L	1.4	20	08-MAY-23
Tellurium (Te)-Dissolved		0.00001	0.00002	RPD-NA	mg/L	N/A	20	08-MAY-23
Thallium (Tl)-Dissolved		0.000010	0.000004	RPD-NA	mg/L	N/A	20	08-MAY-23
Thorium (Th)-Dissolved		0.00002	0.00002	RPD-NA	mg/L	N/A	20	08-MAY-23
Tin (Sn)-Dissolved		0.000005	<0.000005	RPD-NA	mg/L	N/A	20	08-MAY-23
Titanium (Ti)-Dissolved		0.00034	0.00038	RPD-NA	mg/L	N/A	20	08-MAY-23
Tungsten (W)-Dissolved		0.000020	0.000024	RPD-NA	mg/L	N/A	20	08-MAY-23
Uranium (U)-Dissolved		0.00125	0.00121	RPD-NA	mg/L	N/A	20	08-MAY-23
Vanadium (V)-Dissolved		0.00046	0.00046	RPD-NA	mg/L	N/A	20	08-MAY-23
Zinc (Zn)-Dissolved		0.0044	0.0046		mg/L	2.6	20	08-MAY-23
Zirconium (Zr)-Dissolved		0.000210	0.000206	RPD-NA	mg/L	N/A	20	08-MAY-23
WG3783709-6	LCS							
Aluminum (Al)-Dissolved			98.1		%		80-120	08-MAY-23
Antimony (Sb)-Dissolved			102.0		%		80-120	08-MAY-23
Arsenic (As)-Dissolved			101.4		%		80-120	08-MAY-23
Barium (Ba)-Dissolved			100.7		%		80-120	08-MAY-23
Beryllium (Be)-Dissolved			96.5		%		80-120	08-MAY-23
Bismuth (Bi)-Dissolved			99.1		%		80-120	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 12 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5949822							
WG3783709-6	LCS							
Boron (B)-Dissolved			91.2		%		80-120	08-MAY-23
Cadmium (Cd)-Dissolved			99.8		%		80-120	08-MAY-23
Calcium (Ca)-Dissolved			101.1		%		80-120	08-MAY-23
Cesium (Cs)-Dissolved			100.8		%		80-120	08-MAY-23
Chromium (Cr)-Dissolved			98.0		%		80-120	08-MAY-23
Cobalt (Co)-Dissolved			96.4		%		80-120	08-MAY-23
Copper (Cu)-Dissolved			95.1		%		80-120	08-MAY-23
Iron (Fe)-Dissolved			92.6		%		80-120	08-MAY-23
Lead (Pb)-Dissolved			99.6		%		80-120	08-MAY-23
Lithium (Li)-Dissolved			98.4		%		80-120	08-MAY-23
Magnesium (Mg)-Dissolved			98.7		%		80-120	08-MAY-23
Manganese (Mn)-Dissolved			97.0		%		80-120	08-MAY-23
Molybdenum (Mo)-Dissolved			98.1		%		80-120	08-MAY-23
Nickel (Ni)-Dissolved			95.3		%		80-120	08-MAY-23
Phosphorus (P)-Dissolved			101.6		%		70-130	08-MAY-23
Potassium (K)-Dissolved			94.2		%		80-120	08-MAY-23
Rubidium (Rb)-Dissolved			98.7		%		80-120	08-MAY-23
Selenium (Se)-Dissolved			94.5		%		80-120	08-MAY-23
Silicon (Si)-Dissolved			99.4		%		60-140	08-MAY-23
Silver (Ag)-Dissolved			90.0		%		80-120	08-MAY-23
Sodium (Na)-Dissolved			105.2		%		80-120	08-MAY-23
Strontium (Sr)-Dissolved			99.1		%		80-120	08-MAY-23
Sulfur (S)-Dissolved			94.2		%		80-120	08-MAY-23
Tellurium (Te)-Dissolved			98.9		%		80-120	08-MAY-23
Thallium (Tl)-Dissolved			98.8		%		80-120	08-MAY-23
Thorium (Th)-Dissolved			99.9		%		80-120	08-MAY-23
Tin (Sn)-Dissolved			96.9		%		80-120	08-MAY-23
Titanium (Ti)-Dissolved			94.0		%		80-120	08-MAY-23
Tungsten (W)-Dissolved			100.4		%		80-120	08-MAY-23
Uranium (U)-Dissolved			100.5		%		80-120	08-MAY-23
Vanadium (V)-Dissolved			97.7		%		80-120	08-MAY-23
Zinc (Zn)-Dissolved			96.0		%		80-120	08-MAY-23
Zirconium (Zr)-Dissolved			96.1		%		80-120	08-MAY-23

WG3783709-5 MB



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 13 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5949822							
WG3783709-5	MB							
Aluminum (Al)-Dissolved			0.0004		mg/L		0.005	08-MAY-23
Antimony (Sb)-Dissolved			<0.000005		mg/L		0.0006	08-MAY-23
Arsenic (As)-Dissolved			0.0000020		mg/L		0.001	08-MAY-23
Barium (Ba)-Dissolved			<0.000005		mg/L		0.01	08-MAY-23
Beryllium (Be)-Dissolved			<0.000002		mg/L		0.001	08-MAY-23
Bismuth (Bi)-Dissolved			<0.000002		mg/L		0.001	08-MAY-23
Boron (B)-Dissolved			<0.0005		mg/L		0.05	08-MAY-23
Cadmium (Cd)-Dissolved			<0.0000005		mg/L		0.000017	08-MAY-23
Calcium (Ca)-Dissolved			0.014		mg/L		0.2	08-MAY-23
Cesium (Cs)-Dissolved			0.0000010		mg/L		0.00001	08-MAY-23
Chromium (Cr)-Dissolved			<0.00001		mg/L		0.001	08-MAY-23
Cobalt (Co)-Dissolved			<0.000002		mg/L		0.0005	08-MAY-23
Copper (Cu)-Dissolved			<0.00002		mg/L		0.001	08-MAY-23
Iron (Fe)-Dissolved			<0.0005		mg/L		0.02	08-MAY-23
Lead (Pb)-Dissolved			<0.00001		mg/L		0.00005	08-MAY-23
Lithium (Li)-Dissolved			<0.0002		mg/L		0.05	08-MAY-23
Magnesium (Mg)-Dissolved			0.0005		mg/L		0.02	08-MAY-23
Manganese (Mn)-Dissolved			<0.00002		mg/L		0.001	08-MAY-23
Molybdenum (Mo)-Dissolved			<0.000002		mg/L		0.001	08-MAY-23
Nickel (Ni)-Dissolved			<0.00002		mg/L		0.002	08-MAY-23
Phosphorus (P)-Dissolved			<0.005		mg/L		0.05	08-MAY-23
Potassium (K)-Dissolved			<0.01		mg/L		0.5	08-MAY-23
Rubidium (Rb)-Dissolved			0.000004		mg/L		0.0002	08-MAY-23
Selenium (Se)-Dissolved			0.000005		mg/L		0.00005	08-MAY-23
Silicon (Si)-Dissolved			<0.005		mg/L		0.05	08-MAY-23
Silver (Ag)-Dissolved			<0.0000005		mg/L		0.0001	08-MAY-23
Sodium (Na)-Dissolved			<0.005		mg/L		0.1	08-MAY-23
Strontium (Sr)-Dissolved			<0.00002		mg/L		0.001	08-MAY-23
Sulfur (S)-Dissolved			<0.2		mg/L		0.5	08-MAY-23
Tellurium (Te)-Dissolved			<0.00001		mg/L		0.001	08-MAY-23
Thallium (Tl)-Dissolved			<0.000002		mg/L		0.0003	08-MAY-23
Thorium (Th)-Dissolved			<0.00001		mg/L		0.0001	08-MAY-23
Tin (Sn)-Dissolved			<0.000005		mg/L		0.001	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 14 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB								
	Effluent							
Batch	R5949822							
WG3783709-5	MB							
Titanium (Ti)-Dissolved			<0.00002		mg/L		0.002	08-MAY-23
Tungsten (W)-Dissolved			<0.000002		mg/L		0.01	08-MAY-23
Uranium (U)-Dissolved			<0.0000005		mg/L		0.005	08-MAY-23
Vanadium (V)-Dissolved			<0.00002		mg/L		0.001	08-MAY-23
Zinc (Zn)-Dissolved			<0.0002		mg/L		0.003	08-MAY-23
Zirconium (Zr)-Dissolved			<0.000002		mg/L		0.001	08-MAY-23
WG3783709-8	MS	L2750391-18						
Aluminum (Al)-Dissolved			99.3		%		70-130	08-MAY-23
Antimony (Sb)-Dissolved			109.1		%		70-130	08-MAY-23
Arsenic (As)-Dissolved			104.4		%		70-130	08-MAY-23
Barium (Ba)-Dissolved			106.1		%		70-130	08-MAY-23
Beryllium (Be)-Dissolved			108.1		%		70-130	08-MAY-23
Bismuth (Bi)-Dissolved			94.8		%		70-130	08-MAY-23
Boron (B)-Dissolved			100.7		%		70-130	08-MAY-23
Cadmium (Cd)-Dissolved			106.0		%		70-130	08-MAY-23
Calcium (Ca)-Dissolved			N/A	MS-B	%		-	08-MAY-23
Cesium (Cs)-Dissolved			111.8		%		70-130	08-MAY-23
Chromium (Cr)-Dissolved			104.1		%		70-130	08-MAY-23
Cobalt (Co)-Dissolved			100.2		%		70-130	08-MAY-23
Copper (Cu)-Dissolved			99.2		%		70-130	08-MAY-23
Iron (Fe)-Dissolved			93.6		%		70-130	08-MAY-23
Lead (Pb)-Dissolved			99.6		%		70-130	08-MAY-23
Lithium (Li)-Dissolved			114.5		%		70-130	08-MAY-23
Magnesium (Mg)-Dissolved			N/A	MS-B	%		-	08-MAY-23
Manganese (Mn)-Dissolved			96.4		%		70-130	08-MAY-23
Molybdenum (Mo)-Dissolved			110.8		%		70-130	08-MAY-23
Nickel (Ni)-Dissolved			98.4		%		70-130	08-MAY-23
Phosphorus (P)-Dissolved			111.6		%		70-130	08-MAY-23
Potassium (K)-Dissolved			105.3		%		70-130	08-MAY-23
Rubidium (Rb)-Dissolved			101.1		%		70-130	08-MAY-23
Selenium (Se)-Dissolved			104.5		%		70-130	08-MAY-23
Silicon (Si)-Dissolved			87.4		%		70-130	08-MAY-23
Silver (Ag)-Dissolved			104.4		%		70-130	08-MAY-23
Sodium (Na)-Dissolved			N/A	MS-B	%		-	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 15 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-MISA-TB		Effluent						
Batch	R5949822							
WG3783709-8 MS		L2750391-18						
Strontium (Sr)-Dissolved			N/A	MS-B	%		-	08-MAY-23
Sulfur (S)-Dissolved			99.4		%		70-130	08-MAY-23
Tellurium (Te)-Dissolved			110.3		%		70-130	08-MAY-23
Thallium (Tl)-Dissolved			99.1		%		70-130	08-MAY-23
Thorium (Th)-Dissolved			100.9		%		70-130	08-MAY-23
Tin (Sn)-Dissolved			105.8		%		70-130	08-MAY-23
Titanium (Ti)-Dissolved			100.7		%		70-130	08-MAY-23
Tungsten (W)-Dissolved			103.4		%		70-130	08-MAY-23
Uranium (U)-Dissolved			101.0		%		70-130	08-MAY-23
Vanadium (V)-Dissolved			103.6		%		70-130	08-MAY-23
Zinc (Zn)-Dissolved			102.8		%		70-130	08-MAY-23
Zirconium (Zr)-Dissolved			113.1		%		70-130	08-MAY-23
MET-T-MISA-TB		Effluent						
Batch	R5949796							
WG3783831-3 DUP		L2750391-18						
Aluminum (Al)-Total		0.120	0.130		mg/L	8.4	20	08-MAY-23
Antimony (Sb)-Total		0.000100	0.000100	RPD-NA	mg/L	N/A	20	08-MAY-23
Arsenic (As)-Total		0.00067	0.00063	RPD-NA	mg/L	N/A	20	08-MAY-23
Barium (Ba)-Total		0.0170	0.0167		mg/L	2.1	20	08-MAY-23
Beryllium (Be)-Total		0.0000066	0.0000077	RPD-NA	mg/L	N/A	20	08-MAY-23
Bismuth (Bi)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	08-MAY-23
Boron (B)-Total		0.0095	0.0085	RPD-NA	mg/L	N/A	20	08-MAY-23
Cadmium (Cd)-Total		0.000007	0.000006	RPD-NA	mg/L	N/A	20	08-MAY-23
Calcium (Ca)-Total		34.2	32.5		mg/L	5.2	20	08-MAY-23
Cesium (Cs)-Total		0.0000165	0.0000175		mg/L	6.5	20	08-MAY-23
Chromium (Cr)-Total		0.00038	0.00034	RPD-NA	mg/L	N/A	20	08-MAY-23
Cobalt (Co)-Total		0.000130	0.000125	RPD-NA	mg/L	N/A	20	08-MAY-23
Copper (Cu)-Total		0.00128	0.00122		mg/L	4.5	20	08-MAY-23
Iron (Fe)-Total		0.442	0.428		mg/L	3.1	20	08-MAY-23
Lead (Pb)-Total		0.00030	0.00029		mg/L	3.2	20	08-MAY-23
Lithium (Li)-Total		0.0024	0.0024	RPD-NA	mg/L	N/A	20	08-MAY-23
Magnesium (Mg)-Total		12.8	12.5		mg/L	2.6	20	08-MAY-23
Manganese (Mn)-Total		0.0218	0.0216		mg/L	1.0	20	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 16 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5949796							
WG3783831-3	DUP	L2750391-18						
Molybdenum (Mo)-Total		0.000565	0.000520	RPD-NA	mg/L	N/A	20	08-MAY-23
Nickel (Ni)-Total		0.00102	0.00098	RPD-NA	mg/L	N/A	20	08-MAY-23
Phosphorus (P)-Total		0.005	0.015	RPD-NA	mg/L	N/A	20	08-MAY-23
Potassium (K)-Total		1.68	1.64		mg/L	2.6	20	08-MAY-23
Rubidium (Rb)-Total		0.00171	0.00167		mg/L	2.2	20	08-MAY-23
Selenium (Se)-Total		0.000110	0.000105		mg/L	5.7	20	08-MAY-23
Silicon (Si)-Total		3.02	3.00		mg/L	0.7	20	08-MAY-23
Silver (Ag)-Total		0.000002	0.000003	RPD-NA	mg/L	N/A	20	08-MAY-23
Sodium (Na)-Total		3.91	3.66		mg/L	6.6	20	08-MAY-23
Strontium (Sr)-Total		0.0703	0.0674		mg/L	4.3	20	08-MAY-23
Sulfur (S)-Total		3.6	3.6		mg/L	1.0	20	08-MAY-23
Tellurium (Te)-Total		0.00002	<0.00002	RPD-NA	mg/L	N/A	20	08-MAY-23
Thallium (Tl)-Total		<0.000005	<0.000005	RPD-NA	mg/L	N/A	20	08-MAY-23
Thorium (Th)-Total		0.00003	0.00004	RPD-NA	mg/L	N/A	20	08-MAY-23
Tin (Sn)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	08-MAY-23
Titanium (Ti)-Total		0.00377	0.00370		mg/L	1.8	20	08-MAY-23
Tungsten (W)-Total		<0.00001	<0.00001	RPD-NA	mg/L	N/A	20	08-MAY-23
Uranium (U)-Total		0.00102	0.000966	RPD-NA	mg/L	N/A	20	08-MAY-23
Vanadium (V)-Total		0.00075	0.00075	RPD-NA	mg/L	N/A	20	08-MAY-23
Zinc (Zn)-Total		0.0060	0.0060		mg/L	3.3	20	08-MAY-23
Zirconium (Zr)-Total		0.000218	0.000486	RPD-NA	mg/L	N/A	20	08-MAY-23
WG3783831-2	LCS							
Aluminum (Al)-Total			102.9		%		80-120	08-MAY-23
Antimony (Sb)-Total			103.1		%		80-120	08-MAY-23
Arsenic (As)-Total			105.2		%		80-120	08-MAY-23
Barium (Ba)-Total			103.7		%		80-120	08-MAY-23
Beryllium (Be)-Total			100.8		%		80-120	08-MAY-23
Bismuth (Bi)-Total			98.7		%		80-120	08-MAY-23
Boron (B)-Total			92.8		%		80-120	08-MAY-23
Cadmium (Cd)-Total			101.8		%		80-120	08-MAY-23
Calcium (Ca)-Total			103.2		%		80-120	08-MAY-23
Cesium (Cs)-Total			105.8		%		80-120	08-MAY-23
Chromium (Cr)-Total			101.7		%		80-120	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 17 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5949796							
WG3783831-2	LCS							
Cobalt (Co)-Total			99.6		%		80-120	08-MAY-23
Copper (Cu)-Total			99.1		%		80-120	08-MAY-23
Iron (Fe)-Total			97.1		%		80-120	08-MAY-23
Lead (Pb)-Total			99.6		%		80-120	08-MAY-23
Lithium (Li)-Total			105.3		%		80-120	08-MAY-23
Magnesium (Mg)-Total			103.5		%		80-120	08-MAY-23
Manganese (Mn)-Total			99.9		%		80-120	08-MAY-23
Molybdenum (Mo)-Total			104.3		%		80-120	08-MAY-23
Nickel (Ni)-Total			101.2		%		80-120	08-MAY-23
Phosphorus (P)-Total			95.9		%		80-120	08-MAY-23
Potassium (K)-Total			98.9		%		80-120	08-MAY-23
Rubidium (Rb)-Total			102.8		%		80-120	08-MAY-23
Selenium (Se)-Total			98.7		%		80-120	08-MAY-23
Silicon (Si)-Total			100.8		%		80-120	08-MAY-23
Silver (Ag)-Total			97.2		%		80-120	08-MAY-23
Sodium (Na)-Total			105.9		%		80-120	08-MAY-23
Strontium (Sr)-Total			106.3		%		80-120	08-MAY-23
Sulfur (S)-Total			92.2		%		80-120	08-MAY-23
Tellurium (Te)-Total			96.7		%		80-120	08-MAY-23
Thallium (Tl)-Total			98.7		%		80-120	08-MAY-23
Thorium (Th)-Total			98.0		%		80-120	08-MAY-23
Tin (Sn)-Total			101.3		%		80-120	08-MAY-23
Titanium (Ti)-Total			95.3		%		80-120	08-MAY-23
Tungsten (W)-Total			100.4		%		80-120	08-MAY-23
Uranium (U)-Total			99.4		%		80-120	08-MAY-23
Vanadium (V)-Total			103.1		%		80-120	08-MAY-23
Zinc (Zn)-Total			105.1		%		80-120	08-MAY-23
Zirconium (Zr)-Total			103.7		%		80-120	08-MAY-23
WG3783831-1	MB							
Aluminum (Al)-Total			0.0022		mg/L		0.005	08-MAY-23
Antimony (Sb)-Total			0.000010		mg/L		0.0006	08-MAY-23
Arsenic (As)-Total			0.00001		mg/L		0.001	08-MAY-23
Barium (Ba)-Total			0.00002		mg/L		0.01	08-MAY-23
Beryllium (Be)-Total			0.0000011		mg/L		0.001	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 18 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB		Effluent						
Batch	R5949796							
WG3783831-1 MB								
Bismuth (Bi)-Total			<0.00001		mg/L		0.001	08-MAY-23
Boron (B)-Total			<0.0005		mg/L		0.05	08-MAY-23
Cadmium (Cd)-Total			<0.000001		mg/L		0.000017	08-MAY-23
Calcium (Ca)-Total			0.002		mg/L		0.2	08-MAY-23
Cesium (Cs)-Total			0.0000010		mg/L		0.00001	08-MAY-23
Chromium (Cr)-Total			<0.00002		mg/L		0.001	08-MAY-23
Cobalt (Co)-Total			<0.000005		mg/L		0.0005	08-MAY-23
Copper (Cu)-Total			<0.00002		mg/L		0.001	08-MAY-23
Iron (Fe)-Total			0.0015		mg/L		0.02	08-MAY-23
Lead (Pb)-Total			<0.00001		mg/L		0.00005	08-MAY-23
Lithium (Li)-Total			0.0002		mg/L		0.05	08-MAY-23
Magnesium (Mg)-Total			0.0008		mg/L		0.02	08-MAY-23
Manganese (Mn)-Total			<0.0002		mg/L		0.001	08-MAY-23
Molybdenum (Mo)-Total			<0.000005		mg/L		0.001	08-MAY-23
Nickel (Ni)-Total			<0.00002		mg/L		0.002	08-MAY-23
Phosphorus (P)-Total			<0.005		mg/L		0.05	08-MAY-23
Potassium (K)-Total			<0.01		mg/L		0.5	08-MAY-23
Rubidium (Rb)-Total			0.000006		mg/L		0.0002	08-MAY-23
Selenium (Se)-Total			0.000010		mg/L		0.00005	08-MAY-23
Silicon (Si)-Total			0.028		mg/L		0.1	08-MAY-23
Silver (Ag)-Total			<0.000001		mg/L		0.0001	08-MAY-23
Sodium (Na)-Total			0.005		mg/L		0.1	08-MAY-23
Strontium (Sr)-Total			0.000010		mg/L		0.001	08-MAY-23
Sulfur (S)-Total			<0.2		mg/L		0.5	08-MAY-23
Tellurium (Te)-Total			<0.00002		mg/L		0.001	08-MAY-23
Thallium (Tl)-Total			<0.000005		mg/L		0.0003	08-MAY-23
Thorium (Th)-Total			<0.00001		mg/L		0.0001	08-MAY-23
Tin (Sn)-Total			<0.00001		mg/L		0.001	08-MAY-23
Titanium (Ti)-Total			0.00012		mg/L		0.002	08-MAY-23
Tungsten (W)-Total			<0.00001		mg/L		0.01	08-MAY-23
Uranium (U)-Total			<0.0000005		mg/L		0.005	08-MAY-23
Vanadium (V)-Total			<0.00005		mg/L		0.001	08-MAY-23
Zinc (Zn)-Total			0.0010		mg/L		0.003	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 19 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5949796							
WG3783831-1 MB								
Zirconium (Zr)-Total			<0.000002		mg/L		0.001	08-MAY-23
WG3783831-4 MS		L2750391-19						
Aluminum (Al)-Total			101.9		%		70-130	08-MAY-23
Antimony (Sb)-Total			104.6		%		70-130	08-MAY-23
Arsenic (As)-Total			100.5		%		70-130	08-MAY-23
Barium (Ba)-Total			105.5		%		70-130	08-MAY-23
Beryllium (Be)-Total			98.2		%		70-130	08-MAY-23
Bismuth (Bi)-Total			103.5		%		70-130	08-MAY-23
Boron (B)-Total			98.4		%		70-130	08-MAY-23
Cadmium (Cd)-Total			102.6		%		70-130	08-MAY-23
Calcium (Ca)-Total			99.4		%		70-130	08-MAY-23
Cesium (Cs)-Total			107.1		%		70-130	08-MAY-23
Chromium (Cr)-Total			94.6		%		70-130	08-MAY-23
Cobalt (Co)-Total			101.8		%		70-130	08-MAY-23
Copper (Cu)-Total			100.8		%		70-130	08-MAY-23
Iron (Fe)-Total			98.6		%		70-130	08-MAY-23
Lead (Pb)-Total			104.3		%		70-130	08-MAY-23
Lithium (Li)-Total			102.9		%		70-130	08-MAY-23
Magnesium (Mg)-Total			102.3		%		70-130	08-MAY-23
Manganese (Mn)-Total			102.8		%		70-130	08-MAY-23
Molybdenum (Mo)-Total			105.5		%		70-130	08-MAY-23
Nickel (Ni)-Total			99.0		%		70-130	08-MAY-23
Phosphorus (P)-Total			96.9		%		70-130	08-MAY-23
Potassium (K)-Total			96.9		%		70-130	08-MAY-23
Rubidium (Rb)-Total			102.7		%		70-130	08-MAY-23
Selenium (Se)-Total			97.7		%		70-130	08-MAY-23
Silicon (Si)-Total			96.9		%		70-130	08-MAY-23
Silver (Ag)-Total			103.0		%		70-130	08-MAY-23
Sodium (Na)-Total			103.7		%		70-130	08-MAY-23
Strontium (Sr)-Total			101.6		%		70-130	08-MAY-23
Sulfur (S)-Total			96.6		%		70-130	08-MAY-23
Tellurium (Te)-Total			100.1		%		70-130	08-MAY-23
Thallium (Tl)-Total			104.5		%		70-130	08-MAY-23
Thorium (Th)-Total			102.9		%		70-130	08-MAY-23



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 20 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-MISA-TB								
	Effluent							
Batch	R5949796							
WG3783831-4	MS	L2750391-19						
Tin (Sn)-Total			101.4		%		70-130	08-MAY-23
Titanium (Ti)-Total			97.7		%		70-130	08-MAY-23
Tungsten (W)-Total			107.7		%		70-130	08-MAY-23
Uranium (U)-Total			102.3		%		70-130	08-MAY-23
Vanadium (V)-Total			102.2		%		70-130	08-MAY-23
Zinc (Zn)-Total			105.3		%		70-130	08-MAY-23
Zirconium (Zr)-Total			110.0		%		70-130	08-MAY-23
NH3-MISA-F-TB								
	Effluent							
Batch	R5950496							
WG3783877-3	DUP	L2750391-1						
Ammonia, Total (as N)		0.016	0.014		mg/L	8.5	20	10-MAY-23
WG3783877-2	LCS							
Ammonia, Total (as N)			98.9		%		85-115	10-MAY-23
WG3783877-1	MB							
Ammonia, Total (as N)			<0.002		mg/L		0.005	10-MAY-23
WG3783877-4	MS	L2750391-2						
Ammonia, Total (as N)			101.8		%		75-125	10-MAY-23
NO2-MISA-IC-TB								
	Effluent							
Batch	R5949345							
WG3783749-3	DUP	L2750391-1						
Nitrite (as N)		<0.001	<0.001	RPD-NA	mg/L	N/A	20	05-MAY-23
WG3783749-2	LCS							
Nitrite (as N)			100.3		%		90-110	05-MAY-23
WG3783749-1	MB							
Nitrite (as N)			0.002		mg/L		0.01	05-MAY-23
WG3783749-4	MS	L2750391-2						
Nitrite (as N)			105.5		%		75-125	05-MAY-23
NO3-MISA-IC-TB								
	Effluent							
Batch	R5949345							
WG3783749-3	DUP	L2750391-1						
Nitrate (as N)		0.008	0.004	RPD-NA	mg/L	N/A	20	05-MAY-23
WG3783749-2	LCS							
Nitrate (as N)			101.4		%		90-110	05-MAY-23
WG3783749-1	MB							
Nitrate (as N)			<0.002		mg/L		0.02	05-MAY-23
WG3783749-4	MS	L2750391-2						



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 21 of 25

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
NO3-MISA-IC-TB									
Effluent									
Batch	R5949345								
WG3783749-4	MS	L2750391-2							
Nitrate (as N)			108.1		%		75-125	05-MAY-23	
OGG-TOT-WT									
Effluent									
Batch	R5950676								
WG3784134-2	LCS								
Oil and Grease, Total			96.5		%		50-150	11-MAY-23	
WG3784134-1	MB								
Oil and Grease, Total			0.4		mg/L		1	11-MAY-23	
PH-MISA-TB									
Effluent									
Batch	R5949337								
WG3783753-3	DUP	L2750391-1							
pH			7.83	7.84	J	pH	0.01	0.2	05-MAY-23
WG3783753-2	LCS								
pH			6.99			pH	6.9-7.1	05-MAY-23	
SO4-MISA-IC-TB									
Effluent									
Batch	R5949345								
WG3783749-3	DUP	L2750391-1							
Sulfate (SO4)			4.40	4.25		mg/L	3.1	20	05-MAY-23
WG3783749-2	LCS								
Sulfate (SO4)			103.9			%	90-110	05-MAY-23	
WG3783749-1	MB								
Sulfate (SO4)			0.05			mg/L	0.3	05-MAY-23	
WG3783749-4	MS	L2750391-2							
Sulfate (SO4)			112.4			%	75-125	05-MAY-23	
TDS-MISA-TB									
Effluent									
Batch	R5949341								
WG3783828-3	DUP	L2750391-8							
Total Dissolved Solids			172	172		mg/L	0.4	20	05-MAY-23
WG3783828-2	LCS								
Total Dissolved Solids			97.6			%	85-115	05-MAY-23	
WG3783828-1	MB								
Total Dissolved Solids			2			mg/L	10	05-MAY-23	
Batch	R5949343								
WG3783757-3	DUP	L2750391-7							
Total Dissolved Solids			2	<2	RPD-NA	mg/L	N/A	20	05-MAY-23
WG3783757-2	LCS								



Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Page 22 of 25

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Contact: Garnet Cornell

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TDS-MISA-TB		Effluent						
Batch	R5949343							
WG3783757-2	LCS							
Total Dissolved Solids			99.0		%		85-115	05-MAY-23
WG3783757-1	MB							
Total Dissolved Solids			<2		mg/L		10	05-MAY-23
TSS-MISA-TB		Effluent						
Batch	R5949339							
WG3783829-3	DUP	L2750391-8						
Total Suspended Solids		2.5	3.0	RPD-NA	mg/L	N/A	20	05-MAY-23
WG3783829-2	LCS							
Total Suspended Solids			106.3		%		85-115	05-MAY-23
WG3783829-1	MB							
Total Suspended Solids			<0.5		mg/L		3	05-MAY-23
Batch	R5949344							
WG3783758-3	DUP	L2750391-7						
Total Suspended Solids		<0.5	<0.5	RPD-NA	mg/L	N/A	20	05-MAY-23
WG3783758-2	LCS							
Total Suspended Solids			107.2		%		85-115	05-MAY-23
WG3783758-1	MB							
Total Suspended Solids			0.5		mg/L		3	05-MAY-23

Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0
Contact: Garnet Cornell

Page 23 of 25

Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
<DL	Recorded value = measured amount <LMDL (non-zero)
<T	A Measurable Trace Amount: Interpret With Caution
<W	No Measurable Response (Zero): < Reported Value
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Client: New Gold Inc. Rainy River Project
 24 Marr Rd
 Barwick ON P0W 1A0
 Contact: Garnet Cornell

Page 24 of 25

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Anions and Nutrients							
Filtr./Pres. for Carbons Subcontract							
	1	02-MAY-23 09:35	06-MAY-23 16:00	3	4	days	EHT
	2	02-MAY-23 10:10	06-MAY-23 16:00	3	4	days	EHT
	3	02-MAY-23 10:10	06-MAY-23 16:00	3	4	days	EHT
	4	02-MAY-23 10:40	06-MAY-23 16:00	3	4	days	EHT
	5	02-MAY-23 11:10	06-MAY-23 16:00	3	4	days	EHT
	6	02-MAY-23 11:30	06-MAY-23 16:00	3	4	days	EHT
	8	02-MAY-23 12:00	06-MAY-23 16:00	3	4	days	EHT
	9	02-MAY-23 12:45	06-MAY-23 16:00	3	4	days	EHT
	10	02-MAY-23 13:25	06-MAY-23 16:00	3	4	days	EHT
	11	02-MAY-23 13:25	06-MAY-23 16:00	3	4	days	EHT
	12	02-MAY-23 13:45	06-MAY-23 16:00	3	4	days	EHT
	13	02-MAY-23 13:50	06-MAY-23 16:00	3	4	days	EHT
	14	02-MAY-23 14:15	06-MAY-23 16:00	3	4	days	EHT
	15	02-MAY-23 14:25	06-MAY-23 16:00	3	4	days	EHT
	16	02-MAY-23 14:45	06-MAY-23 16:00	3	4	days	EHT
	17	02-MAY-23 14:45	06-MAY-23 16:00	3	4	days	EHT
	18	02-MAY-23 15:20	06-MAY-23 16:00	3	4	days	EHT
Cyanides							
Free Cyanide by Continuous Flow Analyzer							
	1	02-MAY-23 09:35	10-MAY-23 00:00	7	8	days	EHT
	2	02-MAY-23 10:10	10-MAY-23 00:00	7	8	days	EHT
	3	02-MAY-23 10:10	10-MAY-23 00:00	7	8	days	EHT
	4	02-MAY-23 10:40	10-MAY-23 00:00	7	8	days	EHT
	5	02-MAY-23 11:10	10-MAY-23 00:00	7	8	days	EHT
	6	02-MAY-23 11:30	10-MAY-23 00:00	7	8	days	EHT
	7	02-MAY-23 12:00	10-MAY-23 00:00	7	8	days	EHT
	8	02-MAY-23 12:00	10-MAY-23 00:00	7	8	days	EHT
Organic / Inorganic Carbon							
Dissolved Organic Carbon for MISA							
	1	02-MAY-23 09:35	09-MAY-23 00:00	3	7	days	EHT
	2	02-MAY-23 10:10	09-MAY-23 00:00	3	7	days	EHT
	3	02-MAY-23 10:10	09-MAY-23 00:00	3	7	days	EHT
	4	02-MAY-23 10:40	09-MAY-23 00:00	3	7	days	EHT
	5	02-MAY-23 11:10	09-MAY-23 00:00	3	7	days	EHT
	6	02-MAY-23 11:30	09-MAY-23 00:00	3	7	days	EHT
	8	02-MAY-23 12:00	09-MAY-23 00:00	3	7	days	EHT
	9	02-MAY-23 12:45	09-MAY-23 00:00	3	6	days	EHT
	10	02-MAY-23 13:25	09-MAY-23 00:00	3	6	days	EHT
	11	02-MAY-23 13:25	09-MAY-23 00:00	3	6	days	EHT
	12	02-MAY-23 13:45	09-MAY-23 00:00	3	6	days	EHT
	13	02-MAY-23 13:50	09-MAY-23 00:00	3	6	days	EHT
	14	02-MAY-23 14:15	09-MAY-23 00:00	3	6	days	EHT
	15	02-MAY-23 14:25	09-MAY-23 00:00	3	6	days	EHT
	16	02-MAY-23 14:45	09-MAY-23 00:00	3	6	days	EHT
	17	02-MAY-23 14:45	09-MAY-23 00:00	3	6	days	EHT
	18	02-MAY-23 15:20	09-MAY-23 00:00	3	6	days	EHT

Legend & Qualifier Definitions:

Quality Control Report

Workorder: L2750391

Report Date: 19-MAY-23

Client: New Gold Inc. Rainy River Project
24 Marr Rd
Barwick ON P0W 1A0

Page 25 of 25

Contact: Garnet Cornell

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2750391 were received on 04-MAY-23 09:57.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

SRC Group # 2023-5290

May 16, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: May-05-2023

Client P.O.: L2750391

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-5290

May 16, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023012817	Client PO #:	L2750391
Date Sampled:	May 02, 2023	Date Received:	May 05, 2023
Sample Matrix:	WATER		
Description:	05/02/2023 SW20_SW_20230502 L2750391-1		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 16.8 °C upon receipt.

SRC Group # 2023-5290

May 16, 2023

ALS, Thunder Bay Analytical

Sample #: **2023012818**
Date Sampled: **May 02, 2023**
Sample Matrix: **WATER**
Description: **05/02/2023 SW23_SW_20230502 L2750391-10**

Client PO #: **L2750391**
Date Received: **May 05, 2023**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.006	0.005

The temperature of the cooler was 16.8 °C upon receipt.

SRC Group # 2023-5290

May 16, 2023

ALS, Thunder Bay Analytical

Sample #: **2023012819** Client PO #: **L2750391**
 Date Sampled: **May 02, 2023** Date Received: **May 05, 2023**
 Sample Matrix: **WATER**
 Description: **05/02/2023 SW24_SW_20230502 L2750391-12**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.009	0.005

The temperature of the cooler was 16.8 °C upon receipt.

SRC Group # 2023-5290

May 16, 2023

ALS, Thunder Bay Analytical

Sample #: **2023012820** Client PO #: **L2750391**
 Date Sampled: **May 02, 2023** Date Received: **May 05, 2023**
 Sample Matrix: **WATER**
 Description: **05/02/2023 SW22A_SW_20230502 L2750391-17**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 16.8 °C upon receipt.

SRC Group # 2023-5290

May 16, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105



L2750391

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 5/3/2023 5:19:00 PM COC Number: ALS-450497215						Containers Filtered Preservatives		SW Kit	Re-226 Bottle								Number of Containers	Comments
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MIMER-BE											
1 SW20_SW_20230502	10.7	7.36	5.49	05/02/2023 09:35	SW	X							12					
2 SW20_SW_20230502	10.7	7.36	5.49	05/02/2023 09:35	SW		X						12					
3 SW10_SW_20230502	13.83	7.56	5.93	05/02/2023 10:10	SW	X							11					
4 SW16_SW_20230502	11.3	7.01	5.47	05/02/2023 10:10	SW	X							11					
5 SW28A_SW_20230502	14.35	7.57	6.77	05/02/2023 10:40	SW	X							11					
SW02_SW_20230502	12.05	7.18	6.03	05/02/2023 11:10	SW	X							11					

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	5/3/2023 5:19:00 PM	Method of Shipment: Courier On Ice: yes / no		
Received by	5/4/23 9:57am	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Temp on Back Manitowlin 330 2389619 7 - coolers ice



Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 5/3/2023 5:19:00 PM COC Number: ALS-450497215						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle									Number of Containers	Comments
						N	N												
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE												
SW17_SW_20230502	11.04	7.19	6.26	05/02/2023 11:30	SW	X								11					
FB_SW_20230502				05/02/2023 12:00	SW	X								11					
SW06_SW_20230502	13.53	8	11.43	05/02/2023 12:00	SW	X								11					
SW15_SW_20230502	9.22	7.49	8.08	05/02/2023 12:45	SW	X								11					
SW23_SW_20230502	9.43	7.44	7.81	05/02/2023 13:25	SW	X								12					
SW23 SW 20230502	9.43	7.44	7.81	05/02/2023 13:25	SW		X							12					

6
7
8
9
10

Signature	Date/Time	Shipping Details		ATTN	Special Instructions:
		Method of Shipment: Courier			
Shipped by	5/3/2023 5:19:00 PM	On Ice: yes / no			Email Invoice to:
		Shipped: Air/Ground			
Received by		Lab Name: ALS Thunder Bay			Email Report to:
		Lab Phone:			
				rainyriver.accounts1@newgold.com	
				rainyriver.labresults@newgold.com	



Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 5/3/2023 5:19:00 PM COC Number: ALS-450497215						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle								Number of Containers	Comments
						N	N											
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE											
11 12 13 14 15 SW26_SW_20230502	13.5	8.13	8.51	05/02/2023 13:25	SW	X							11					
SW24_SW_20230502	8.85	7.42	7.89	05/02/2023 13:45	SW	X							12					
SW24_SW_20230502	8.85	7.42	7.89	05/02/2023 13:45	SW		X						12					
SW21A_SW_20230502	12.11	7.78	9.26	05/02/2023 13:50	SW	X							11					
SW27_SW_20230502	25.89	7.8	8.42	05/02/2023 14:15	SW	X							11					
SW29_SW_20230502	8.52	7.32	9.85	05/02/2023 14:25	SW	X							11					

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	5/3/2023 5:19:00 PM	Method of Shipment: Courier On Ice: yes / no		
Received by		Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com



Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 5/3/2023 5:19:00 PM COC Number: ALS-450497215						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle								Number of Containers	Comments
						N	N											
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE											
16 SW03_SW_20230502	9.74	7.61	8.93	05/02/2023 14:45	SW	X							11					
17 SW22A_SW_20230502	13.42	7.67	9.09	05/02/2023 14:45	SW	X							12					
SW22A_SW_20230502	13.42	7.67	9.09	05/02/2023 14:45	SW		X						12					
18 SW25_SW_20230502	13.53	8	11.43	05/02/2023 15:20	SW	X							11					
19 TB_SW_20230502				05/03/2023 00:00	SW	X							11					

Signature	Date/Time	Shipping Details		ATTN	Special Instructions:
		Method of Shipment: Courier			
Shipped by	5/3/2023 5:19:00 PM	On Ice: yes / no			Email Invoice to:
		Shipped: Air/Ground			
Received by		Lab Name: ALS Thunder Bay			Email Report to:
		Lab Phone:			
					rainyriver.accounts1@newgold.com
					rainyriver.labresults@newgold.com



Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input checked="" type="checkbox"/> No
Are samples for human consumption / use? Yes <input checked="" type="checkbox"/> No
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	5/3/2023 5:19:00 PM	Method of Shipment: Courier On Ice: yes / no		
Received by		Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form



10750304 0050

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO	Confirmed all as accurate as per CoC, Sample Remarks or PM			
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO	Client <input checked="" type="checkbox"/>	Office <input checked="" type="checkbox"/>	Work Contact <input checked="" type="checkbox"/>	Quote <input checked="" type="checkbox"/>
Client: <u>New Gold RR</u>				RECEIPT DETAIL			
SAMPLE RECEIPT INFORMATION				Project <input checked="" type="checkbox"/>	PO <input checked="" type="checkbox"/>	Site/LSD <input checked="" type="checkbox"/>	
Mode of Delivery: <u>Courier</u>		Drop Off <input type="checkbox"/>		Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	<input type="radio"/> No
COURIER		<u>Manitoulin</u>		Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	<input type="radio"/> NA
Waybill Number		<u>3302389619</u>		Sample Remarks checked		<input checked="" type="radio"/> Yes	<input type="radio"/> NA
Shipment Cost		Collect? <input type="checkbox"/>	Y/N <input type="checkbox"/>	Submission Issues communicated		Yes <input type="checkbox"/>	<input checked="" type="radio"/> NA
Temperature <u>See Back CoC</u>		Cooler Count <u>7</u>		Sample Info communicated via Remarks		Yes <input type="checkbox"/>	<input checked="" type="radio"/> NA
Cooling Method		None <input type="checkbox"/>	Ice <input type="checkbox"/>	VERIFICATION CHECKLIST			
		Ice Packs <input checked="" type="checkbox"/>		Sample Name entered as per CoC		<input checked="" type="checkbox"/>	
SAMPLE MATRIX/BOTTLE INFORMATION				Sampling Date and time entered as per CoC		<input checked="" type="checkbox"/>	
Matrix:	<u>Water</u>	Soil <input type="checkbox"/>	Air <input type="checkbox"/>	Biota <input type="checkbox"/>	Other <input type="checkbox"/>	Containers selected in order of CoC	
DW Schedule 24 Bottles Correct?		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Sales items from QUOTE ONLY (and/or verified as correct)		<input checked="" type="checkbox"/>	
DW Metals pH Check <2		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Field Data/Calc Codes removed if not on CoC		<input checked="" type="checkbox"/>	
Bottle Types:		Sample Count <u>23</u>		Bottle Allocation Verified		<input checked="" type="checkbox"/>	
Green/white		<u>19 Routine, 19 BOD</u>		Guideline added or auto-allocated		<input checked="" type="checkbox"/>	
Orange/black				Due dates updated		<input checked="" type="checkbox"/>	
Warm red/green/white				VALIDATION			
Warm red/white		<u>4 Radium, 19 Tot. Metals, 19 Diss. Metals</u>		Validation errors or checks		<input checked="" type="radio"/> Yes	<input type="radio"/> No
Yellow/black				Internal CoC created		<input checked="" type="radio"/> Yes	<input type="radio"/> NA
Purple/white		<u>19 NUTS, 19 DOC, 19 TOC</u>		Login Comments: <u>Cooler: temps 9.9, 9.3, 5.7, 9.8, 9.1, 9.5, 8.8</u>			
Light blue/white							
Others (detail)		<u>19 Dark Green CN, 38 OGG</u>					
Comments on Samples and Bottles:		<u>DOC, Diss. Metals & Diss. Merc need 1 qb FP</u>					
Samples Requiring Preservation or Filtering:							
Layout Staff Initials				Login Staff Initials:		<u>APS</u>	
Date and Time of Layout		<u>9/2 5/4/23 11:31 am</u>					

CERTIFICATE OF ANALYSIS

<p>Work Order : TY2305301</p> <p>Client : New Gold Inc. (Rainy River)</p> <p>Contact : Garnet.Cornell@newgold.com Garnet Cornell</p> <p>Address : 24 Marr Rd. Barwick ON Canada P0W 1A0</p> <p>Telephone : 807-234-8170</p> <p>Project : Surface Water</p> <p>PO : 4500062842</p> <p>C-O-C number : ----</p> <p>Sampler : Client</p> <p>Site : New Gold Inc. (Rainy River)</p> <p>Quote number : New Gold Rainy River Project - Picka Project</p> <p>No. of samples received : 19</p> <p>No. of samples analysed : 19</p>	<p>Page : 1 of 22</p> <p>Laboratory : Thunder Bay - Environmental</p> <p>Account Manager : Christine Paradis</p> <p>Address : 1081 Barton Street Thunder Bay ON Canada P7B 5N3</p> <p>Telephone : +1 807 623 6463</p> <p>Date Samples Received : 09-Jun-2023 09:15</p> <p>Date Analysis Commenced : 10-Jun-2023</p> <p>Issue Date : 04-Jul-2023 13:55</p>
--	---

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Administration, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Inorganics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Metals, Waterloo, Ontario
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Shannon Veltri	Supervisor - Water Chemistry	Inorganics, Thunder Bay, Ontario
Walt Kippenhuck	Supervisor - Inorganic	Metals, Waterloo, Ontario
Wayne Smith	Client Services Specialist	Inorganics, Waterloo, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
 LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
°C	degrees celsius
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	Description
< DL	Recorded value = measured amount > LMDL (non-zero).
< T	A measureable trace amount: Interpret with caution.
< W	No measurable response (zero): < Reported Value
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DLUI	Detection Limit Raised: Unknown interference generated an apparent false positive test result.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW16_SW_202 30606 SW	SW17_SW_202 30606 SW	SW15_SW_202 30606 SW	SW23_SW_202 30606 SW	SW24_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 09:30	06-Jun-2023 10:20	06-Jun-2023 11:00	06-Jun-2023 11:45	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-001	TY2305301-002	TY2305301-003	TY2305301-004	TY2305301-005
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	7.66	7.00	4.30	5.07	5.50
pH, field	----	EF001/TY	0.10	pH units	7.00	7.17	7.20	7.14	7.24
Temperature, field	----	EF001/TY	0.10	°C	20.1	21.0	21.6	22.6	22.5
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	2.5 ^{DLB}	2.5 ^{DLB}	4.2 ^{DLB}	4.8 ^{DLB}	4.7 ^{DLB}
Colour, true	----	E329-L/TY	2.0	CU	39.5	54.1	325	280	263
Conductivity	----	E100/TY	1.0	µS/cm	61.7	71.7	232	318	423
Hardness (as CaCO3), dissolved	----	EC100/WT	0.50	mg/L	26.1	33.0	123	155	188
pH	----	E108/TY	0.10	pH units	7.58	7.64	7.83	7.80	7.81
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	46	59	221	246	322
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	7.9	7.7	29.5	23.7	21.9
Turbidity	----	E121/TY	0.10	NTU	4.05	5.02	30.0	15.5	15.5
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	24.4	30.6	84.8	98.5	99.8
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0166 ^{<T}	0.0144 ^{<T}	0.0633 ^{<T}	0.0833 ^{<T}	0.127 ^{<T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	1.90	2.02	4.60	7.30	10.3
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	0.029	0.041	0.050	0.060
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.515	0.504	1.48	1.48	1.55
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.030 ^{<T}	0.032 ^{<T}	0.165 ^{<T}	0.205 ^{<T}	0.406
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.001 ^{<W}	0.0012 ^{<DL}	0.0039 ^{<DL}	0.0055 ^{<DL}	0.0083 ^{<DL}
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	<0.0010	<0.0010	0.0259	0.0387	0.0300
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	2.68	3.46	31.4	56.3	103
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	0.00054 ^{<DL}	0.00065 ^{<DL}	0.0017 ^{<DL}	0.0018 ^{<DL}	0.0016 ^{<DL}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	0.00074 ^{<DL}	0.00076 ^{<DL}	0.0017 ^{<DL}	0.0016 ^{<DL}	0.0016 ^{<DL}
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW16_SW_202 30606 SW	SW17_SW_202 30606 SW	SW15_SW_202 30606 SW	SW23_SW_202 30606 SW	SW24_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 09:30	06-Jun-2023 10:20	06-Jun-2023 11:00	06-Jun-2023 11:45	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-001	TY2305301-002	TY2305301-003	TY2305301-004	TY2305301-005
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	13.3	15.2	45.0	39.5	40.8
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	11.2	13.4	----	----	----
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	----	----	47.3 ^{DLM}	42.7 ^{DLM}	40.3 ^{DLM}
Total Metals									
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L	0.126	0.169	1.02	0.594	0.562
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L	0.000049 ^{<DL}	0.000071 ^{<DL}	0.00068 ^{<T}	0.00107 ^{<T}	0.00206 ^{<T}
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L	0.00048 ^{<T}	0.00060 ^{<T}	0.00214 ^{<T}	0.00230 ^{<T}	0.00220 ^{<T}
Barium, total	7440-39-3	E420/WT	0.00010	mg/L	0.00878	0.0105	0.0280	0.0277	0.0292
Beryllium, total	7440-41-7	E420/WT	0.000020	mg/L	0.000014 ^{<DL}	0.000013 ^{<DL}	0.000057 ^{<T}	0.000045 ^{<T}	0.000037 ^{<T}
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L	0.0000055 ^{<DL}	<0.000005 ^{<W}	0.000019 ^{<DL}	0.000010 ^{<DL}	0.0000089 ^{<DL}
Boron, total	7440-42-8	E420/WT	0.010	mg/L	0.0065 ^{<DL}	0.0072 ^{<DL}	0.024 ^{<T}	0.030 ^{<T}	0.037 ^{<T}
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L	0.0000081 ^{<T}	0.0000082 ^{<T}	0.0000346 ^{<T}	0.0000262 ^{<T}	0.0000303 ^{<T}
Calcium, total	7440-70-2	E420/WT	0.050	mg/L	6.91	8.45	30.4	37.0	46.5
Cesium, total	7440-46-2	E420/WT	0.000010	mg/L	0.000019	0.000026	0.000151	0.000081	0.000106
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L	0.00053 ^{<T}	0.00053 ^{<T}	0.00217 ^{<T}	0.00138 ^{<T}	0.00132 ^{<T}
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L	0.000097 ^{<DL}	0.00012 ^{<T}	0.00088 ^{<T}	0.00084 ^{<T}	0.00093 ^{<T}
Copper, total	7440-50-8	E420/WT	0.00050	mg/L	0.00447 ^{<T}	0.00379 ^{<T}	0.00384 ^{<T}	0.00258 ^{<T}	0.00204 ^{<T}
Iron, total	7439-89-6	E420/WT	0.010	mg/L	0.212	0.293	1.57	1.22	1.15
Lead, total	7439-92-1	E420/WT	0.000050	mg/L	0.000133 ^{<T}	0.000195 ^{<T}	0.000776 ^{<T}	0.000489 ^{<T}	0.000443 ^{<T}
Lithium, total	7439-93-2	E420/WT	0.0010	mg/L	0.00073 ^{<DL}	0.00080 ^{<DL}	0.0055 ^{<T}	0.0059 ^{<T}	0.0067 ^{<T}
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L	2.24	2.83	11.7	13.4	14.6
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L	0.0134	0.0259	0.0962	0.190	0.179
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	0.0000040 ^{<DL}	0.0000044 ^{<DL}	0.0000087 ^{<T}	0.0000076 ^{<T}	0.0000072 ^{<T}
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L	0.000119 ^{<T}	0.000171 ^{<T}	0.00108 ^{<T}	0.00166 ^{<T}	0.00268 ^{<T}
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L	0.00084 ^{<T}	0.00092 ^{<T}	0.00349 ^{<T}	0.00273 ^{<T}	0.00274 ^{<T}
Phosphorus, total	7723-14-0	E420/WT	0.050	mg/L	0.025 ^{<DL}	0.031 ^{<DL}	0.069	0.106	0.094
Potassium, total	7440-09-7	E420/WT	0.050	mg/L	0.730	0.826	3.42	4.64	8.02
Rubidium, total	7440-17-7	E420/WT	0.00020	mg/L	0.00187	0.00206	0.00491	0.00457	0.00607
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L	0.000093 ^{<T}	0.000107 ^{<T}	0.000308 ^{<T}	0.000310 ^{<T}	0.000367 ^{<T}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW16_SW_202 30606 SW	SW17_SW_202 30606 SW	SW15_SW_202 30606 SW	SW23_SW_202 30606 SW	SW24_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 09:30	06-Jun-2023 10:20	06-Jun-2023 11:00	06-Jun-2023 11:45	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-001	TY2305301-002	TY2305301-003	TY2305301-004	TY2305301-005
					Result	Result	Result	Result	Result
Total Metals									
Silicon, total	7440-21-3	E420/WT	0.10	mg/L	2.19	2.33	5.33	4.35	4.04
Silver, total	7440-22-4	E420/WT	0.000010	mg/L	0.0000051 <DL	0.0000034 <DL	0.0000088 <DL	0.0000070 <DL	0.0000061 <DL
Sodium, total	7440-23-5	E420/WT	0.050	mg/L	2.18	2.30	7.20	11.4	19.3
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L	0.0211	0.0240	0.0910	0.132	0.184
Sulfur, total	7704-34-9	E420/WT	0.50	mg/L	0.88	1.15	11.2	19.3	35.2
Tellurium, total	13494-80-9	E420/WT	0.00020	mg/L	0.0000050 <DL	0.0000050 <DL	0.000020 <DL	0.000027 <DL	0.000049 <DL
Thallium, total	7440-28-0	E420/WT	0.000010	mg/L	0.0000037 <DL	0.0000041 <DL	0.000021 <T	0.000011 <T	0.000011 <T
Thorium, total	7440-29-1	E420/WT	0.00010	mg/L	0.000046 <DL	0.000039 <DL	0.00022	0.00012	0.00014
Tin, total	7440-31-5	E420/WT	0.00010	mg/L	0.000015 <DL	0.000014 <DL	0.000074 <DL	0.000034 <DL	0.000025 <DL
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L	0.00385	0.00548	0.0345	0.0213	0.0196
Tungsten, total	7440-33-7	E420/WT	0.00010	mg/L	0.0000041 <DL	0.0000034 <DL	0.000020 <DL	0.000023 <DL	0.000035 <DL
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L	0.000082 <T	0.000107 <T	0.000672 <T	0.000643 <T	0.000795 <T
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L	0.00057	0.00076	0.00388	0.00262	0.00246
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L	0.0018 <DL	0.0018 <DL	0.0067 <T	0.0048 <T	0.0044 <T
Zirconium, total	7440-67-7	E420/WT	0.00020	mg/L	0.00015 <DL	0.00020	0.00112	0.00073	0.00067
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/WT	0.0010	mg/L	0.0203	0.0217	0.0978	0.0718	0.0703
Antimony, dissolved	7440-36-0	E421/WT	0.00010	mg/L	0.000049 <DL	0.000060 <DL	0.00065	0.00102	0.00197
Arsenic, dissolved	7440-38-2	E421/WT	0.00010	mg/L	0.00041	0.00051	0.00182	0.00216	0.00208
Barium, dissolved	7440-39-3	E421/WT	0.00010	mg/L	0.00714	0.00824	0.0200	0.0233	0.0251
Beryllium, dissolved	7440-41-7	E421/WT	0.000020	mg/L	0.0000091 <DL	0.000010 <DL	0.000025	0.000023	0.000024
Bismuth, dissolved	7440-69-9	E421/WT	0.000050	mg/L	<0.000005 <W	<0.000005 <W	0.0000055 <DL	<0.000005 <W	<0.000005 <W
Boron, dissolved	7440-42-8	E421/WT	0.010	mg/L	0.0064 <DL	0.0074 <DL	0.023	0.029	0.038
Cadmium, dissolved	7440-43-9	E421/WT	0.0000050	mg/L	0.0000042 <DL	0.0000061	0.0000186	0.0000143	0.0000178
Calcium, dissolved	7440-70-2	E421/WT	0.050	mg/L	6.91	8.55	30.0	38.8	50.3
Cesium, dissolved	7440-46-2	E421/WT	0.000010	mg/L	0.0000031 <DL	0.0000021 <DL	0.0000051 <DL	0.0000057 <DL	0.0000034
Chromium, dissolved	7440-47-3	E421/WT	0.00050	mg/L	0.00022 <DL	0.00021 <DL	0.00032 <DL	0.00029 <DL	0.00031 <DL
Cobalt, dissolved	7440-48-4	E421/WT	0.00010	mg/L	0.000023 <DL	0.000044 <DL	0.00033	0.00049	0.00060
Copper, dissolved	7440-50-8	E421/WT	0.00020	mg/L	0.00262	0.00185	0.00349	0.00219	0.00156



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW16_SW_202 30606 SW	SW17_SW_202 30606 SW	SW15_SW_202 30606 SW	SW23_SW_202 30606 SW	SW24_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 09:30	06-Jun-2023 10:20	06-Jun-2023 11:00	06-Jun-2023 11:45	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-001	TY2305301-002	TY2305301-003	TY2305301-004	TY2305301-005
					Result	Result	Result	Result	Result
Dissolved Metals									
Iron, dissolved	7439-89-6	E421/WT	0.010	mg/L	0.072	0.092	0.457	0.562	0.545
Lead, dissolved	7439-92-1	E421/WT	0.000050	mg/L	0.000028 ^{<DL}	0.000035 ^{<DL}	0.000181	0.000166	0.000156
Lithium, dissolved	7439-93-2	E421/WT	0.0010	mg/L	0.00075 ^{<DL}	0.00091 ^{<DL}	0.0045	0.0058	0.0069
Magnesium, dissolved	7439-95-4	E421/WT	0.0050	mg/L	2.14	2.83	11.7	14.2	15.2
Manganese, dissolved	7439-96-5	E421/WT	0.00010	mg/L	0.00233	0.00911	0.0686	0.156	0.143
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	0.0000011 ^{<DL}	<0.000001 ^{<W}	0.0000049 ^{<DL}	0.0000034 ^{<DL}	0.0000031 ^{<DL}
Molybdenum, dissolved	7439-98-7	E421/WT	0.000050	mg/L	0.000116	0.000152	0.000981	0.00151	0.00244
Nickel, dissolved	7440-02-0	E421/WT	0.00050	mg/L	0.00064	0.00065	0.00192	0.00183	0.00190
Phosphorus, dissolved	7723-14-0	E421/WT	0.050	mg/L	0.0032 ^{<DL}	0.0059 ^{<DL}	0.050	0.057	0.054
Potassium, dissolved	7440-09-7	E421/WT	0.050	mg/L	0.680	0.773	3.10	4.83	8.36
Rubidium, dissolved	7440-17-7	E421/WT	0.00020	mg/L	0.00167	0.00162	0.00244	0.00332	0.00483
Selenium, dissolved	7782-49-2	E421/WT	0.000050	mg/L	0.000113	0.000111	0.000268	0.000382	0.000371
Silicon, dissolved	7440-21-3	E421/WT	0.050	mg/L	1.96	1.99	3.22	3.23	2.96
Silver, dissolved	7440-22-4	E421/WT	0.000010	mg/L	0.0000017 ^{<DL}	<0.0000005 ^{<W}	0.0000014 ^{<DL}	0.0000010 ^{<DL}	<0.0000005 ^{<W}
Sodium, dissolved	7440-23-5	E421/WT	0.050	mg/L	2.26	2.44	7.66	11.7	19.4
Strontium, dissolved	7440-24-6	E421/WT	0.00020	mg/L	0.0194	0.0238	0.0853	0.122	0.178
Sulfur, dissolved	7704-34-9	E421/WT	0.50	mg/L	1.09	1.28	11.3	20.4	36.1
Tellurium, dissolved	13494-80-9	E421/WT	0.00020	mg/L	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	0.0000067 ^{<DL}	0.0000067 ^{<DL}
Thallium, dissolved	7440-28-0	E421/WT	0.000010	mg/L	0.0000027 ^{<DL}	0.0000028 ^{<DL}	0.0000047 ^{<DL}	0.0000041 ^{<DL}	0.0000050 ^{<DL}
Thorium, dissolved	7440-29-1	E421/WT	0.00010	mg/L	0.000027 ^{<DL}	0.000030 ^{<DL}	0.000078 ^{<DL}	0.000050 ^{<DL}	0.000047 ^{<DL}
Tin, dissolved	7440-31-5	E421/WT	0.00010	mg/L	<0.000002 ^{<W}	0.0000044 ^{<DL}	0.000024 ^{<DL}	0.0000025 ^{<DL}	0.000011 ^{<DL}
Titanium, dissolved	7440-32-6	E421/WT	0.00030	mg/L	0.00023 ^{<DL}	0.00037	0.00209	0.00221	0.00176
Tungsten, dissolved	7440-33-7	E421/WT	0.00010	mg/L	<0.000002 ^{<W}	<0.000002 ^{<W}	0.0000089 ^{<DL}	0.000014 ^{<DL}	0.000029 ^{<DL}
Uranium, dissolved	7440-61-1	E421/WT	0.000010	mg/L	0.000063	0.000086	0.000497	0.000543	0.000675
Vanadium, dissolved	7440-62-2	E421/WT	0.00050	mg/L	0.00031 ^{<DL}	0.00038 ^{<DL}	0.00144	0.00125	0.00121
Zinc, dissolved	7440-66-6	E421/WT	0.0010	mg/L	0.00097 ^{<DL}	0.0020	0.0030	0.0023	0.0021
Zirconium, dissolved	7440-67-7	E421/WT	0.00030	mg/L	0.00012 ^{<DL}	0.00016 ^{<DL}	0.00053	0.00046	0.00040
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/WT	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW16_SW_202 30606 SW	SW17_SW_202 30606 SW	SW15_SW_202 30606 SW	SW23_SW_202 30606 SW	SW24_SW_202 30606 SW
					Client sampling date / time	06-Jun-2023 09:30	06-Jun-2023 10:20	06-Jun-2023 11:00	06-Jun-2023 11:45	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-001	TY2305301-002	TY2305301-003	TY2305301-004	TY2305301-005	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	33	37	126	114	106	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.3	1.7	0.28 ^{<DL}	1.2	0.88 ^{<DL}	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	----	0.006	<0.005	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW29_SW_202 30606 SW	SW03_SW_202 30606 SW	SW10_SW_202 30606 SW	SW28A_SW_20 230606 SW	SW20_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 12:35	06-Jun-2023 13:00	06-Jun-2023 13:30	06-Jun-2023 13:45	06-Jun-2023 14:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-006	TY2305301-007	TY2305301-008	TY2305301-009	TY2305301-010
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	0.35	5.09	5.77	6.40	3.51
pH, field	----	EF001/TY	0.10	pH units	6.76	7.33	7.30	7.49	7.16
Temperature, field	----	EF001/TY	0.10	°C	21.7	24.2	24.5	27.0	24.6
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	6.2 ^{DLB}	3.1 ^{DLB}	3.7 ^{DLB}	2.5 ^{DLB}	4.9 ^{DLB}
Colour, true	----	E329-L/TY	2.0	CU	119	150	254	171	230
Conductivity	----	E100/TY	1.0	µS/cm	230	526	188	149	237
Hardness (as CaCO3), dissolved	----	EC100/WT	0.50	mg/L	138	223	101	88.5	118
pH	----	E108/TY	0.10	pH units	7.74	7.96	7.90	7.96	7.85
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	174	380	169	134	167
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	9.7	12.4	9.0	1.8 ^{<DL}	2.6 ^{<DL}
Turbidity	----	E121/TY	0.10	NTU	4.74	7.87	8.53	2.23	3.53
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	136	127	90.7	79.6	106
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0245 ^{<T}	0.150 ^{<T}	0.0351 ^{<T}	0.0284 ^{<T}	0.0387 ^{<T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	0.0017	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	0.76	15.0	7.11	0.91	15.2
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.046	0.066	0.039	0.036	0.042
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.39	1.35	1.30	1.20	1.41
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.0021 ^{<DL}	0.511	0.0036 ^{<DL}	0.0028 ^{<DL}	0.0022 ^{<DL}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.001 ^{<W}	0.012 ^{<T}	<0.001 ^{<W}	<0.001 ^{<W}	0.0034 ^{<DL}
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0063	0.0585	0.0280	<0.0010	0.0318
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	0.70	131	1.56	0.50	0.67
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	0.0016 ^{<DL}	0.0017 ^{<DL}	0.0016 ^{<DL}	0.0014 ^{<DL}	0.0014 ^{<DL}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	0.0015 ^{<DL}	0.0014 ^{<DL}	0.0015 ^{<DL}	0.0012 ^{<DL}	0.0014 ^{<DL}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	27.5	26.2	42.2	34.9	39.1



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW29_SW_202 30606 SW	SW03_SW_202 30606 SW	SW10_SW_202 30606 SW	SW28A_SW_20 230606 SW	SW20_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 12:35	06-Jun-2023 13:00	06-Jun-2023 13:30	06-Jun-2023 13:45	06-Jun-2023 14:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-006	TY2305301-007	TY2305301-008	TY2305301-009	TY2305301-010
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	30.0	25.6	39.1	31.7	35.8
Total Metals									
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L	0.0327	0.249	0.301	0.0531	0.122
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L	0.000061 ^{<DL}	0.00246 ^{<T}	0.000066 ^{<DL}	0.000056 ^{<DL}	0.000070 ^{<DL}
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L	0.00235 ^{<T}	0.00209 ^{<T}	0.00196 ^{<T}	0.00139 ^{<T}	0.00201 ^{<T}
Barium, total	7440-39-3	E420/WT	0.00010	mg/L	0.0247	0.0297	0.0184	0.0116	0.0193
Beryllium, total	7440-41-7	E420/WT	0.000020	mg/L	0.000018 ^{<DL}	0.000023 ^{<T}	0.000039 ^{<T}	0.000014 ^{<DL}	0.000025 ^{<T}
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L	<0.000005 ^{<W}	<0.000005 ^{<W}	0.0000053 ^{<DL}	<0.000005 ^{<W}	<0.000005 ^{<W}
Boron, total	7440-42-8	E420/WT	0.010	mg/L	0.016 ^{<T}	0.046 ^{<T}	0.020 ^{<T}	0.014 ^{<T}	0.021 ^{<T}
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L	0.0000089 ^{<T}	0.0000136 ^{<T}	0.0000156 ^{<T}	0.0000048 ^{<DL}	0.0000095 ^{<T}
Calcium, total	7440-70-2	E420/WT	0.050	mg/L	31.2	57.0	24.3	19.9	28.0
Cesium, total	7440-46-2	E420/WT	0.000010	mg/L	0.0000043 ^{<DL}	0.000070	0.000041	0.0000077 ^{<DL}	0.000012
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L	0.00030 ^{<DL}	0.00074 ^{<T}	0.00086 ^{<T}	0.00034 ^{<DL}	0.00054 ^{<T}
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L	0.00128 ^{<T}	0.00074 ^{<T}	0.00032 ^{<T}	0.00015 ^{<T}	0.00051 ^{<T}
Copper, total	7440-50-8	E420/WT	0.00050	mg/L	0.00060 ^{<T}	0.00195 ^{<T}	0.00123 ^{<T}	0.00067 ^{<T}	0.00086 ^{<T}
Iron, total	7439-89-6	E420/WT	0.010	mg/L	0.845	0.711	0.760	0.369	0.827
Lead, total	7439-92-1	E420/WT	0.000050	mg/L	0.000055 ^{<T}	0.000191 ^{<T}	0.000232 ^{<T}	0.000067 ^{<T}	0.000124 ^{<T}
Lithium, total	7439-93-2	E420/WT	0.0010	mg/L	0.0029 ^{<T}	0.0086 ^{<T}	0.0041 ^{<T}	0.0022 ^{<T}	0.0038 ^{<T}
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L	13.3	17.9	10.6	9.54	11.7
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L	1.27	0.151	0.0425	0.0460	0.206
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	0.0000045 ^{<DL}	0.0000036 ^{<DL}	0.0000067 ^{<T}	0.0000058 ^{<T}	0.0000057 ^{<T}
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L	0.000523 ^{<T}	0.00340 ^{<T}	0.000560 ^{<T}	0.000448 ^{<T}	0.000504 ^{<T}
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L	0.00150 ^{<T}	0.00232 ^{<T}	0.00204 ^{<T}	0.00110 ^{<T}	0.00195 ^{<T}
Phosphorus, total	7723-14-0	E420/WT	0.050	mg/L	0.077	0.112	0.063	0.045 ^{<DL}	0.086
Potassium, total	7440-09-7	E420/WT	0.050	mg/L	0.786	9.73	0.972	0.511	1.07
Rubidium, total	7440-17-7	E420/WT	0.00020	mg/L	0.00203	0.00653	0.00209	0.00183	0.00197
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L	0.000208 ^{<T}	0.000410 ^{<T}	0.000244 ^{<T}	0.000188 ^{<T}	0.000254 ^{<T}
Silicon, total	7440-21-3	E420/WT	0.10	mg/L	3.94	3.58	3.41	1.28	3.47
Silver, total	7440-22-4	E420/WT	0.000010	mg/L	0.0000025 ^{<DL}	0.0000045 ^{<DL}	0.0000031 ^{<DL}	0.0000018 ^{<DL}	0.0000029 ^{<DL}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW29_SW_202 30606 SW	SW03_SW_202 30606 SW	SW10_SW_202 30606 SW	SW28A_SW_20 230606 SW	SW20_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 12:35	06-Jun-2023 13:00	06-Jun-2023 13:30	06-Jun-2023 13:45	06-Jun-2023 14:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-006	TY2305301-007	TY2305301-008	TY2305301-009	TY2305301-010
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/WT	0.050	mg/L	1.44	24.4	4.30	0.986	9.17
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L	0.0745	0.239	0.0654	0.0440	0.0765
Sulfur, total	7704-34-9	E420/WT	0.50	mg/L	0.26 ^{<DL}	45.5	0.61	0.40 ^{<DL}	0.73
Tellurium, total	13494-80-9	E420/WT	0.00020	mg/L	0.000015 ^{<DL}	0.000040 ^{<DL}	0.000012 ^{<DL}	0.000023 ^{<DL}	0.000015 ^{<DL}
Thallium, total	7440-28-0	E420/WT	0.00010	mg/L	0.0000029 ^{<DL}	0.0000074 ^{<DL}	0.0000069 ^{<DL}	0.0000028 ^{<DL}	0.0000035 ^{<DL}
Thorium, total	7440-29-1	E420/WT	0.00010	mg/L	0.000027 ^{<DL}	0.000066 ^{<DL}	0.000082 ^{<DL}	0.000028 ^{<DL}	0.000056 ^{<DL}
Tin, total	7440-31-5	E420/WT	0.00010	mg/L	<0.00001 ^{<W}	0.000015 ^{<DL}	0.000017 ^{<DL}	<0.00001 ^{<W}	0.000013 ^{<DL}
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L	0.0010 ^{<DL,DLU}	0.00970	0.0110	0.0018 ^{<DL,DLU}	0.00442
Tungsten, total	7440-33-7	E420/WT	0.00010	mg/L	0.0000035 ^{<DL}	0.000040 ^{<DL}	0.0000053 ^{<DL}	<0.000002 ^{<W}	0.0000062 ^{<DL}
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L	0.000164 ^{<T}	0.000979 ^{<T}	0.000330 ^{<T}	0.000182 ^{<T}	0.000273 ^{<T}
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L	0.00050	0.00161	0.00191	0.00065	0.00116
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L	0.0021 ^{<DL}	0.0027 ^{<DL}	0.0028 ^{<DL}	0.0012 ^{<DL}	0.0026 ^{<DL}
Zirconium, total	7440-67-7	E420/WT	0.00020	mg/L	0.00022	0.00048	0.00059	0.00022	0.00052
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/WT	0.0010	mg/L	0.0058	0.0145	0.0324	0.0102	0.0256
Antimony, dissolved	7440-36-0	E421/WT	0.00010	mg/L	0.000065 ^{<DL}	0.00240	0.000071 ^{<DL}	0.000053 ^{<DL}	0.000073 ^{<DL}
Arsenic, dissolved	7440-38-2	E421/WT	0.00010	mg/L	0.00201	0.00199	0.00179	0.00127	0.00177
Barium, dissolved	7440-39-3	E421/WT	0.00010	mg/L	0.0203	0.0263	0.0154	0.0105	0.0178
Beryllium, dissolved	7440-41-7	E421/WT	0.000020	mg/L	0.000011 ^{<DL}	0.000014 ^{<DL}	0.000026	0.000016 ^{<DL}	0.000023
Bismuth, dissolved	7440-69-9	E421/WT	0.000050	mg/L	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}
Boron, dissolved	7440-42-8	E421/WT	0.010	mg/L	0.016	0.045	0.019	0.014	0.021
Cadmium, dissolved	7440-43-9	E421/WT	0.0000050	mg/L	0.0000061	0.0000077	0.0000090	0.0000041 ^{<DL}	0.0000077
Calcium, dissolved	7440-70-2	E421/WT	0.050	mg/L	32.9	59.2	24.1	20.2	28.1
Cesium, dissolved	7440-46-2	E421/WT	0.000010	mg/L	0.0000016 ^{<DL}	0.000042	0.0000013 ^{<DL}	0.0000020 ^{<DL}	0.0000010 ^{<DL}
Chromium, dissolved	7440-47-3	E421/WT	0.00050	mg/L	0.00016 ^{<DL}	0.00019 ^{<DL}	0.00028 ^{<DL}	0.00017 ^{<DL}	0.00028 ^{<DL}
Cobalt, dissolved	7440-48-4	E421/WT	0.00010	mg/L	0.00099	0.00059	0.00018	0.00011	0.00043
Copper, dissolved	7440-50-8	E421/WT	0.00020	mg/L	0.00058	0.00156	0.00104	0.00056	0.00075
Iron, dissolved	7439-89-6	E421/WT	0.010	mg/L	0.293	0.350	0.421	0.282	0.591
Lead, dissolved	7439-92-1	E421/WT	0.000050	mg/L	<0.00002 ^{<W}	0.000054	0.000100	0.000041 ^{<DL}	0.000071



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW29_SW_202 30606 SW	SW03_SW_202 30606 SW	SW10_SW_202 30606 SW	SW28A_SW_20 230606 SW	SW20_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 12:35	06-Jun-2023 13:00	06-Jun-2023 13:30	06-Jun-2023 13:45	06-Jun-2023 14:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-006	TY2305301-007	TY2305301-008	TY2305301-009	TY2305301-010
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/WT	0.0010	mg/L	0.0031	0.0087	0.0038	0.0026	0.0042
Magnesium, dissolved	7439-95-4	E421/WT	0.0050	mg/L	13.7	18.2	10.0	9.24	11.5
Manganese, dissolved	7439-96-5	E421/WT	0.00010	mg/L	1.01	0.127	0.0275	0.0264	0.174
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	0.0000021 ^{<DL}	0.0000022 ^{<DL}	0.0000027 ^{<DL}	0.0000022 ^{<DL}	0.0000030 ^{<DL}
Molybdenum, dissolved	7439-98-7	E421/WT	0.000050	mg/L	0.000532	0.00318	0.000511	0.000413	0.000441
Nickel, dissolved	7440-02-0	E421/WT	0.00050	mg/L	0.00133	0.00189	0.00164	0.00097	0.00174
Phosphorus, dissolved	7723-14-0	E421/WT	0.050	mg/L	0.028 ^{<DL}	0.082	0.054	0.012 ^{<DL}	0.064
Potassium, dissolved	7440-09-7	E421/WT	0.050	mg/L	0.749	10.0	0.895	0.489	1.06
Rubidium, dissolved	7440-17-7	E421/WT	0.00020	mg/L	0.00190	0.00572	0.00135	0.00156	0.00169
Selenium, dissolved	7782-49-2	E421/WT	0.000050	mg/L	0.000244	0.000375	0.000205	0.000142	0.000227
Silicon, dissolved	7440-21-3	E421/WT	0.050	mg/L	3.98	2.88	2.52	1.12	3.08
Silver, dissolved	7440-22-4	E421/WT	0.000010	mg/L	0.00000060 ^{<DL}	0.0000049 ^{<DL}	0.0000021 ^{<DL}	0.0000013 ^{<DL}	0.0000020 ^{<DL}
Sodium, dissolved	7440-23-5	E421/WT	0.050	mg/L	1.40	24.4	4.18	0.990	9.17
Strontium, dissolved	7440-24-6	E421/WT	0.00020	mg/L	0.0700	0.236	0.0620	0.0426	0.0731
Sulfur, dissolved	7704-34-9	E421/WT	0.50	mg/L	0.38 ^{<DL}	45.1	0.61	0.46 ^{<DL}	0.72
Tellurium, dissolved	13494-80-9	E421/WT	0.00020	mg/L	<0.000005 ^{<W}	0.0000098 ^{<DL}	0.0000085 ^{<DL}	0.0000060 ^{<DL}	0.000014 ^{<DL}
Thallium, dissolved	7440-28-0	E421/WT	0.000010	mg/L	0.0000027 ^{<DL}	0.0000045 ^{<DL}	0.0000032 ^{<DL}	0.0000026 ^{<DL}	0.0000034 ^{<DL}
Thorium, dissolved	7440-29-1	E421/WT	0.00010	mg/L	0.000019 ^{<DL}	0.000029 ^{<DL}	0.000060 ^{<DL}	0.000027 ^{<DL}	0.000060 ^{<DL}
Tin, dissolved	7440-31-5	E421/WT	0.00010	mg/L	<0.000002 ^{<W}	0.0000023 ^{<DL}	0.000019 ^{<DL}	0.000012 ^{<DL}	0.000013 ^{<DL}
Titanium, dissolved	7440-32-6	E421/WT	0.00030	mg/L	0.00024 ^{<DL}	0.00052 ^{<DL,DLU}	0.00108	0.00036	0.00110
Tungsten, dissolved	7440-33-7	E421/WT	0.00010	mg/L	<0.000002 ^{<W}	0.000037 ^{<DL}	0.0000036 ^{<DL}	<0.000002 ^{<W}	0.0000051 ^{<DL}
Uranium, dissolved	7440-61-1	E421/WT	0.000010	mg/L	0.000139	0.000868	0.000289	0.000160	0.000246
Vanadium, dissolved	7440-62-2	E421/WT	0.00050	mg/L	0.00032 ^{<DL}	0.00092	0.00113	0.00045 ^{<DL}	0.00089
Zinc, dissolved	7440-66-6	E421/WT	0.0010	mg/L	0.0019	0.0015	0.0020	0.0014	0.0022
Zirconium, dissolved	7440-67-7	E421/WT	0.00030	mg/L	0.00023 ^{<DL}	0.00031	0.00044	0.00020 ^{<DL}	0.00051
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/WT	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW29_SW_202 30606 SW	SW03_SW_202 30606 SW	SW10_SW_202 30606 SW	SW28A_SW_20 230606 SW	SW20_SW_202 30606 SW
					Client sampling date / time	06-Jun-2023 12:35	06-Jun-2023 13:00	06-Jun-2023 13:30	06-Jun-2023 13:45	06-Jun-2023 14:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-006	TY2305301-007	TY2305301-008	TY2305301-009	TY2305301-010	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	87	79	113	85	102	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.7	0.92 ^{<DL}	1.7	10.3	1.7	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/21	0.005	Bq/L	----	----	----	----	<0.005	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

				SW02_SW_202 30606 SW	SW26_SW_202 30606 SW	SW25_SW_202 30606 SW	FB_SW_202306 06 SW	SW06_SW_202 30606 SW	
Client sampling date / time				06-Jun-2023 08:35	06-Jun-2023 09:05	06-Jun-2023 09:45	06-Jun-2023 12:00	06-Jun-2023 12:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-011	TY2305301-012	TY2305301-013	TY2305301-014	TY2305301-015
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	3.93	5.46	1.43	----	5.46
pH, field	----	EF001/TY	0.10	pH units	6.90	7.37	7.23	----	7.37
Temperature, field	----	EF001/TY	0.10	°C	19.8	19.5	19.8	----	19.5
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	4.9 ^{DLB}	2.0 ^{<DL,DLB}	2.5 ^{DLB}	2.3 ^{DLB}	2.3 ^{DLB}
Colour, true	----	E329-L/TY	2.0	CU	196	94.7	94.5	<2.0	95.1
Conductivity	----	E100/TY	1.0	µS/cm	145	276	264	1.4	280
Hardness (as CaCO3), dissolved	----	EC100/WT	0.50	mg/L	86.3	145	137	<0.50	145
pH	----	E108/TY	0.10	pH units	7.75	8.17	8.05	5.45	8.12
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	129	185	176	<2 ^{<W}	180
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	1.6 ^{<DL}	3.2	4.0	<0.5 ^{<W}	3.2
Turbidity	----	E121/TY	0.10	NTU	2.15	7.15	6.02	<0.10	7.54
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	78.3	141	127	0.50 ^{<DL}	140
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0234 ^{<T}	0.0326 ^{<T}	0.0386 ^{<T}	<0.002 ^{<W}	0.0296 ^{<T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	----	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	0.30	10.7	10.9	<0.10	10.7
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.029	0.051	<0.020	<0.020	0.051
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.996	0.780	0.801	<0.05 ^{<W}	0.785
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.002 ^{<W}	0.0025 ^{<DL}	0.0054 ^{<DL}	<0.002 ^{<W}	0.0071 ^{<DL}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.001 ^{<W}	<0.001 ^{<W}	<0.001 ^{<W}	<0.001 ^{<W}	0.0025 ^{<DL}
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	<0.0010	0.0123	0.0119	<0.0010	0.0156
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.05 ^{<W}	8.57	6.94	0.15 ^{<DL}	8.64
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	0.0013 ^{<DL}	0.0011 ^{<DL}	0.0012 ^{<DL}	0.00031 ^{<DL}	0.00072 ^{<DL}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	0.0012 ^{<DL}	0.00080 ^{<DL}	0.00088 ^{<DL}	0.00022 ^{<DL}	0.00082 ^{<DL}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	34.5	20.6	22.4	0.24 ^{<DL}	24.1



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW02_SW_202 30606 SW	SW26_SW_202 30606 SW	SW25_SW_202 30606 SW	FB_SW_202306 06 SW	SW06_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 08:35	06-Jun-2023 09:05	06-Jun-2023 09:45	06-Jun-2023 12:00	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-011	TY2305301-012	TY2305301-013	TY2305301-014	TY2305301-015
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	31.9	20.8	20.3	<0.2 ^{cw}	20.3
Total Metals									
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L	0.0899	0.217	0.161	0.0014 ^{cDL}	0.205
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L	0.000044 ^{cDL}	0.00010	0.00010	<0.000005 ^{cw}	0.000099 ^{cDL}
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L	0.00152 ^{cT}	0.00188 ^{cT}	0.00151 ^{cT}	0.000089 ^{cDL}	0.00184 ^{cT}
Barium, total	7440-39-3	E420/WT	0.00010	mg/L	0.0152	0.0183	0.0178	0.000030 ^{cDL}	0.0185
Beryllium, total	7440-41-7	E420/WT	0.000020	mg/L	0.000010 ^{cDL}	0.000016 ^{cDL}	0.000016 ^{cDL}	<0.000002 ^{cw}	0.000018 ^{cDL}
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L	<0.000005 ^{cw}	<0.000005 ^{cw}	<0.000005 ^{cw}	<0.000005 ^{cw}	<0.000005 ^{cw}
Boron, total	7440-42-8	E420/WT	0.010	mg/L	0.010	0.016 ^{cT}	0.014 ^{cT}	0.019 ^{cT}	0.016 ^{cT}
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L	0.0000073 ^{cT}	0.0000078 ^{cT}	0.0000054 ^{cT}	<0.0000002 ^{cw}	0.0000077 ^{cT}
Calcium, total	7440-70-2	E420/WT	0.050	mg/L	20.6	36.8	34.5	0.020 ^{cDL}	36.5
Cesium, total	7440-46-2	E420/WT	0.000010	mg/L	0.000011	0.000031	0.000022	<0.0000002 ^{cw}	0.000028
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L	0.00041 ^{cDL}	0.00051 ^{cT}	0.00053 ^{cT}	0.00011 ^{cDL}	0.00057 ^{cT}
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L	0.00030 ^{cT}	0.00023 ^{cT}	0.00026 ^{cT}	<0.000002 ^{cw}	0.00022 ^{cT}
Copper, total	7440-50-8	E420/WT	0.00050	mg/L	0.00040 ^{cDL}	0.00137 ^{cT}	0.00133 ^{cT}	<0.00005 ^{cw}	0.00133 ^{cT}
Iron, total	7439-89-6	E420/WT	0.010	mg/L	0.504	0.607	0.496	<0.001 ^{cw}	0.595
Lead, total	7439-92-1	E420/WT	0.000050	mg/L	0.000102 ^{cT}	0.000153 ^{cT}	0.000136 ^{cT}	<0.00002 ^{cw}	0.000149 ^{cT}
Lithium, total	7439-93-2	E420/WT	0.0010	mg/L	0.0011 ^{cT}	0.0038 ^{cT}	0.0031 ^{cT}	<0.0002 ^{cw}	0.0038 ^{cT}
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L	8.34	13.3	12.5	0.0022 ^{cDL}	13.3
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L	0.115	0.0848	0.192	0.000059 ^{cDL}	0.0853
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	0.0000047 ^{cDL}	0.0000028 ^{cDL}	0.0000029 ^{cDL}	0.0000026 ^{cDL}	0.0000046 ^{cDL}
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L	0.000186 ^{cT}	0.000750 ^{cT}	0.000657 ^{cT}	<0.000005 ^{cw}	0.000738 ^{cT}
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L	0.00080 ^{cT}	0.00146 ^{cT}	0.00131 ^{cT}	0.000044 ^{cDL}	0.00141 ^{cT}
Phosphorus, total	7723-14-0	E420/WT	0.050	mg/L	0.018 ^{cDL}	0.046 ^{cDL}	0.035 ^{cDL}	0.025 ^{cDL}	0.039 ^{cDL}
Potassium, total	7440-09-7	E420/WT	0.050	mg/L	0.654	1.68	1.64	<0.002 ^{cw}	1.68
Rubidium, total	7440-17-7	E420/WT	0.00020	mg/L	0.00183	0.00230	0.00207	<0.000002 ^{cw}	0.00226
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L	0.000164 ^{cT}	0.000161 ^{cT}	0.000180 ^{cT}	<0.000002 ^{cw}	0.000171 ^{cT}
Silicon, total	7440-21-3	E420/WT	0.10	mg/L	3.45	3.15	2.25	0.20	3.13
Silver, total	7440-22-4	E420/WT	0.000010	mg/L	0.0000022 ^{cDL}	0.0000034 ^{cDL}	0.0000034 ^{cDL}	0.0000090 ^{cDL}	0.0000038 ^{cDL}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW02_SW_202 30606 SW	SW26_SW_202 30606 SW	SW25_SW_202 30606 SW	FB_SW_202306 06 SW	SW06_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 08:35	06-Jun-2023 09:05	06-Jun-2023 09:45	06-Jun-2023 12:00	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-011	TY2305301-012	TY2305301-013	TY2305301-014	TY2305301-015
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/WT	0.050	mg/L	0.896	4.03	3.72	0.042 ^{<DL}	3.93
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L	0.0392	0.0877	0.0785	0.000029 ^{<DL}	0.0873
Sulfur, total	7704-34-9	E420/WT	0.50	mg/L	0.11 ^{<DL}	3.30	2.69	<0.05 ^{<W}	3.24
Tellurium, total	13494-80-9	E420/WT	0.00020	mg/L	0.0000083 ^{<DL}	0.000032 ^{<DL}	0.000012 ^{<DL}	<0.000005 ^{<W}	0.000024 ^{<DL}
Thallium, total	7440-28-0	E420/WT	0.00010	mg/L	0.0000059 ^{<DL}	0.0000041 ^{<DL}	0.0000040 ^{<DL}	<0.000001 ^{<W}	0.000047 ^{<DL}
Thorium, total	7440-29-1	E420/WT	0.00010	mg/L	0.000021 ^{<DL}	0.000050 ^{<DL}	0.000035 ^{<DL}	<0.000002 ^{<W}	0.000043 ^{<DL}
Tin, total	7440-31-5	E420/WT	0.00010	mg/L	<0.00001 ^{<W}	0.000053 ^{<DL}	<0.00001 ^{<W}	0.000030 ^{<DL}	0.000018 ^{<DL}
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L	0.00239	0.00852	0.00640	<0.00002 ^{<W}	0.00730
Tungsten, total	7440-33-7	E420/WT	0.00010	mg/L	<0.000002 ^{<W}	0.000013 ^{<DL}	0.000014 ^{<DL}	<0.000002 ^{<W}	0.000013 ^{<DL}
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L	0.000046 ^{<T}	0.000575 ^{<T}	0.000581 ^{<T}	<0.0000005 ^{<W}	0.000561 ^{<T}
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L	0.00042 ^{<DL}	0.00123	0.00099	0.000053 ^{<DL}	0.00118
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L	0.0022 ^{<DL}	0.0087 ^{<T}	0.0066 ^{<T}	0.00035 ^{<DL}	0.0088 ^{<T}
Zirconium, total	7440-67-7	E420/WT	0.00020	mg/L	0.00020	0.00032	0.00032	<0.000004 ^{<W}	0.00036
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/WT	0.0010	mg/L	0.0260	0.0061	0.0045	0.00054 ^{<DL}	0.0040
Antimony, dissolved	7440-36-0	E421/WT	0.00010	mg/L	0.000047 ^{<DL}	0.000097 ^{<DL}	0.00010	0.000087 ^{<DL}	0.000097 ^{<DL}
Arsenic, dissolved	7440-38-2	E421/WT	0.00010	mg/L	0.00143	0.00157	0.00142	<0.000005 ^{<W}	0.00161
Barium, dissolved	7440-39-3	E421/WT	0.00010	mg/L	0.0141	0.0157	0.0158	0.000051 ^{<DL}	0.0158
Beryllium, dissolved	7440-41-7	E421/WT	0.000020	mg/L	0.000012 ^{<DL}	0.0000077 ^{<DL}	0.0000098 ^{<DL}	<0.000002 ^{<W}	0.000011 ^{<DL}
Bismuth, dissolved	7440-69-9	E421/WT	0.000050	mg/L	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}
Boron, dissolved	7440-42-8	E421/WT	0.010	mg/L	0.010	0.016	0.014	0.017	0.016
Cadmium, dissolved	7440-43-9	E421/WT	0.0000050	mg/L	0.0000047 ^{<DL}	0.0000030 ^{<DL}	0.0000035 ^{<DL}	<0.0000002 ^{<W}	0.0000036 ^{<DL}
Calcium, dissolved	7440-70-2	E421/WT	0.050	mg/L	20.8	36.5	34.7	0.015 ^{<DL}	36.7
Cesium, dissolved	7440-46-2	E421/WT	0.000010	mg/L	0.0000022 ^{<DL}	0.0000036 ^{<DL}	0.0000027 ^{<DL}	0.00000030 ^{<DL}	0.0000035 ^{<DL}
Chromium, dissolved	7440-47-3	E421/WT	0.00050	mg/L	0.00014 ^{<DL}	0.00012 ^{<DL}	0.000094 ^{<DL}	0.00011 ^{<DL}	0.00011 ^{<DL}
Cobalt, dissolved	7440-48-4	E421/WT	0.00010	mg/L	0.00023	0.00012	0.00017	<0.000002 ^{<W}	0.00012
Copper, dissolved	7440-50-8	E421/WT	0.00020	mg/L	0.00035	0.00106	0.00100	<0.00005 ^{<W}	0.00098
Iron, dissolved	7439-89-6	E421/WT	0.010	mg/L	0.370	0.273	0.243	<0.001 ^{<W}	0.253
Lead, dissolved	7439-92-1	E421/WT	0.000050	mg/L	0.000057	0.000042 ^{<DL}	0.000034 ^{<DL}	<0.00002 ^{<W}	0.000031 ^{<DL}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW02_SW_202 30606 SW	SW26_SW_202 30606 SW	SW25_SW_202 30606 SW	FB_SW_202306 06 SW	SW06_SW_202 30606 SW
Client sampling date / time					06-Jun-2023 08:35	06-Jun-2023 09:05	06-Jun-2023 09:45	06-Jun-2023 12:00	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-011	TY2305301-012	TY2305301-013	TY2305301-014	TY2305301-015
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/WT	0.0010	mg/L	0.0014	0.0041	0.0035	<0.0002 ^{cW}	0.0042
Magnesium, dissolved	7439-95-4	E421/WT	0.0050	mg/L	8.34	13.0	12.2	0.00060 ^{cDL}	12.9
Manganese, dissolved	7439-96-5	E421/WT	0.00010	mg/L	0.0958	0.0637	0.165	0.000026 ^{cDL}	0.0632
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	0.0000019 ^{cDL}	0.0000021 ^{cDL}	0.0000015 ^{cDL}	<0.000001 ^{cW}	0.0000012 ^{cDL}
Molybdenum, dissolved	7439-98-7	E421/WT	0.000050	mg/L	0.000166	0.000687	0.000630	<0.000005 ^{cW}	0.000690
Nickel, dissolved	7440-02-0	E421/WT	0.00050	mg/L	0.00065	0.00115	0.00109	<0.00002 ^{cW}	0.00117
Phosphorus, dissolved	7723-14-0	E421/WT	0.050	mg/L	0.0060 ^{cDL}	0.025 ^{cDL}	0.020 ^{cDL}	<0.002 ^{cW}	0.026 ^{cDL}
Potassium, dissolved	7440-09-7	E421/WT	0.050	mg/L	0.652	1.63	1.59	0.0044 ^{cDL}	1.61
Rubidium, dissolved	7440-17-7	E421/WT	0.00020	mg/L	0.00167	0.00165	0.00168	<0.000002 ^{cW}	0.00164
Selenium, dissolved	7782-49-2	E421/WT	0.000050	mg/L	0.000130	0.000180	0.000175	0.0000032 ^{cDL}	0.000168
Silicon, dissolved	7440-21-3	E421/WT	0.050	mg/L	3.29	2.57	1.81	0.146	2.60
Silver, dissolved	7440-22-4	E421/WT	0.000010	mg/L	0.0000010 ^{cDL}	0.0000013 ^{cDL}	0.0000011 ^{cDL}	<0.0000005 ^{cW}	0.0000090 ^{cDL}
Sodium, dissolved	7440-23-5	E421/WT	0.050	mg/L	0.921	3.93	3.68	0.051	3.90
Strontium, dissolved	7440-24-6	E421/WT	0.00020	mg/L	0.0383	0.0838	0.0760	0.000023 ^{cDL}	0.0832
Sulfur, dissolved	7704-34-9	E421/WT	0.50	mg/L	0.14 ^{cDL}	3.23	2.63	<0.05 ^{cW}	3.32
Tellurium, dissolved	13494-80-9	E421/WT	0.00020	mg/L	<0.000005 ^{cW}	0.000016 ^{cDL}	0.0000088 ^{cDL}	<0.000005 ^{cW}	0.000016 ^{cDL}
Thallium, dissolved	7440-28-0	E421/WT	0.000010	mg/L	0.0000056 ^{cDL}	0.0000026 ^{cDL}	0.0000024 ^{cDL}	<0.000001 ^{cW}	0.0000022 ^{cDL}
Thorium, dissolved	7440-29-1	E421/WT	0.00010	mg/L	0.000020 ^{cDL}	0.000026 ^{cDL}	0.000022 ^{cDL}	<0.000002 ^{cW}	0.000022 ^{cDL}
Tin, dissolved	7440-31-5	E421/WT	0.00010	mg/L	0.000023 ^{cDL}	0.000014 ^{cDL}	0.0000035 ^{cDL}	0.00014	0.000011 ^{cDL}
Titanium, dissolved	7440-32-6	E421/WT	0.00030	mg/L	0.00042	0.00039	0.00034	<0.00002 ^{cW}	0.00032
Tungsten, dissolved	7440-33-7	E421/WT	0.00010	mg/L	<0.000002 ^{cW}	0.000010 ^{cDL}	0.0000096 ^{cDL}	<0.000002 ^{cW}	0.000012 ^{cDL}
Uranium, dissolved	7440-61-1	E421/WT	0.000010	mg/L	0.000040	0.000502	0.000525	<0.0000005 ^{cW}	0.000505
Vanadium, dissolved	7440-62-2	E421/WT	0.00050	mg/L	0.00025 ^{cDL}	0.00066	0.00057	<0.00002 ^{cW}	0.00066
Zinc, dissolved	7440-66-6	E421/WT	0.0010	mg/L	0.0027	0.0061	0.0047	0.00032 ^{cDL}	0.0055
Zirconium, dissolved	7440-67-7	E421/WT	0.00030	mg/L	0.00014 ^{cDL}	0.00024 ^{cDL}	0.00023 ^{cDL}	<0.000004 ^{cW}	0.00024 ^{cDL}
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/WT	-	-	Laboratory	Laboratory	Laboratory	Field	Laboratory
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW02_SW_202 30606 SW	SW26_SW_202 30606 SW	SW25_SW_202 30606 SW	FB_SW_202306 06 SW	SW06_SW_202 30606 SW
					Client sampling date / time	06-Jun-2023 08:35	06-Jun-2023 09:05	06-Jun-2023 09:45	06-Jun-2023 12:00	06-Jun-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-011	TY2305301-012	TY2305301-013	TY2305301-014	TY2305301-015	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	87	57	56	5.0 ^{<DL}		58
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.7	0.88 ^{<DL}	2.0	1.3		0.64 ^{<DL}

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW22A_SW_20 230606 SW	SW27_SW_202 30606 SW	SW21A_SW_20 230606 SW	TB_SW_20230 606 SW	----
					06-Jun-2023 17:00	06-Jun-2023 17:40	06-Jun-2023 18:00	06-Jun-2023 09:00	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-016	TY2305301-017	TY2305301-018	TY2305301-019	-----
					Result	Result	Result	Result	----
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	6.09	7.65	1.75	----	----
pH, field	----	EF001/TY	0.10	pH units	7.35	7.66	7.05	----	----
Temperature, field	----	EF001/TY	0.10	°C	21.2	19.9	21.5	----	----
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	3.1 ^{DLB}	1.9 ^{<DL,DLB}	4.0	1.6 ^{<DL}	----
Colour, true	----	E329-L/TY	2.0	CU	127	92.1	214	<2.0	----
Conductivity	----	E100/TY	1.0	µS/cm	690	310	256	1.1	----
Hardness (as CaCO3), dissolved	----	EC100/WT	0.50	mg/L	256	161	133	<0.50	----
pH	----	E108/TY	0.10	pH units	7.99	8.13	7.86	5.36	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	449	190	194	<2 ^{<W}	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	6.6	3.6	4.0	<0.5 ^{<W}	----
Turbidity	----	E121/TY	0.10	NTU	3.63	6.41	2.53	<0.10	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	126	180	118	<0.2 ^{<W}	----
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.258	0.0260 ^{<T}	0.0387 ^{<T}	<0.002 ^{<W}	----
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	0.0025	<0.0010	<0.0010	----	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	22.3	10.9	12.1	0.16	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.040 ^{DLDS}	0.056	0.054	<0.020	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.35	1.13	1.40	<0.05 ^{<W}	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	----	<0.002 ^{<W}	<0.020 ^{<DL}	<0.020 ^{<DL}	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.829	----	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	----	<0.001 ^{<W}	<0.001 ^{<W}	<0.010 ^{<DL}	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	0.0048 ^{<DL,DLDS}	----	----	----	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0517	0.0152	0.125	<0.0010	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	----	8.10	2.63	<0.30 ^{<DL}	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	204	----	----	----	----
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	0.0012 ^{<DL}	0.0011 ^{<DL}	0.0015 ^{<DL}	<0.0002 ^{<W}	----



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW22A_SW_20 230606 SW	SW27_SW_202 30606 SW	SW21A_SW_20 230606 SW	TB_SW_20230 606 SW	----
Client sampling date / time					06-Jun-2023 17:00	06-Jun-2023 17:40	06-Jun-2023 18:00	06-Jun-2023 09:00	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-016	TY2305301-017	TY2305301-018	TY2305301-019	-----
					Result	Result	Result	Result	----
Cyanides									
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	0.0013 ^{<DL}	0.0012 ^{<DL}	0.0012 ^{<DL}	0.00017 ^{<DL}	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	26.6	20.8	38.6	<0.2 ^{<W}	----
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	24.1	21.1	34.2	<0.2 ^{<W}	----
Total Metals									
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L	0.0939	0.189	0.0375	0.0013 ^{<DL}	----
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L	0.00456 ^{<T}	0.00010	0.000091 ^{<DL}	<0.000005 ^{<W}	----
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L	0.00226 ^{<T}	0.00182 ^{<T}	0.00309 ^{<T}	<0.000005 ^{<W}	----
Barium, total	7440-39-3	E420/WT	0.00010	mg/L	0.0277	0.0161	0.0225	<0.00002 ^{<W}	----
Beryllium, total	7440-41-7	E420/WT	0.000020	mg/L	0.000014 ^{<DL}	0.000020 ^{<DL}	0.000023 ^{<T}	<0.000002 ^{<W}	----
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	----
Boron, total	7440-42-8	E420/WT	0.010	mg/L	0.055	0.018 ^{<T}	0.026 ^{<T}	<0.002 ^{<W}	----
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L	0.0000168 ^{<T}	0.0000088 ^{<T}	0.0000090 ^{<T}	<0.0000002 ^{<W}	----
Calcium, total	7440-70-2	E420/WT	0.050	mg/L	73.6	40.6	31.8	<0.005 ^{<W}	----
Cesium, total	7440-46-2	E420/WT	0.000010	mg/L	0.000164	0.000025	0.0000048 ^{<DL}	<0.0000002 ^{<W}	----
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L	0.00041 ^{<DL}	0.00057 ^{<T}	0.00042 ^{<DL}	0.00027 ^{<DL}	----
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L	0.00097 ^{<T}	0.00025 ^{<T}	0.00078 ^{<T}	0.0000023 ^{<DL}	----
Copper, total	7440-50-8	E420/WT	0.00050	mg/L	0.00229 ^{<T}	0.00166 ^{<T}	0.00098 ^{<T}	<0.00005 ^{<W}	----
Iron, total	7439-89-6	E420/WT	0.010	mg/L	0.759	0.505	1.39	0.0012 ^{<DL}	----
Lead, total	7439-92-1	E420/WT	0.000050	mg/L	0.000093 ^{<T}	0.000136 ^{<T}	0.000079 ^{<T}	<0.00002 ^{<W}	----
Lithium, total	7439-93-2	E420/WT	0.0010	mg/L	0.0086 ^{<T}	0.0043 ^{<T}	0.0047 ^{<T}	<0.0002 ^{<W}	----
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L	17.6	15.2	13.2	0.0017 ^{<DL}	----
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L	0.141	0.0952	0.328	0.000047 ^{<DL}	----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	0.0000033 ^{<DL}	0.0000033 ^{<DL}	0.0000068 ^{<T}	0.0000010 ^{<DL}	----
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L	0.00526 ^{<T}	0.000747 ^{<T}	0.000698 ^{<T}	0.000018 ^{<DL}	----
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L	0.00228 ^{<T}	0.00153 ^{<T}	0.00195 ^{<T}	0.00016 ^{<DL}	----
Phosphorus, total	7723-14-0	E420/WT	0.050	mg/L	0.126	0.044 ^{<DL}	0.199	0.012 ^{<DL}	----
Potassium, total	7440-09-7	E420/WT	0.050	mg/L	16.2	1.79	1.94	<0.002 ^{<W}	----
Rubidium, total	7440-17-7	E420/WT	0.00020	mg/L	0.00948	0.00212	0.00258	<0.000002 ^{<W}	----



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW22A_SW_20 230606 SW	SW27_SW_202 30606 SW	SW21A_SW_20 230606 SW	TB_SW_20230 606 SW	----
Client sampling date / time					06-Jun-2023 17:00	06-Jun-2023 17:40	06-Jun-2023 18:00	06-Jun-2023 09:00	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-016	TY2305301-017	TY2305301-018	TY2305301-019	-----
					Result	Result	Result	Result	----
Total Metals									
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L	0.000483 ^{<T}	0.000186 ^{<T}	0.000282 ^{<T}	<0.000002 ^{<W}	----
Silicon, total	7440-21-3	E420/WT	0.10	mg/L	3.07	3.83	4.67	0.037 ^{<DL}	----
Silver, total	7440-22-4	E420/WT	0.000010	mg/L	0.0000044 ^{<DL}	0.0000036 ^{<DL}	0.0000024 ^{<DL}	0.0000011 ^{<DL}	----
Sodium, total	7440-23-5	E420/WT	0.050	mg/L	38.6	4.73	6.27	<0.005 ^{<W}	----
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L	0.335	0.0941	0.0875	<0.00001 ^{<W}	----
Sulfur, total	7704-34-9	E420/WT	0.50	mg/L	71.4	3.03	1.43	<0.05 ^{<W}	----
Tellurium, total	13494-80-9	E420/WT	0.00020	mg/L	0.000050 ^{<DL}	0.000027 ^{<DL}	0.000034 ^{<DL}	<0.000005 ^{<W}	----
Thallium, total	7440-28-0	E420/WT	0.000010	mg/L	0.0000067 ^{<DL}	0.0000042 ^{<DL}	0.0000016 ^{<DL}	<0.000001 ^{<W}	----
Thorium, total	7440-29-1	E420/WT	0.00010	mg/L	0.000050 ^{<DL}	0.000042 ^{<DL}	0.000035 ^{<DL}	<0.000002 ^{<W}	----
Tin, total	7440-31-5	E420/WT	0.00010	mg/L	0.000013 ^{<DL}	0.000016 ^{<DL}	<0.00001 ^{<W}	<0.00001 ^{<W}	----
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L	0.00439	0.00674	0.00155	<0.00002 ^{<W}	----
Tungsten, total	7440-33-7	E420/WT	0.00010	mg/L	0.000082 ^{<DL}	0.000012 ^{<DL}	0.000012 ^{<DL}	<0.000002 ^{<W}	----
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L	0.00106 ^{<T}	0.000701 ^{<T}	0.000230 ^{<T}	<0.0000005 ^{<W}	----
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L	0.00088	0.00124	0.00090	0.000049 ^{<DL}	----
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L	0.0041 ^{<T}	0.0052 ^{<T}	0.0015 ^{<DL}	<0.0002 ^{<W}	----
Zirconium, total	7440-67-7	E420/WT	0.00020	mg/L	0.00032	0.00035	0.00035	<0.000004 ^{<W}	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/WT	0.0010	mg/L	0.0065	0.0045	0.0167	<0.0002 ^{<W}	----
Antimony, dissolved	7440-36-0	E421/WT	0.00010	mg/L	0.00445	0.000097 ^{<DL}	0.000091 ^{<DL}	<0.000005 ^{<W}	----
Arsenic, dissolved	7440-38-2	E421/WT	0.00010	mg/L	0.00206	0.00164	0.00300	<0.000005 ^{<W}	----
Barium, dissolved	7440-39-3	E421/WT	0.00010	mg/L	0.0258	0.0137	0.0216	0.000028 ^{<DL}	----
Beryllium, dissolved	7440-41-7	E421/WT	0.000020	mg/L	0.000011 ^{<DL}	0.000012 ^{<DL}	0.000020 ^{<DL}	<0.000002 ^{<W}	----
Bismuth, dissolved	7440-69-9	E421/WT	0.000050	mg/L	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	<0.000005 ^{<W}	----
Boron, dissolved	7440-42-8	E421/WT	0.010	mg/L	0.054	0.017	0.026	<0.002 ^{<W}	----
Cadmium, dissolved	7440-43-9	E421/WT	0.0000050	mg/L	0.0000278	0.0000033 ^{<DL}	0.0000071	<0.0000002 ^{<W}	----
Calcium, dissolved	7440-70-2	E421/WT	0.050	mg/L	73.5	40.4	31.9	<0.005 ^{<W}	----
Cesium, dissolved	7440-46-2	E421/WT	0.000010	mg/L	0.000147	0.0000013 ^{<DL}	0.0000018 ^{<DL}	0.00000030 ^{<DL}	----
Chromium, dissolved	7440-47-3	E421/WT	0.00050	mg/L	0.00015 ^{<DL}	0.00011 ^{<DL}	0.00026 ^{<DL}	0.000034 ^{<DL}	----
Cobalt, dissolved	7440-48-4	E421/WT	0.00010	mg/L	0.00086	0.00014	0.00072	<0.000002 ^{<W}	----



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW22A_SW_20 230606 SW	SW27_SW_202 30606 SW	SW21A_SW_20 230606 SW	TB_SW_20230 606 SW	----
Client sampling date / time					06-Jun-2023 17:00	06-Jun-2023 17:40	06-Jun-2023 18:00	06-Jun-2023 09:00	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-016 Result	TY2305301-017 Result	TY2305301-018 Result	TY2305301-019 Result	----- ----
Dissolved Metals									
Copper, dissolved	7440-50-8	E421/WT	0.00020	mg/L	0.00344	0.00117	0.00070	<0.00005 ^{<W}	----
Iron, dissolved	7439-89-6	E421/WT	0.010	mg/L	0.488	0.192	1.27	<0.001 ^{<W}	----
Lead, dissolved	7439-92-1	E421/WT	0.000050	mg/L	0.000032 ^{<DL}	0.000024 ^{<DL}	0.000070	<0.00002 ^{<W}	----
Lithium, dissolved	7439-93-2	E421/WT	0.0010	mg/L	0.0091	0.0045	0.0051	<0.0002 ^{<W}	----
Magnesium, dissolved	7439-95-4	E421/WT	0.0050	mg/L	17.5	14.7	12.9	<0.0005 ^{<W}	----
Manganese, dissolved	7439-96-5	E421/WT	0.00010	mg/L	0.0998	0.0654	0.310	<0.0002 ^{<W}	----
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	0.0000013 ^{<DL}	0.0000012 ^{<DL}	0.0000031 ^{<DL}	0.0000010 ^{<DL}	----
Molybdenum, dissolved	7439-98-7	E421/WT	0.000050	mg/L	0.00492	0.000735	0.000641	0.000033 ^{<DL}	----
Nickel, dissolved	7440-02-0	E421/WT	0.00050	mg/L	0.00203	0.00122	0.00186	<0.0002 ^{<W}	----
Phosphorus, dissolved	7723-14-0	E421/WT	0.050	mg/L	0.081	0.026 ^{<DL}	0.180	<0.002 ^{<W}	----
Potassium, dissolved	7440-09-7	E421/WT	0.050	mg/L	16.2	1.73	1.96	0.0025 ^{<DL}	----
Rubidium, dissolved	7440-17-7	E421/WT	0.00020	mg/L	0.00904	0.00156	0.00234	<0.000002 ^{<W}	----
Selenium, dissolved	7782-49-2	E421/WT	0.000050	mg/L	0.000420	0.000163	0.000246	<0.000002 ^{<W}	----
Silicon, dissolved	7440-21-3	E421/WT	0.050	mg/L	2.81	3.29	4.60	<0.002 ^{<W}	----
Silver, dissolved	7440-22-4	E421/WT	0.000010	mg/L	0.0000014 ^{<DL}	0.0000012 ^{<DL}	0.0000011 ^{<DL}	<0.0000005 ^{<W}	----
Sodium, dissolved	7440-23-5	E421/WT	0.050	mg/L	38.5	4.64	6.27	0.0086 ^{<DL}	----
Strontium, dissolved	7440-24-6	E421/WT	0.00020	mg/L	0.322	0.0912	0.0844	<0.00001 ^{<W}	----
Sulfur, dissolved	7704-34-9	E421/WT	0.50	mg/L	69.3	3.03	1.44	<0.05 ^{<W}	----
Tellurium, dissolved	13494-80-9	E421/WT	0.00020	mg/L	0.000038 ^{<DL}	0.000017 ^{<DL}	0.000018 ^{<DL}	<0.000005 ^{<W}	----
Thallium, dissolved	7440-28-0	E421/WT	0.000010	mg/L	0.0000059 ^{<DL}	0.0000022 ^{<DL}	0.0000015 ^{<DL}	<0.000001 ^{<W}	----
Thorium, dissolved	7440-29-1	E421/WT	0.00010	mg/L	0.000021 ^{<DL}	0.000017 ^{<DL}	0.000036 ^{<DL}	<0.000002 ^{<W}	----
Tin, dissolved	7440-31-5	E421/WT	0.00010	mg/L	0.0000038 ^{<DL}	0.0000024 ^{<DL}	0.000014 ^{<DL}	0.0000040 ^{<DL}	----
Titanium, dissolved	7440-32-6	E421/WT	0.00030	mg/L	0.00038	0.00026 ^{<DL}	0.00088	<0.00002 ^{<W}	----
Tungsten, dissolved	7440-33-7	E421/WT	0.00010	mg/L	0.000072 ^{<DL}	0.0000078 ^{<DL}	0.0000083 ^{<DL}	<0.000002 ^{<W}	----
Uranium, dissolved	7440-61-1	E421/WT	0.000010	mg/L	0.000991	0.000630	0.000209	<0.0000005 ^{<W}	----
Vanadium, dissolved	7440-62-2	E421/WT	0.00050	mg/L	0.00053	0.00066	0.00076	<0.00002 ^{<W}	----
Zinc, dissolved	7440-66-6	E421/WT	0.0010	mg/L	0.0146	0.0029	0.0014	0.0013	----
Zirconium, dissolved	7440-67-7	E421/WT	0.00030	mg/L	0.00026 ^{<DL}	0.00024 ^{<DL}	0.00042	<0.000004 ^{<W}	----
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	----



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW22A_SW_20	SW27_SW_202	SW21A_SW_20	TB_SW_20230	----
						230606	30606	230606	606	
						SW	SW	SW	SW	
					Client sampling date / time	06-Jun-2023	06-Jun-2023	06-Jun-2023	06-Jun-2023	----
						17:00	17:40	18:00	09:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2305301-016	TY2305301-017	TY2305301-018	TY2305301-019	-----	
					Result	Result	Result	Result	----	
Dissolved Metals										
Dissolved metals filtration location	----	EP421/WT	-	-	Laboratory	Laboratory	Laboratory	Field		----
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0		----
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	71	59	104	<2 ^{rw}		----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.3	1.0	1.9	2.6		----
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	<0.005	----	----	----		----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



CHAIN OF CUSTODY RECORD - ALS-450852916

TY2305301

Environmental Division
Thunder Bay
Work Order Reference
TY2305301

Project Name: Rainy River	Containers	SW Qt	Pa-226 Bottle																
Location: Chapple	Filtered	N	N																
Project Number:	Preservatives																		
Project Manager:																			
PO Number:																			
Project:																			
Turn Around Time (days): 10 Business Days																			
Shipping Company:																			
Shipping Date: 6/8/2023 7:00:00 AM																			
COC Number: ALS-450852916																			



Telephone : + 1 807 623 6463

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE												Number of Containers	Comments
SW16_SW_20230606	7.66	7	20.11	06/06/2023 09:30	SW	X													11	
SW17_SW_20230606	7	7.17	21	06/06/2023 10:20	SW	X													11	
SW15_SW_20230606	4.3	7.2	21.55	06/06/2023 11:00	SW	X													11	
SW23_SW_20230606	5.07	7.14	22.59	06/06/2023 11:45	SW	X													12	
SW23_SW_20230606	5.07	7.14	22.59	06/06/2023 11:45	SW		X												12	
SW24_SW_20230606	5.5	7.24	22.5	06/06/2023 12:00	SW	X													12	

Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	6/8/2023 7:00:00 AM	Method of Shipment: Courier On Ice: <input type="checkbox"/> yes / <input type="checkbox"/> no		
Received by	W June 9, 2023 9:15 AM	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

9 coolers reconstituted

Project Name: Rainy River						Containers	SW Kit	100 mL Bottle												
Location: Chapple						Filtered	N	N												
Project Number:																				
Project Manager:																				
PO Number:																				
Project:						Preservatives														
Turn Around Time (days): 10 Business Days																				
Shipping Company:																				
Shipping Date: 6/8/2023 7:00:00 AM																				
COC Number: ALS-450852916																				
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE												Number of Containers	Comments
SW24_SW_20230606	5.5	7.24	22.5	06/06/2023 12:00	SW		X												12	
SW29_SW_20230606	0.35	6.76	21.72	06/06/2023 12:35	SW	X													11	
SW03_SW_20230606	5.09	7.33	24.2	06/06/2023 13:00	SW	X													11	
SW10_SW_20230606	5.77	7.3	24.46	06/06/2023 13:30	SW	X													11	
SW28A_SW_20230606	6.4	7.49	26.95	06/06/2023 13:45	SW	X													11	
SW20_SW_20230606	3.51	7.16	24.57	06/06/2023 14:00	SW	X													12	

Signature	Data/Time	Shipping Details		ATTN	Special Instructions:
		Method of Shipment: Courier			
Shipped by	6/8/2023 7:00:00 AM	On Ice: yes / no			Email Invoice to:
		Shipped: Air/Ground			
Received by		Lab Name: ALS Thunder Bay			rainyriver.accounts1@newgold.com
		Lab Phone:			
					Email Report to: rainyriver.labresults@newgold.com

Project Name: Rainy River						Containers											
Location: Chapple						SW Kit	Ra-226 Bottle										
Project Number:						Filtered	N	N									
Project Manager:																	
PO Number:																	
Project:						Preservatives											
Turn Around Time (days): 10 Business Days																	
Shipping Company:																	
Shipping Date: 6/8/2023 7:00:00 AM																	
COC Number: ALS-450852916																	
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE									Number of Containers	Comments
SW20_SW_20230606	3.51	7.16	24.57	06/06/2023 14:00	SW		X									12	
SW02_SW_20230606	3.93	6.9	19.76	06/07/2023 08:35	SW	X										11	
SW26_SW_20230606	5.46	7.37	19.49	06/07/2023 09:05	SW	X										11	
SW25_SW_20230606	1.43	7.23	19.81	06/07/2023 09:45	SW	X										11	
FB_SW_20230606				06/07/2023 12:00	SW	X										11	
SW06_SW_20230606	5.46	7.37	19.49	06/07/2023 12:00	SW	X										11	

Signature	Data/Time	Shipping Details		ATTN	Special Instructions:
		Method of Shipment: Courier			
Shipped by	6/8/2023 7:00:00 AM	On Ice: yes / no			Email Invoice to:
		Shipped: Air/Ground			
Received by		Lab Name: ALS Thunder Bay			rainyriver.accounts1@newgold.com
		Lab Phone:			
					Email Report to: rainyriver.labresults@newgold.com

Project Name: Rainy River						Containers													
Location: Chapple						SW Kit	IR-226 Bottle												
Project Number:																			
Project Manager:						Filtered	N	N											
PO Number:																			
Project:						Preservatives													
Turn Around Time (days): 10 Business Days																			
Shipping Company:																			
Shipping Date: 6/8/2023 7:00:00 AM																			
COC Number: ALS-450852916																			
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE											Number of Containers	Comments
SW22A_SW_20230606	6.09	7.35	21.19	06/07/2023 17:00	SW	X												12	
SW22A_SW_20230606	6.09	7.35	21.19	06/07/2023 17:00	SW		X											12	
SW27_SW_20230606	7.65	7.66	19.9	06/07/2023 17:40	SW	X												11	
SW21A_SW_20230606	1.75	7.05	21.51	06/07/2023 18:00	SW	X												11	
TB_SW_20230606				06/08/2023 09:00	SW	X												11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	6/8/2023 7:00:00 AM	Method of Shipment: Courier On Ice: yes / no		Email Invoice to:
Received by		Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Drinking Water (DW) Samples (client-use)
Are samples taken from a Regulated DW System? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are samples for human consumption / use? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)			
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated			
Submission Comments Identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA			
Initial Cooler Temperatures °C		Final Cooler Temperatures °C	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	6/8/2023 7:00:00 AM	Method of Shipment: Courier On Ice: yes / no		
Received by		Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO	Confirmed all as accurate as per CoC, Sample Remarks or PM			
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO	Client	Office	Work Contact	Quote
Client: <u>NW Gold</u>				RECEIPT DETAIL			
SAMPLE RECEIPT INFORMATION				Project	PO	Site/LSD	
Mode of Delivery: <u>Courier</u>		Drop-Off		Recipients match CoC or Sample Remarks		Yes	No
COURIER <u>Manitowish</u>				Billing Instruction added to remarks		Yes	NA
Waybill Number <u>3302461875</u>				Sample Remarks checked		Yes	
Shipment Cost		Collect?	Y/N	Submission Issues communicated		Yes	NA
Temperature		Cooler Count <u>9</u>		Sample Info communicated via Remarks		Yes	NA
Cooling Method		None	Ice	VERIFICATION CHECKLIST			
		<u>Ice Packs</u>		Sample Name entered as per CoC			
SAMPLE MATRIX/BOTTLE INFORMATION				Sampling Date and time entered as per CoC			
Matrix:	<u>Water</u>	Soil	Air	Biota	Other	Containers selected in order of CoC	
DW Schedule 24 Bottles Correct?			Yes	<input checked="" type="radio"/> No			
DW Metals pH Check <2			Yes	<input checked="" type="radio"/> No			
Bottle Types:	<u>12</u>	Sample Count	<u>19</u>	Field Data/Calc Codes removed if not on CoC			
Green/white	<u>19</u>	<u>reactive</u>	<u>19</u>	Bottle Allocation Verified			
Orange/black				Guideline added or auto-allocated			
Warm red/green/white				Due dates updated			
Warm red/white	<u>19</u>	<u>TOT</u>	<u>19</u>	VALIDATION			
Yellow/black	<u>19</u>	<u>TOT</u>	<u>19</u>	Validation errors or checks		Yes	No
Purple/white	<u>19</u>	<u>NUT</u>	<u>19</u>	Internal CoC created		Yes	NA
Light blue/white				Login Comments:			
Others (detail)							
Comments on Samples and Bottles:							
Samples Requiring Preservation or Filtering: <u>DOC, Diss. Metals, Diss Hg FIP @ lab</u>				<u>Except for field and Travel blank</u>			
Layout Staff Initials		<u>NP3 June 9, 2023</u>		Login Staff Initials:			
Date and Time of Layout		<u>14:33 PM</u>					



CERTIFICATE OF ANALYSIS

Work Order	: TY2306623	Page	: 1 of 23
Amendment	: 1	Laboratory	: ALS Environmental - Thunder Bay
Client	: New Gold Inc. (Rainy River)	Account Manager	: Christine Paradis
Contact	: Garnet.Cornell@newgold.com Garnet Cornell	Address	: 1081 Barton Street Thunder Bay ON Canada P7B 5N3
Address	: 24 Marr Rd. Barwick ON Canada P0W 1A0	Telephone	: +1 807 623 6463
Telephone	: 807 234 8170	Date Samples Received	: 11-Jul-2023 09:28
Project	: Surface Water	Date Analysis Commenced	: 11-Jul-2023
PO	: 4700002620	Issue Date	: 22-Aug-2023 08:44
C-O-C number	: ----		
Sampler	: ----		
Site	: New Gold Inc. (Rainy River)		
Quote number	: New Gold Rainy River Project - Picka Project		
No. of samples received	: 19		
No. of samples analysed	: 19		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Inorganics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Metals, Waterloo, Ontario
Julie Ruoho	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Julie Ruoho	Teamleader Wet Chem	Administration, Thunder Bay, Ontario
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Wayne Smith	Client Services Specialist	Inorganics, Waterloo, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
 LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
°C	degrees celsius
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Amendment (22/08/2023): This report has been amended and re-released to allow the reporting of additional analytical data. Un-ionized Ammonia and Field data added

Sample Comments

Sample	Client Id	Comment
TY2306623-013	SW23_SW_20230704	Samples SW23 and SW24 - Limited sample - Detection Limit Raised to 0.05 Bq/L for Radium

Qualifiers

Qualifier	Description
-----------	-------------



Page : 3 of 23
Work Order : TY2306623 Amendment 1
Client : New Gold Inc. (Rainy River)
Project : Surface Water

< T *A measureable trace amount: Interpret with caution.*

DLHC *Detection Limit Raised: Dilution required due to high concentration of test analyte(s).*

DLM *Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).*

DTC *Dissolved concentration exceeds total. Results were confirmed by re-analysis.*

RRV *Reported result verified by repeat analysis.*



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
					08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	4.88	7.01	5.22	5.67	7.01
pH, field	----	EF001/TY	0.10	pH units	7.16	7.53	7.25	7.21	7.53
Temperature, field	----	EF001/TY	0.10	°C	18.3	15.0	18.8	15.8	15.0
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	3.4	3.0	4.3	4.2	2.6
Colour, true	----	E329-L/TY	2.0	CU	203	108	153	162	109
Conductivity	----	E100/TY	1.0	µS/cm	255	229	280	179	228
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	131	130	131	105	133
pH	----	E108/TY	0.10	pH units	7.80	7.90	7.67	7.62	7.92
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	222	178	223	154	182
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	6.8	<3.0	7.2	6.4	<3.0
Turbidity	----	E121/TY	0.10	NTU	8.22	2.08	6.29	3.01	2.15
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	117	125	117	94.1	128
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0400 ^{±T}	0.0299 ^{±T}	0.0327 ^{±T}	0.0823 ^{±T}	0.0277 ^{±T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	13.2	0.55	21.0	0.14	0.70
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.052	0.044	0.027	0.029	0.040
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.52	1.22	1.49	1.29	1.20
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	0.036 ^{±T}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0437	0.0039	0.0266	0.0014	0.0052
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	1.89	<0.30	0.91	<0.30	<0.30
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	36.6 ^{DLHC}	30.8 ^{DLHC}	35.8 ^{DLHC}	32.3 ^{DLHC}	31.1 ^{DLHC}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
Client sampling date / time					08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	---	E355-LWT	0.50	mg/L	34.7	29.2	31.3	30.9	29.4
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.289	0.0391	0.223	0.0801	0.0412
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00244 ST	0.00141 ST	0.00176 ST	0.00187 ST	0.00146 ST
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0183	0.0125	0.0195	0.0172	0.0124
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000037 ST	<0.000020	0.000041 ST	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.025 ST	0.014 ST	0.022 ST	<0.010	0.016 ST
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000131 ST	<0.0000050	0.0000060 ST	<0.0000050	0.0000060 ST
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	33.3	33.2	32.8	27.0	32.9
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000031	<0.000010	0.000030	0.000010	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00075 ST	<0.00050	0.00057 ST	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00037 ST	0.00023 ST	0.00058 ST	0.00066 ST	0.00022 ST
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00338 ST	0.00101 ST	0.00127 ST	0.00062 ST	0.00176 ST
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.791	0.346	0.914	0.942	0.344
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000241 ST	<0.000050	0.000149 ST	0.000145 ST	0.000056 ST
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0060 ST	0.0036 ST	0.0047 ST	0.0017 ST	0.0036 ST
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	14.4	13.5	13.6	10.6	14.5
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0856	0.0664	0.211	0.441	0.0707
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000505 ST	0.000390 ST	0.000258 ST	0.000084 ST	0.000380 ST
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00235 ST	0.00138 ST	0.00179 ST	0.00077 ST	0.00141 ST
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.097	<0.050	0.079	<0.050	<0.050
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.05	0.283	0.796	0.423	0.290
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00182	0.00084	0.00170	0.00141	0.00082
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000278 ST	0.000180 ST	0.000267 ST	0.000198 ST	0.000183 ST
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.21	3.20	4.31	6.80	3.17
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	7.59	1.05	11.8	0.897	1.74



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
					Client sampling date / time	08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005	
					Result	Result	Result	Result	Result	
Total Metals										
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0921	0.0706	0.0867	0.0485	0.0732	
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.13	<0.50	0.68	<0.50	<0.50	
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	0.000014 ^{±T}	<0.00010	<0.00010	<0.00010	<0.00010	
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00053	
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0123	0.00150	0.00888	0.00227	<0.00243 ^{DLM}	
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Uranium, total	7440-61-1	E420/TY	0.00010	mg/L	0.000462 ^{±T}	0.000231 ^{±T}	0.000218 ^{±T}	0.000058 ^{±T}	0.000231 ^{±T}	
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00194	<0.00050	0.00102	<0.00050	<0.00050	
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00064	<0.00020	0.00047	<0.00020	<0.00020	
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0188	0.0065	0.0131	0.0200	0.0061	
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00215	0.00131	0.00161	0.00158	0.00137	
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0147	0.0114	0.0163	0.0148	0.0115	
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	0.000028	<0.000020	0.000022	<0.000020	<0.000020	
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.021	0.013	0.018	<0.010	0.013	
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000086	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	31.2	30.6	30.8	25.8	31.2	
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00023	0.00020	0.00044	0.00038	0.00020	
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00376	0.00116	0.00091	0.00142 ^{DTC}	0.00192	
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.432	0.266	0.518	0.595	0.264	
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000105	<0.000050	0.000073	0.000072	<0.000050	
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0054	0.0032	0.0042	0.0015	0.0035	
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	12.9	13.1	13.2	9.92	13.3	



Page : 7 of 23
 Work Order : TY2306623 Amendment 1
 Client : New Gold Inc. (Rainy River)
 Project : Surface Water

Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW10_SW_202	SW28A_SW_20	SW20_SW_202	SW02_SW_202	SW06_SW_202
						30704	230704	30704	30704	30704
						SW	SW	SW	SW	SW
					Client sampling date / time	08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005	
					Result	Result	Result	Result	Result	
Dissolved Metals										
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0598	0.0581	0.169	0.239	0.0587	
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000527	0.000368	0.000235	0.000086	0.000444	
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00198	0.00129	0.00154	0.00072	0.00133	
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.070	<0.050	0.050	<0.050	<0.050	
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	0.902	0.260	0.708	0.394	0.283	
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00116	0.00064	0.00113	0.00116	0.00068	
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000243	0.000210	0.000252	0.000158	0.000199	
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.57	3.04	3.75	6.63	3.11	
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	7.40	1.14	11.4	0.909	1.12	
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0865	0.0609	0.0778	0.0442	0.0617	
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.11	<0.50	0.67	<0.50	<0.50	
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00185	0.00052	0.00112	0.00052	0.00051	
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000460	0.000222	0.000194	0.000048	0.000228	
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00107	<0.00050	<0.00050	<0.00050	<0.00050	
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0019	0.0017	0.0019	0.0033	0.0022	
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00053	<0.00030	0.00037	<0.00030	<0.00030	
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field	
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	102	85	95	91	87	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	1.7	<1.0	
Radiological Parameters										



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
					Client sampling date / time	08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005	
					Result	Result	Result	Result	Result	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/21	0.005	Bq/L	----	----	<0.005	----	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

				SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW	
Client sampling date / time				08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
				Result	Result	Result	Result	Result	
Field Tests									
Oxygen, dissolved, field	---	EF001/TY	0.01	mg/L	5.26	5.46	5.62	3.95	4.72
pH, field	---	EF001/TY	0.10	pH units	7.35	7.49	7.27	7.24	7.28
Temperature, field	---	EF001/TY	0.10	°C	20.6	18.0	22.4	22.6	20.2
Physical Tests									
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	5.1	4.5	4.1	4.5	3.3
Colour, true	---	E329-L/TY	2.0	CU	55.8	40.8	129	60.1	128
Conductivity	---	E100/TY	1.0	µS/cm	463	577	283	457	288
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	245	302	151	236	147
pH	---	E108/TY	0.10	pH units	7.93	8.05	7.77	7.94	7.91
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	291	345	214	300	221
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	12.2	13.8	4.4	<3.0	3.8
Turbidity	---	E121/TY	0.10	NTU	7.88	18.9	2.40	21.3	24.2
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	242	284	137	229	141
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0281 ^{±T}	0.0159 ^{±T}	0.0383 ^{±T}	0.0176 ^{±T}	0.0405 ^{±T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	17.1	21.3	11.7	20.6	9.20
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.056	0.061	0.051	0.068	0.061
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	0.993	0.918	1.46	1.01	1.56
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0086	0.0033	0.0688	0.0448	0.0668
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	6.95	27.9	2.17	15.4	3.68
Cyanides									
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	20.1 ^{DLHC}	15.8 ^{DLHC}	31.6 ^{DLHC}	20.1 ^{DLHC}	32.1 ^{DLHC}
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	20.7	16.3	31.2	20.4	31.2



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
Client sampling date / time					08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
					Result	Result	Result	Result	Result
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.184	0.420	0.0378	0.0237 ^{^T}	0.0929
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00012 ^{^T}	0.00012 ^{^T}	<0.00010	0.00013 ^{^T}	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00167 ^{^T}	0.00193 ^{^T}	0.00219 ^{^T}	0.00274 ^{^T}	0.00216 ^{^T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0275	0.0337	0.0145	0.0263	0.0154
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	0.000022 ^{^T}	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.027 ^{^T}	0.037 ^{^T}	0.023 ^{^T}	0.026 ^{^T}	0.026 ^{^T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	66.3	74.9	35.7	60.2	37.5
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000032	0.000058	<0.000010	<0.000010	0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00053 ^{^T}	0.00079 ^{^T}	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00045 ^{^T}	0.00038 ^{^T}	0.00039 ^{^T}	0.00032 ^{^T}	0.00040 ^{^T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00124 ^{^T}	0.00134 ^{^T}	0.00052 ^{^T}	0.00050	<0.00050
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.664	0.727	0.491	0.582	0.468
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000167 ^{^T}	0.000286 ^{^T}	0.000056 ^{^T}	<0.000050	0.000073 ^{^T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0098 ^{^T}	0.0126 ^{^T}	0.0052 ^{^T}	0.0076 ^{^T}	0.0061 ^{^T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	22.8	29.7	15.4	22.5	15.5
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.695	0.253	0.218	0.504	0.166
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000668 ^{^T}	0.00117 ^{^T}	0.000354 ^{^T}	0.000911 ^{^T}	0.000417 ^{^T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00172 ^{^T}	0.00187 ^{^T}	0.00164 ^{^T}	0.00132 ^{^T}	0.00174 ^{^T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.058	<0.050	0.110	0.107	0.111
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.69	2.45	1.24	2.05	1.25
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00193	0.00239	0.00205	0.00166	0.00202
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000237 ^{^T}	0.000171 ^{^T}	0.000211 ^{^T}	0.000202 ^{^T}	0.000262 ^{^T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.29	5.25	5.07	6.35	5.11
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	5.23	7.50	6.99	6.83	6.64
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.179	0.230	0.0891	0.163	0.0982
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	2.86	9.94	1.38	5.52	1.78



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
					Client sampling date / time	08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010	
					Result	Result	Result	Result	Result	
Total Metals										
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00044	<0.00010	<0.00010	<0.00010	<0.00010	
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00680	0.0181	0.00132	0.00106	<0.00462 ^{DLM}	
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.00121 ^{-T}	0.00194 ^{-T}	0.000199 ^{-T}	0.000923 ^{-T}	0.000267 ^{-T}	
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00109	0.00199	0.00061	0.00050	0.00093	
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0062 ^{-T}	0.0035 ^{-T}	<0.0030	<0.0030	<0.0030	
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00032	0.00063	0.00021	<0.00020	0.00032	
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0031	0.0055	0.0051	0.0046	0.0080	
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	0.00011	<0.00010	0.00011	<0.00010	
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00143	0.00161	0.00198	0.00251	0.00213	
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0237	0.0292	0.0133	0.0235	0.0140	
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.024	0.034	0.022	0.024	0.023	
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	62.6	74.4	36.6	59.3	35.3	
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00032	0.00020	0.00028	0.00025	0.00031	
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00104	0.00091	0.00080	0.00057	0.00049	
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.171	0.061	0.288	0.308	0.304	
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0094	0.0120	0.0055	0.0074	0.0056	
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	21.6	28.3	14.4	21.4	14.2	
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.637	0.209	0.143	0.388	0.143	
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
Client sampling date / time					08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
					Result	Result	Result	Result	Result
Dissolved Metals									
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000592	0.00111	0.000371	0.000803	0.000439
Nickel, dissolved	7440-02-0	E421/TY	0.000050	mg/L	0.00143	0.00135	0.00156	0.00130	0.00164
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	0.092	0.061	0.099
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.58	2.22	1.15	1.95	1.18
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00146	0.00146	0.00176	0.00153	0.00173
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000234	0.000187	0.000255	0.000217	0.000248
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.68	4.11	4.96	6.23	4.80
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.16	7.48	6.60	6.60	6.38
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.159	0.206	0.0864	0.142	0.0869
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	2.70	9.68	1.24	5.37	1.65
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00022 ^{DTC}	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	0.00099	<0.00030	0.00034	0.00063
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00117	0.00182	0.000200	0.000894	0.000259
Vanadium, dissolved	7440-62-2	E421/TY	0.000050	mg/L	<0.000050	0.00065	<0.000050	<0.000050	0.00064
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0024	0.0019	0.0033	0.0031	0.0015
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	67	51	94	58	89
Oil & grease (gravimetric)	----	E567-LWT	1.0	mg/L	1.2	1.4	1.1	<1.0	<1.0
Radiological Parameters									
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	----	----	<0.005



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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	---	EF001/TY	0.01	mg/L	4.12	2.31	5.04	6.51	7.64
pH, field	---	EF001/TY	0.10	pH units	7.30	7.08	7.45	7.35	7.63
Temperature, field	---	EF001/TY	0.10	°C	18.0	17.7	19.2	18.9	23.1
Physical Tests									
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	3.9	7.1	3.8	4.3	3.3
Colour, true	---	E329-L/TY	2.0	CU	158	131	318	374	404
Conductivity	---	E100/TY	1.0	µS/cm	276	342	227	205	156
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	143	191	134	117	95.2
pH	---	E108/TY	0.10	pH units	7.83	7.77	7.81	7.74	7.74
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	232	273	225	217	194
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	10.8	31.2	13.6	13.2	9.0
Turbidity	---	E121/TY	0.10	NTU	24.1	15.1	25.0	23.9	15.3
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	133	198	116	106	78.0
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0246 ^{±T}	0.144 ^{±T}	0.0877 ^{±T}	0.0462 ^{±T}	0.0459 ^{±T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	2.38	2.39	3.43	2.98	1.43
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.065	0.030	0.026	0.036	0.035
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	1.62	1.99	1.70	1.58	1.46
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	0.021 ^{±T}	0.044 ^{±T}	0.037 ^{±T}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0884	0.0417	0.0642	0.0587	0.0188
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	<0.30	2.74	2.41	3.98
Cyanides									
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	0.0021	<0.0020
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	0.0024 ^{±T}	<0.0020 ^{±T}
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	0.0029 ^{±T}	<0.0020 ^{±T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	40.3 ^{DLHC}	38.9 ^{DLHC}	49.3 ^{DLHC}	52.5 ^{DLHC}	51.4 ^{DLHC}
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	35.2 ^{DLM}	34.5 ^{DLM}	48.8 ^{DLM}	54.9 ^{DLM}	51.1 ^{DLM}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.399	0.470	0.643	0.851	0.527
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00028 ^{^T}	<0.00010	0.00022 ^{^T}	0.00021 ^{^T}	0.00015 ^{^T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00280 ^{^T}	0.00288 ^{^T}	0.00335 ^{^T}	0.00323 ^{^T}	0.00220 ^{^T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0205	0.0350	0.0224	0.0230	0.0186
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000042 ^{^T}	0.000037 ^{^T}	0.000057 ^{^T}	0.000056 ^{^T}	0.000045 ^{^T}
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.025 ^{^T}	0.017 ^{^T}	0.019 ^{^T}	0.018 ^{^T}	0.015 ^{^T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000130 ^{^T}	0.0000211 ^{^T}	0.0000191 ^{^T}	0.0000261 ^{^T}	0.0000251 ^{^T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	38.0	50.6	32.5	31.2	23.3
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000056	0.000068	0.000091	0.000109	0.000065
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00095 ^{^T}	0.00104 ^{^T}	0.00156 ^{^T}	0.00182 ^{^T}	0.00108 ^{^T}
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00057 ^{^T}	0.00207 ^{^T}	0.00089 ^{^T}	0.00096 ^{^T}	0.00047 ^{^T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00152 ^{^T}	0.00102 ^{^T}	0.00207 ^{^T}	0.00211 ^{^T}	0.00189 ^{^T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.916	2.59	1.92	2.01	1.21
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000351 ^{^T}	0.000444 ^{^T}	0.000713 ^{^T}	0.000840 ^{^T}	0.000530 ^{^T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0056 ^{^T}	0.0052 ^{^T}	0.0050 ^{^T}	0.0051 ^{^T}	0.0048 ^{^T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	14.1	19.3	13.0	12.5	10.5
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.182	1.42	0.252	0.249	0.0898
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000623 ^{^T}	0.000584 ^{^T}	0.000520 ^{^T}	0.000501 ^{^T}	0.000351 ^{^T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00270 ^{^T}	0.00286 ^{^T}	0.00337 ^{^T}	0.00351 ^{^T}	0.00237 ^{^T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.150	0.142	0.129	0.131	0.072
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.84	1.07	1.44	1.47	0.965
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00264	0.00297	0.00280	0.00319	0.00194
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000315 ^{^T}	0.000317 ^{^T}	0.000311 ^{^T}	0.000334 ^{^T}	0.000256 ^{^T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.64	10.7	6.03	6.30	4.76
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	5.48	1.79	3.45	3.54	2.45
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.101	0.114	0.0897	0.0797	0.0561
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.84	<0.50	1.52	1.43	1.75



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Total Metals									
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	0.000011 ^{±T}	0.000013 ^{±T}	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	0.00018	0.00019	0.00016
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0157	0.0135	0.0231	0.0322	0.0206
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000454 ^{±T}	0.00105 ^{±T}	0.000459 ^{±T}	0.000448 ^{±T}	0.000497 ^{±T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00239	0.00192	0.00320	0.00368	0.00256
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0046 ^{±T}	0.0044 ^{±T}	0.0042 ^{±T}	0.0056 ^{±T}	0.0035 ^{±T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00067	0.00047	0.00119	0.00121	0.00104
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0218	0.0103	0.0733	0.117	0.130
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00024	<0.00010	0.00019	0.00021	0.00013
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00258	0.00258	0.00287	0.00281	0.00206
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0165	0.0281	0.0166	0.0162	0.0154
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	0.000024	<0.000020	0.000030	0.000035	0.000028
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.022	0.014	0.018	0.016	0.013
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000086	<0.0000050	0.0000128	0.0000192	0.0000191
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	35.8	46.4	33.1	28.8	22.3
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00035	0.00164	0.00049	0.00048	0.00027
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00101	0.00040	0.00156	0.00144	0.00162
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.401	1.26	0.964	0.991	0.689
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000138	0.000160	0.000316	0.000439	0.000288
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0051	0.0045	0.0044	0.0041	0.0038
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	13.1	18.2	12.4	11.0	9.60
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.133	1.25	0.200	0.189	0.0668
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
Client sampling date / time					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Dissolved Metals									
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000650	0.000522	0.000465	0.000464	0.000335
Nickel, dissolved	7440-02-0	E421/TY	0.000050	mg/L	0.00218	0.00221	0.00245	0.00233	0.00183
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.118	0.082	0.096	0.082	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.68	0.958	1.26	1.18	0.829
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00162	0.00192	0.00129	0.00116	0.00088
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000301	0.000304	0.000311	0.000357	0.000251
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.77	9.46	4.74	4.59	3.78
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.45	1.74	3.40	3.34	2.46
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0904	0.0998	0.0748	0.0693	0.0498
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.81	<0.50	1.48	1.41	1.68
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	0.000013	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	0.00012	0.00013	0.00016
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00288	0.00087	0.00497	0.00591	0.00657
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000433	0.000981	0.000405	0.000416	0.000474
Vanadium, dissolved	7440-62-2	E421/TY	0.000050	mg/L	0.00130	0.00068	0.00162	0.00163	0.00149
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0038	0.0014	0.0022	0.0035	0.0023
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00050	<0.00030	0.00089	0.00085	0.00076
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	107	105	131	140	156
Oil & grease (gravimetric)	----	E567-LWT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Radiological Parameters									
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	0.03	<0.02	----



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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	FB_SW_202307	SW17_SW_202	SW16_SW_202	TB_SW_20230	----
						04	30704	30704	704	
						SW	SW	SW	SW	
					Client sampling date / time	09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----	
					Result	Result	Result	Result	-----	
Field Tests										
Oxygen, dissolved, field	---	EF001/TY	0.01	mg/L	---	8.9	8.92	---	---	---
pH, field	---	EF001/TY	0.10	pH units	---	7.99	7.59	---	---	---
Temperature, field	---	EF001/TY	0.10	°C	---	22.7	23.2	---	---	---
Physical Tests										
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	2.2	2.4	<2.0	<2.0	---	---
Colour, true	---	E329-L/TY	2.0	CU	<2.0	42.0	36.8	<2.0	---	---
Conductivity	---	E100/TY	1.0	µS/cm	1.0	74.4	76.2	1.1	---	---
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	<0.50	32.2	29.2	<0.50	---	---
pH	---	E108/TY	0.10	pH units	5.47	7.57	7.53	5.34	---	---
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	<10	65	65	<10	---	---
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	<3.0	11.8	19.8	<3.0	---	---
Turbidity	---	E121/TY	0.10	NTU	<0.10	8.76	12.8	<0.10	---	---
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	<2.0	30.1	28.9	<2.0	---	---
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	<0.0050	0.0108 ^{-T}	0.0276 ^{-T}	<0.0050	---	---
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	---	<0.0010	<0.0010	---	---	---
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	<0.10	2.38	3.28	<0.10	---	---
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	0.027	0.024	<0.020	---	---
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	<0.050	0.534	0.518	<0.050	---	---
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	0.043 ^{-T}	<0.020	---	---
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	---	---
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	<0.0010	0.0029	0.0027	<0.0010	---	---
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	4.18	4.33	<0.30	---	---
Cyanides										
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	---	---
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	---	---
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	---	---
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	<0.50	12.6	10.7	<0.50	---	---
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	<0.50	12.7	10.5	<0.50	---	---



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	FB_SW_202307	SW17_SW_202	SW16_SW_202	TB_SW_20230	----
						04	30704	30704	704	
						SW	SW	SW	SW	
					Client sampling date / time	09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----	
					Result	Result	Result	Result		----
Total Metals										
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	<0.0030	0.304	0.303	<0.0030		----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	<0.00010	0.00068 ^{^T}	0.00062 ^{^T}	<0.00010		----
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	<0.00010	0.0116	0.0122	<0.00010		----
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		----
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		----
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.018 ^{^T, RRV}	<0.010	<0.010	<0.010		----
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	0.0000121 ^{^T}	0.0000121 ^{^T}	<0.0000050		----
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	<0.050	8.82	8.47	<0.050		----
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	0.000048	0.000058	<0.000010		----
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	0.00078 ^{^T}	0.00081 ^{^T}	<0.00050		----
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	<0.00010	0.00027 ^{^T}	0.00027 ^{^T}	<0.00010		----
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	0.00136 ^{^T}	0.00145 ^{^T}	<0.00050		----
Iron, total	7439-89-6	E420/TY	0.010	mg/L	<0.010	0.462	0.467	<0.010		----
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	<0.000050	0.000249 ^{^T}	0.000267 ^{^T}	<0.000050		----
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	<0.0010	0.0011 ^{^T}	0.0011 ^{^T}	<0.0010		----
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	<0.0050	3.37	2.87	<0.0050		----
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	<0.00010	0.0412	0.0492	<0.00010		----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	<0.000050	0.000163 ^{^T}	0.000184 ^{^T}	<0.000050		----
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	<0.00050	0.00111 ^{^T}	0.00115 ^{^T}	<0.00050		----
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050		----
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	<0.050	0.832	0.875	<0.050		----
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	<0.00020	0.00245	0.00258	<0.00020		----
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	<0.000050	0.000114 ^{^T}	0.000098 ^{^T}	<0.000050		----
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	0.17 ^{RRV}	2.39	2.58	<0.10		----
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		----
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	<0.050	3.09	3.59	<0.050		----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	<0.00020	0.0252	0.0249	<0.00020		----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	<0.50	1.44	1.43	<0.50		----



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	FB_SW_202307	SW17_SW_202	SW16_SW_202	TB_SW_20230	----
						04	30704	30704	704	
						SW	SW	SW	SW	
					Client sampling date / time	09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----	
					Result	Result	Result	Result	-----	
Total Metals										
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		----
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00015 ^{RRV}	<0.00010	<0.00010	<0.00010		----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00030	0.0108	0.0104	<0.00030		----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	<0.000010	0.000107 ^{CT}	0.000124 ^{CT}	<0.000010		----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	<0.00050	0.00124	0.00124	<0.00050		----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030		----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	0.00029	0.00030	<0.00020		----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	<0.0010	0.0228	0.0217	<0.0010		----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	<0.00010	0.00050	0.00049	<0.00010		----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	<0.00010	0.00882	0.00922	<0.00010		----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.017 ^{RRV}	<0.010	<0.010	<0.010		----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	<0.050	8.32	7.61	<0.050		----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	<0.00020	0.00102	0.00109	<0.00020		----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	<0.010	0.074	0.069	<0.010		----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	0.000055	0.000058	<0.000050		----
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		----
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	<0.0050	2.77	2.49	<0.0050		----
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	<0.00010	0.0189	0.0292	<0.00010		----
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					FB_SW_202307 04 SW	SW17_SW_202 30704 SW	SW16_SW_202 30704 SW	TB_SW_20230 704 SW	----
					09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----
					Result	Result	Result	Result	----
Dissolved Metals									
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	<0.000050	0.000168	0.000393 ^{DTC}	<0.000050	----
Nickel, dissolved	7440-02-0	E421/TY	0.000050	mg/L	<0.000050	0.00066	0.00062	<0.00050	----
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	----
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	<0.050	0.705	0.757	<0.050	----
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	<0.00020	0.00163	0.00173	<0.00020	----
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	<0.000050	0.000114	0.000096	<0.000050	----
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	0.136 ^{RRV}	1.72	1.92	<0.050	----
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	<0.050	3.09	3.54	<0.050	----
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	<0.00020	0.0221	0.0223	<0.00020	----
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	<0.50	1.31	1.32	<0.50	----
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	0.00012	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	<0.00090 ^{DLM}	0.00060	<0.00030	----
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	<0.000010	0.000093	0.000096	<0.000010	----
Vanadium, dissolved	7440-62-2	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	0.0180 ^{DTC}	0.0022	<0.0010	----
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	----
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	----
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	----
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	<10	37	34	<10	----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	1.1	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



SRC Group # 2023-8836

Aug 11, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Jul-17-2023

Client P.O.: TY2306623

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

1081 Barton Street

Thunder Bay, ON P7B 5N3

Attn: Christine Paradis

Sample #: **2023022820**
 Date Sampled: **Jul 08, 2023**
 Sample Matrix: **WATER**
 Description: **07/08/2023 09:15 SW20_SW_20230704 TY2306623-003**

Client PO #: **TY2306623**
 Date Received: **Jul 17, 2023**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Sample #: **2023022821** Client PO #: **TY2306623**
 Date Sampled: **Jul 08, 2023** Date Received: **Jul 17, 2023**
 Sample Matrix: **WATER**
 Description: **07/08/2023 16:00 SW22A_SW_20230704 TY2306623-010**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Sample #: **2023022822** Client PO #: **TY2306623**
 Date Sampled: **Jul 09, 2023** Date Received: **Jul 17, 2023**
 Sample Matrix: **WATER**
 Description: **07/09/2023 09:35 SW23_SW_20230704 TY2306623-013**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.03	0.03

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Sample #: **2023022823** Client PO #: **TY2306623**
 Date Sampled: **Jul 09, 2023** Date Received: **Jul 17, 2023**
 Sample Matrix: **WATER**
 Description: **07/09/2023 10:00 SW24_SW_20230704 TY2306623-014**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.02	0.02

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:

Environmental Division
 Thunder Bay
 Work Order Reference
TY2306623



Telephone : +1 807 623 6463

PO Number:
 Project:
 Turn Around Time (days): 10 Business
 Shipping Company:
 Shipping Date: 7/10/2023 7:59:00 AM
 COC Number: ALS-451173332

TY2306623

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
SW10_SW_20230704	4.88	7.16	18.34	07/08/2023 08:55	SW	X		11	
SW28A_SW_20230704	7.01	7.53	15.04	07/08/2023 09:45	SW	X		11	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW	X		12	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW		X	12	
SW02_SW_20230704	5.67	7.21	15.84	07/08/2023 11:40	SW	X		11	
SW06_SW_20230704	7.01	7.53	15.04	07/08/2023 12:00	SW	X		11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no <i>Ice Pack</i> Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	<i>10.8° 15.3 13.9 10.7 13.6 13.9</i>	Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by <i>LV</i>	<i>7/11/23 9:26</i>			

7 Coolers

Manitoulin 3302521616

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number:						Containers Filtered		SW Kit	Ra-226 Bottle											
Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 7/10/2023 7:59:00 AM COC Number: ALS-451173332						Preservatives														
	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RAZ26-MIMER-BE													
Sample Code																			Number of Containers	Comments
SW15_SW_20230704	7.64	7.63	23.11	07/09/2023 12:00	SW	X													11	
FB_SW_20230704				07/09/2023 12:45	SW	X													11	
SW17_SW_20230704	8.9	7.99	22.7	07/09/2023 12:45	SW	X													11	
SW16_SW_20230704	8.92	7.59	23.17	07/09/2023 13:55	SW	X													11	
TB_SW_20230704				07/10/2023 07:59	SW	X													11	


Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		
Received by	LV 7/11/23 9:26			Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com


Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input checked="" type="checkbox"/> No
Are samples for human consumption / use? Yes <input checked="" type="checkbox"/> No
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no		
Received by LV	7/11/23 9:26	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION					
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO	Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO		
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO	Confirmed all as accurate as per COC, Sample Remarks or PM					
Client:		New Gold		Client ✓		Work Contact ✓			
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL					
Mode of Delivery:		<input checked="" type="radio"/> Courier	Drop Off		Project ✓		PO ✓		
Courier		Manitoulin		Site/LSD		<input checked="" type="radio"/>			
Waybill Number		330 252 1616		Overall-Description-Entered		Yes	<input checked="" type="radio"/> NA		
Temperature		Cooler Count 7		Received date/time as per COC		✓			
Cooling Method		None	Ice	Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	No		
		<input checked="" type="radio"/> Ice Packs		Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	NA		
SAMPLE MATRIX/BOTTLE INFORMATION				Sample Remarks/Specification Doc checked ✓					
Matrix:	<input checked="" type="radio"/> Water	Soil	Air	Biota	Other	Submission Issues communicated			
DW Schedule 24 Bottles Correct?		Yes		No		Yes	<input checked="" type="radio"/> NA		
DW Metals pH Check <2		Yes		No		Sample Info communicated via Remarks	Yes <input checked="" type="radio"/> NA		
Regulation Circled, Works # present		Yes	No - Reject?		VERIFICATION CHECKLIST				
# of Bottles:	Sample Count		23		Planned Event Submission		<input checked="" type="radio"/> Yes	No	
Green/white	19 Routine, 19 BOD				Sample Name entered as per CoC		✓		
Purple/white	19 Nkts, 19 DOC, 19 TOC				Sampling Date and time entered as per CoC		✓		
Warm red/white	(1+19) Tot. Met. 19 Diss. Metals				Containers selected in layout order		✓ (not really)		
Yellow/black	19 Tot. Hg, 19 Diss. Hg				Sales items entered from QUOTE ONLY (and/or verified as correct)		✓		
Light blue/white					Field Data/EC298A removed if not on COC		Yes	<input checked="" type="radio"/> NA	
Orange/black					Bottle Allocation Verified		✓		
Others (detail)	4 Radium				Guideline added or auto-allocated		✓		
		19 CN (Cyanide)				Due dates updated		✓	
Comments on Samples and Bottles:				VALIDATION					
* Fr. 9 (SWZ1A) received one extra Metals.				Validation errors resolved?		<input checked="" type="radio"/> Yes	No		
* All Fraction (except Fr. 4, 12, 16, 18) received				Internal Sublet CoC created		<input checked="" type="radio"/> Yes	NA		
Samples Requiring Preservation or Filtering:				Login Comments:					
				12 bottles.					
Layout Staff Initials		LV 7/11/23 11:15		Login Staff Initials:					
Date and Time of Layout									

Project Name: Rainy River Location: Chapple Project Number: Project Manager:		Environmental Division Thunder Bay Work Order Reference TY2306623			Containers Filtered		SW Kit N	Ra-226 Bottle N											
PO Number: Project: Turn Around Time (days): 10 Business Shipping Company: Shipping Date: 7/10/2023 7:59:00 AM COC Number: ALS-451173332		 Telephone : +1 807 623 6463 TY2306623			Preservatives														
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE											Number of Containers	Comments
SW10_SW_20230704	4.88	7.16	18.34	07/08/2023 08:55	SW	X												11	
SW28A_SW_20230704	7.01	7.53	15.04	07/08/2023 09:45	SW	X												11	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW	X												12	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW		X											12	
SW02_SW_20230704	5.67	7.21	15.84	07/08/2023 11:40	SW	X												11	
SW06_SW_20230704	7.01	7.53	15.04	07/08/2023 12:00	SW	X												11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no <i>Ice Pack</i> Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	10.8° 15.3 13.9 10.7 13.6 13.9	Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by <i>LV</i>	<i>7/11/23 9:28</i>			

7 Coolers

Manitowlin 3302521616

Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 7/10/2023 7:59:00 AM
COC Number: ALS-451173332

Containers	Filtered	Preservatives	Number of Containers	Comments
SW Kit	N			
Ra-226 Bottle	N			

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	Number of Containers	Comments
✓ SW25_SW_20230704	5.26	7.35	20.63	07/08/2023 15:05	SW	X		11	
✓ SW26_SW_20230704	5.46	7.49	18	07/08/2023 15:25	SW	X		11	
✓ SW21A_SW_20230704	5.62	7.27	22.35	07/08/2023 15:50	SW	X		11	
✓ SW27_SW_20230704	3.95	7.24	22.56	07/08/2023 16:20	SW	X		11	
✓ SW22A_SW_20230704	4.72	7.28	20.16	07/08/2023 17:00	SW	X		12	
✓ SW22A_SW_20230704	4.72	7.28	20.16	07/08/2023 17:00	SW	X		12	

Signature Shipped by: LV 7/11/23 9:26 Received by: 7 coolers Date/Time: 7/10/2023 7:59:00 AM	Shipping Details Method of Shipment: Courier On Ice: Yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	ATTN	Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
--	--	-------------	--

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 7/10/2023 7:59:00 AM
 COC Number: ALS-451173332

Containers	Filtered	Preservatives
SW Kit	N	
Ra-226 Bottle	N	

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	Number of Containers	Comments
SW15_SW_20230704	7.64	7.63	23.11	07/09/2023 12:00	SW	X		11	
FB_SW_20230704				07/09/2023 12:45	SW	X		11	
SW17_SW_20230704	8.9	7.99	22.7	07/09/2023 12:45	SW	X		11	
SW16_SW_20230704	8.92	7.59	23.17	07/09/2023 13:55	SW	X		11	
TB_SW_20230704				07/10/2023 07:59	SW	X		11	

Signature Shipped by Received by	Date/Time 7/10/2023 7:59:00 AM 7/11/23 9:26	Shipping Details Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	ATTN	Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
--	---	---	------	---

Drinking Water (DW) Samples (client use)	
Are samples taken from a Regulated DW System?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are samples for human consumption / use?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Samples from a Regulated DW System require an Authorized DW COC form	

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no		
Received by LV	7/11/23 9:26	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION				
Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO		Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO		
Time Sensitive Hold Time	YES	<input checked="" type="radio"/> NO		Confirmed all as accurate as per COC, Sample Remarks or PM				
Client:	New Gold			Client ✓	Work Contact ✓	Quote ✓		
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL				
Mode of Delivery:	<input checked="" type="radio"/> Courier		Drop Off	Project ✓	PO ✓	Site/LSD ✓		
Courier	Manitowish			Overall Description Entered		Yes	<input checked="" type="radio"/> NA	
Waybill Number	330 252 1616			Received date/time as per COC				
Temperature			Cooler Count 7	Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	No	
Cooling Method	None	Ice	<input checked="" type="radio"/> Ice Packs	Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	NA	
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST				
Matrix:	<input checked="" type="radio"/> Water	Soil	Air	Biota	Other			
DW Schedule 24 Bottles Correct?			Yes	No				
DW Metals pH Check <2			Yes	No				
Regulation Circled, Works # present	Yes	No - Reject?		Planned Event Submission		<input checked="" type="radio"/> Yes	No	
# of Bottles:	Sample Count		23		Sample Name entered as per CoC		✓	
Green/white	19 Routine, 19 BD			Sampling Date and time entered as per CoC		✓		
Purple/white	19 Nkts, 19 DOC, 19 TOC			Containers selected in layout order		✓ (not really)		
Warm red/white	(1+19) Tot. Met. 19 Diss. Metals			Sales items entered from QUOTE ONLY (and/or verified as correct)		✓		
Yellow/black	19 Tot. Hg, 19 Diss. Hg			Field Data/EC298A removed if not on COC		Yes	<input checked="" type="radio"/> NA	
Light blue/white				Bottle Allocation Verified		✓		
Orange/black				Guideline added or auto-allocated		✓		
Others (detail)	4 Radium 19 CN (Cyanide)			Due dates updated		✓		
Comments on Samples and Bottles:				VALIDATION				
* Fr. 9 (SW21A) received one extra Metals.				Validation errors resolved?		<input checked="" type="radio"/> Yes	No	
* All Fraction (except Fr. 4, 12, 15, 18) received				Internal Sublet CoC created		<input checked="" type="radio"/> Yes	NA	
Samples Requiring Preservation or Filtering:				Login Comments:				
				12 bottles.				
Layout Staff Initials	LV 7/11/23 11:15			Login Staff Initials:				
Date and Time of Layout								



CERTIFICATE OF ANALYSIS

<p>Work Order : TY2306623</p> <p>Client : New Gold Inc. (Rainy River)</p> <p>Contact : Garnet.Cornell@newgold.com Garnet Cornell</p> <p>Address : 24 Marr Rd. Barwick ON Canada P0W 1A0</p> <p>Telephone : 807 234 8170</p> <p>Project : Surface Water</p> <p>PO : 4700002620</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : New Gold Inc. (Rainy River)</p> <p>Quote number : New Gold Rainy River Project - Picka Project</p> <p>No. of samples received : 19</p> <p>No. of samples analysed : 19</p>	<p>Page : 1 of 19</p> <p>Laboratory : ALS Environmental - Thunder Bay</p> <p>Account Manager : Christine Paradis</p> <p>Address : 1081 Barton Street Thunder Bay ON Canada P7B 5N3</p> <p>Telephone : +1 807 623 6463</p> <p>Date Samples Received : 11-Jul-2023 09:28</p> <p>Date Analysis Commenced : 11-Jul-2023</p> <p>Issue Date : 14-Aug-2023 12:01</p>
--	---

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Inorganics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Metals, Waterloo, Ontario
Julie Ruoho	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Wayne Smith	Client Services Specialist	Inorganics, Waterloo, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
 LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Sample Comments

Sample	Client Id	Comment
TY2306623-013	SW23_SW_20230704	Samples SW23 and SW24 - Limited sample - Detection Limit Raised to 0.05 Bq/L for Radium

Qualifiers

Qualifier	Description
< T	A measureable trace amount: Interpret with caution.
DLHC	Detection Limit Raised: Dilution required due to high concentration of test analyte(s).
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
RRV	Reported result verified by repeat analysis.





Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
					08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005
					Result	Result	Result	Result	Result
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	3.4	3.0	4.3	4.2	2.6
Colour, true	----	E329-L/TY	2.0	CU	203	108	153	162	109
Conductivity	----	E100/TY	1.0	µS/cm	255	229	280	179	228
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	131	130	131	105	133
pH	----	E108/TY	0.10	pH units	7.80	7.90	7.67	7.62	7.92
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	222	178	223	154	182
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	6.8	<3.0	7.2	6.4	<3.0
Turbidity	----	E121/TY	0.10	NTU	8.22	2.08	6.29	3.01	2.15
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	117	125	117	94.1	128
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0400 ^{±T}	0.0299 ^{±T}	0.0327 ^{±T}	0.0823 ^{±T}	0.0277 ^{±T}
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	13.2	0.55	21.0	0.14	0.70
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.052	0.044	0.027	0.029	0.040
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.52	1.22	1.49	1.29	1.20
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	0.036 ^{±T}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0437	0.0039	0.0266	0.0014	0.0052
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	1.89	<0.30	0.91	<0.30	<0.30
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}	<0.0020 ^{±T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	36.6 ^{DLHC}	30.8 ^{DLHC}	35.8 ^{DLHC}	32.3 ^{DLHC}	31.1 ^{DLHC}
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	34.7	29.2	31.3	30.9	29.4
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.289	0.0391	0.223	0.0801	0.0412
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00244 ^{±T}	0.00141 ^{±T}	0.00176 ^{±T}	0.00187 ^{±T}	0.00146 ^{±T}



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
					Client sampling date / time	08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005	
					Result	Result	Result	Result	Result	
Total Metals										
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0183	0.0125	0.0195	0.0172	0.0124	
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000037 ST	<0.000020	0.000041 ST	<0.000020	<0.000020	
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.025 ST	0.014 ST	0.022 ST	<0.010	0.016 ST	
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000131 ST	<0.0000050	0.0000060 ST	<0.0000050	0.0000060 ST	
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	33.3	33.2	32.8	27.0	32.9	
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000031	<0.000010	0.000030	0.000010	<0.000010	
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00075 ST	<0.00050	0.00057 ST	<0.00050	<0.00050	
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00037 ST	0.00023 ST	0.00058 ST	0.00066 ST	0.00022 ST	
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00338 ST	0.00101 ST	0.00127 ST	0.00062 ST	0.00176 ST	
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.791	0.346	0.914	0.942	0.344	
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000241 ST	<0.000050	0.000149 ST	0.000145 ST	0.000056 ST	
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0060 ST	0.0036 ST	0.0047 ST	0.0017 ST	0.0036 ST	
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	14.4	13.5	13.6	10.6	14.5	
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0856	0.0664	0.211	0.441	0.0707	
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000505 ST	0.000390 ST	0.000258 ST	0.000084 ST	0.000380 ST	
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00235 ST	0.00138 ST	0.00179 ST	0.00077 ST	0.00141 ST	
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.097	<0.050	0.079	<0.050	<0.050	
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.05	0.283	0.796	0.423	0.290	
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00182	0.00084	0.00170	0.00141	0.00082	
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000278 ST	0.000180 ST	0.000267 ST	0.000198 ST	0.000183 ST	
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.21	3.20	4.31	6.80	3.17	
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	7.59	1.05	11.8	0.897	1.74	
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0921	0.0706	0.0867	0.0485	0.0732	
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.13	<0.50	0.68	<0.50	<0.50	
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	0.000014 ST	<0.000010	<0.000010	<0.000010	<0.000010	
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
					Client sampling date / time	08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005	
					Result	Result	Result	Result	Result	
Total Metals										
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00053	
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0123	0.00150	0.00888	0.00227	<0.00243 ^{DLM}	
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000462 ^{±T}	0.000231 ^{±T}	0.000218 ^{±T}	0.000058 ^{±T}	0.000231 ^{±T}	
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00194	<0.00050	0.00102	<0.00050	<0.00050	
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00064	<0.00020	0.00047	<0.00020	<0.00020	
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0188	0.0065	0.0131	0.0200	0.0061	
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00215	0.00131	0.00161	0.00158	0.00137	
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0147	0.0114	0.0163	0.0148	0.0115	
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	0.000028	<0.000020	0.000022	<0.000020	<0.000020	
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.021	0.013	0.018	<0.010	0.013	
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000086	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	31.2	30.6	30.8	25.8	31.2	
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00023	0.00020	0.00044	0.00038	0.00020	
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00376	0.00116	0.00091	0.00142 ^{DTC}	0.00192	
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.432	0.266	0.518	0.595	0.264	
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000105	<0.000050	0.000073	0.000072	<0.000050	
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0054	0.0032	0.0042	0.0015	0.0035	
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	12.9	13.1	13.2	9.92	13.3	
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0598	0.0581	0.169	0.239	0.0587	
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000527	0.000368	0.000235	0.000086	0.000444	
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00198	0.00129	0.00154	0.00072	0.00133	
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.070	<0.050	0.050	<0.050	<0.050	



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 30704 SW	SW28A_SW_20 230704 SW	SW20_SW_202 30704 SW	SW02_SW_202 30704 SW	SW06_SW_202 30704 SW
Client sampling date / time					08-Jul-2023 08:55	08-Jul-2023 09:45	08-Jul-2023 10:15	08-Jul-2023 11:40	08-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-001	TY2306623-002	TY2306623-003	TY2306623-004	TY2306623-005
					Result	Result	Result	Result	Result
Dissolved Metals									
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	0.902	0.260	0.708	0.394	0.283
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00116	0.00064	0.00113	0.00116	0.00068
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000243	0.000210	0.000252	0.000158	0.000199
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.57	3.04	3.75	6.63	3.11
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	7.40	1.14	11.4	0.909	1.12
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0865	0.0609	0.0778	0.0442	0.0617
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.11	<0.50	0.67	<0.50	<0.50
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00185	0.00052	0.00112	0.00052	0.00051
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000460	0.000222	0.000194	0.000048	0.000228
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00107	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0019	0.0017	0.0019	0.0033	0.0022
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00053	<0.00030	0.00037	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	102	85	95	91	87
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	1.7	<1.0
Radiological Parameters									
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	<0.005	----	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
Client sampling date / time					08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
					Result	Result	Result	Result	Result
Physical Tests									
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	5.1	4.5	4.1	4.5	3.3
Colour, true	---	E329-L/TY	2.0	CU	55.8	40.8	129	60.1	128
Conductivity	---	E100/TY	1.0	µS/cm	463	577	283	457	288
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	245	302	151	236	147
pH	---	E108/TY	0.10	pH units	7.93	8.05	7.77	7.94	7.91
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	291	345	214	300	221
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	12.2	13.8	4.4	<3.0	3.8
Turbidity	---	E121/TY	0.10	NTU	7.88	18.9	2.40	21.3	24.2
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	242	284	137	229	141
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0281 ^{°T}	0.0159 ^{°T}	0.0383 ^{°T}	0.0176 ^{°T}	0.0405 ^{°T}
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	17.1	21.3	11.7	20.6	9.20
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.056	0.061	0.051	0.068	0.061
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	0.993	0.918	1.46	1.01	1.56
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0086	0.0033	0.0688	0.0448	0.0668
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	6.95	27.9	2.17	15.4	3.68
Cyanides									
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	20.1 ^{DLHC}	15.8 ^{DLHC}	31.6 ^{DLHC}	20.1 ^{DLHC}	32.1 ^{DLHC}
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	20.7	16.3	31.2	20.4	31.2
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.184	0.420	0.0378	0.0237 ^{°T}	0.0929
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00012 ^{°T}	0.00012 ^{°T}	<0.00010	0.00013 ^{°T}	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00167 ^{°T}	0.00193 ^{°T}	0.00219 ^{°T}	0.00274 ^{°T}	0.00216 ^{°T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0275	0.0337	0.0145	0.0263	0.0154



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
					08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
					Result	Result	Result	Result	Result
Total Metals									
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	0.000022 ^{±T}	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.027 ^{±T}	0.037 ^{±T}	0.023 ^{±T}	0.026 ^{±T}	0.026 ^{±T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	66.3	74.9	35.7	60.2	37.5
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000032	0.000058	<0.000010	<0.000010	0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00053 ^{±T}	0.00079 ^{±T}	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00045 ^{±T}	0.00038 ^{±T}	0.00039 ^{±T}	0.00032 ^{±T}	0.00040 ^{±T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00124 ^{±T}	0.00134 ^{±T}	0.00052 ^{±T}	0.00050	<0.00050
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.664	0.727	0.491	0.582	0.468
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000167 ^{±T}	0.000286 ^{±T}	0.000056 ^{±T}	<0.000050	0.000073 ^{±T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0098 ^{±T}	0.0126 ^{±T}	0.0052 ^{±T}	0.0076 ^{±T}	0.0061 ^{±T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	22.8	29.7	15.4	22.5	15.5
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.695	0.253	0.218	0.504	0.166
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000668 ^{±T}	0.00117 ^{±T}	0.000354 ^{±T}	0.000911 ^{±T}	0.000417 ^{±T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00172 ^{±T}	0.00187 ^{±T}	0.00164 ^{±T}	0.00132 ^{±T}	0.00174 ^{±T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.058	<0.050	0.110	0.107	0.111
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.69	2.45	1.24	2.05	1.25
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00193	0.00239	0.00205	0.00166	0.00202
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000237 ^{±T}	0.000171 ^{±T}	0.000211 ^{±T}	0.000202 ^{±T}	0.000262 ^{±T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.29	5.25	5.07	6.35	5.11
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	5.23	7.50	6.99	6.83	6.64
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.179	0.230	0.0891	0.163	0.0982
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	2.86	9.94	1.38	5.52	1.78
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00044	<0.00010	<0.00010	<0.00010	<0.00010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
Client sampling date / time					08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
					Result	Result	Result	Result	Result
Total Metals									
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00680	0.0181	0.00132	0.00106	<0.00462 ^{DLM}
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.00121 ^{-T}	0.00194 ^{-T}	0.000199 ^{-T}	0.000923 ^{-T}	0.000267 ^{-T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00109	0.00199	0.00061	0.00050	0.00093
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0062 ^{-T}	0.0035 ^{-T}	<0.0030	<0.0030	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00032	0.00063	0.00021	<0.00020	0.00032
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0031	0.0055	0.0051	0.0046	0.0080
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	0.00011	<0.00010	0.00011	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00143	0.00161	0.00198	0.00251	0.00213
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0237	0.0292	0.0133	0.0235	0.0140
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.024	0.034	0.022	0.024	0.023
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	62.6	74.4	36.6	59.3	35.3
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00032	0.00020	0.00028	0.00025	0.00031
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00104	0.00091	0.00080	0.00057	0.00049
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.171	0.061	0.288	0.308	0.304
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0094	0.0120	0.0055	0.0074	0.0056
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	21.6	28.3	14.4	21.4	14.2
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.637	0.209	0.143	0.388	0.143
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000592	0.00111	0.000371	0.000803	0.000439
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00143	0.00135	0.00156	0.00130	0.00164
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	0.092	0.061	0.099
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.58	2.22	1.15	1.95	1.18



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30704 SW	SW26_SW_202 30704 SW	SW21A_SW_20 230704 SW	SW27_SW_202 30704 SW	SW22A_SW_20 230704 SW
Client sampling date / time					08-Jul-2023 15:05	08-Jul-2023 15:25	08-Jul-2023 15:50	08-Jul-2023 16:20	08-Jul-2023 17:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-006	TY2306623-007	TY2306623-008	TY2306623-009	TY2306623-010
					Result	Result	Result	Result	Result
Dissolved Metals									
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00146	0.00146	0.00176	0.00153	0.00173
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000234	0.000187	0.000255	0.000217	0.000248
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.68	4.11	4.96	6.23	4.80
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.16	7.48	6.60	6.60	6.38
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.159	0.206	0.0864	0.142	0.0869
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	2.70	9.68	1.24	5.37	1.65
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00022 ^{DTC}	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	0.00099	<0.00030	0.00034	0.00063
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00117	0.00182	0.000200	0.000894	0.000259
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	0.00065	<0.00050	<0.00050	0.00064
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0024	0.0019	0.0033	0.0031	0.0015
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	67	51	94	58	89
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.2	1.4	1.1	<1.0	<1.0
Radiological Parameters									
Radium-226	13982-63-3	Ra-226/Zl	0.005	Bq/L	----	----	----	----	<0.005

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

				SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW	
Client sampling date / time				09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Physical Tests									
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	3.9	7.1	3.8	4.3	3.3
Colour, true	---	E329-L/TY	2.0	CU	158	131	318	374	404
Conductivity	---	E100/TY	1.0	µS/cm	276	342	227	205	156
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	143	191	134	117	95.2
pH	---	E108/TY	0.10	pH units	7.83	7.77	7.81	7.74	7.74
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	232	273	225	217	194
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	10.8	31.2	13.6	13.2	9.0
Turbidity	---	E121/TY	0.10	NTU	24.1	15.1	25.0	23.9	15.3
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	133	198	116	106	78.0
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0246 ^{°T}	0.144 ^{°T}	0.0877 ^{°T}	0.0462 ^{°T}	0.0459 ^{°T}
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	2.38	2.39	3.43	2.98	1.43
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.065	0.030	0.026	0.036	0.035
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	1.62	1.99	1.70	1.58	1.46
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	0.021 ^{°T}	0.044 ^{°T}	0.037 ^{°T}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0884	0.0417	0.0642	0.0587	0.0188
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	<0.30	2.74	2.41	3.98
Cyanides									
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	0.0021	<0.0020
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}	0.0024 ^{°T}	<0.0020 ^{°T}
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020 ^{°T}	<0.0020 ^{°T}	<0.0020 ^{°T}	0.0029 ^{°T}	<0.0020 ^{°T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	40.3 ^{DLHC}	38.9 ^{DLHC}	49.3 ^{DLHC}	52.5 ^{DLHC}	51.4 ^{DLHC}
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	35.2	34.5 ^{DLM}	48.8 ^{DLM}	54.9 ^{DLM}	51.1 ^{DLM}
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.399	0.470	0.643	0.851	0.527
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00028 ^{°T}	<0.00010	0.00022 ^{°T}	0.00021 ^{°T}	0.00015 ^{°T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00280 ^{°T}	0.00288 ^{°T}	0.00335 ^{°T}	0.00323 ^{°T}	0.00220 ^{°T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0205	0.0350	0.0224	0.0230	0.0186



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Total Metals									
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000042 ^{±T}	0.000037 ^{±T}	0.000057 ^{±T}	0.000056 ^{±T}	0.000045 ^{±T}
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.025 ^{±T}	0.017 ^{±T}	0.019 ^{±T}	0.018 ^{±T}	0.015 ^{±T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000130 ^{±T}	0.0000211 ^{±T}	0.0000191 ^{±T}	0.0000261 ^{±T}	0.0000251 ^{±T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	38.0	50.6	32.5	31.2	23.3
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000056	0.000068	0.000091	0.000109	0.000065
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00095 ^{±T}	0.00104 ^{±T}	0.00156 ^{±T}	0.00182 ^{±T}	0.00108 ^{±T}
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00057 ^{±T}	0.00207 ^{±T}	0.00089 ^{±T}	0.00096 ^{±T}	0.00047 ^{±T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00152 ^{±T}	0.00102 ^{±T}	0.00207 ^{±T}	0.00211 ^{±T}	0.00189 ^{±T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.916	2.59	1.92	2.01	1.21
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000351 ^{±T}	0.000444 ^{±T}	0.000713 ^{±T}	0.000840 ^{±T}	0.000530 ^{±T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0056 ^{±T}	0.0052 ^{±T}	0.0050 ^{±T}	0.0051 ^{±T}	0.0048 ^{±T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	14.1	19.3	13.0	12.5	10.5
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.182	1.42	0.252	0.249	0.0898
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000623 ^{±T}	0.000584 ^{±T}	0.000520 ^{±T}	0.000501 ^{±T}	0.000351 ^{±T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00270 ^{±T}	0.00286 ^{±T}	0.00337 ^{±T}	0.00351 ^{±T}	0.00237 ^{±T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.150	0.142	0.129	0.131	0.072
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.84	1.07	1.44	1.47	0.965
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00264	0.00297	0.00280	0.00319	0.00194
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000315 ^{±T}	0.000317 ^{±T}	0.000311 ^{±T}	0.000334 ^{±T}	0.000256 ^{±T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.64	10.7	6.03	6.30	4.76
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	5.48	1.79	3.45	3.54	2.45
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.101	0.114	0.0897	0.0797	0.0561
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.84	<0.50	1.52	1.43	1.75
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	0.000011 ^{±T}	0.000013 ^{±T}	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	0.00018	0.00019	0.00016
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Total Metals									
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0157	0.0135	0.0231	0.0322	0.0206
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000454 ^{±T}	0.00105 ^{±T}	0.000459 ^{±T}	0.000448 ^{±T}	0.000497 ^{±T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00239	0.00192	0.00320	0.00368	0.00256
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0046 ^{±T}	0.0044 ^{±T}	0.0042 ^{±T}	0.0056 ^{±T}	0.0035 ^{±T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00067	0.00047	0.00119	0.00121	0.00104
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0218	0.0103	0.0733	0.117	0.130
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00024	<0.00010	0.00019	0.00021	0.00013
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00258	0.00258	0.00287	0.00281	0.00206
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0165	0.0281	0.0166	0.0162	0.0154
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	0.000024	<0.000020	0.000030	0.000035	0.000028
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.022	0.014	0.018	0.016	0.013
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000086	<0.0000050	0.0000128	0.0000192	0.0000191
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	35.8	46.4	33.1	28.8	22.3
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00035	0.00164	0.00049	0.00048	0.00027
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00101	0.00040	0.00156	0.00144	0.00162
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.401	1.26	0.964	0.991	0.689
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000138	0.000160	0.000316	0.000439	0.000288
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0051	0.0045	0.0044	0.0041	0.0038
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	13.1	18.2	12.4	11.0	9.60
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.133	1.25	0.200	0.189	0.0668
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000650	0.000522	0.000465	0.000464	0.000335
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00218	0.00221	0.00245	0.00233	0.00183
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.118	0.082	0.096	0.082	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.68	0.958	1.26	1.18	0.829



Page : 15 of 19
 Work Order : TY2306623
 Client : New Gold Inc. (Rainy River)
 Project : Surface Water

Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW03_SW_202 30704 SW	SW29_SW_202 30704 SW	SW23_SW_202 30704 SW	SW24_SW_202 30704 SW	SW15_SW_202 30704 SW
					09-Jul-2023 09:30	09-Jul-2023 10:00	09-Jul-2023 10:35	09-Jul-2023 11:00	09-Jul-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-011	TY2306623-012	TY2306623-013	TY2306623-014	TY2306623-015
					Result	Result	Result	Result	Result
Dissolved Metals									
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00162	0.00192	0.00129	0.00116	0.00088
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000301	0.000304	0.000311	0.000357	0.000251
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.77	9.46	4.74	4.59	3.78
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.45	1.74	3.40	3.34	2.46
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0904	0.0998	0.0748	0.0693	0.0498
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.81	<0.50	1.48	1.41	1.68
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	0.000013	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	0.00012	0.00013	0.00016
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00288	0.00087	0.00497	0.00591	0.00657
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000433	0.000981	0.000405	0.000416	0.000474
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00130	0.00068	0.00162	0.00163	0.00149
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0038	0.0014	0.0022	0.0035	0.0023
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00050	<0.00030	0.00089	0.00085	0.00076
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	107	105	131	140	156
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Radiological Parameters									
Radium-226	13982-63-3	Ra-226/Zl	0.005	Bq/L	----	----	0.03	<0.02	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					FB_SW_202307 04 SW	SW17_SW_202 30704 SW	SW16_SW_202 30704 SW	TB_SW_20230 704 SW	----
					09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----
					Result	Result	Result	Result	----
Physical Tests									
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	2.2	2.4	<2.0	<2.0	----
Colour, true	---	E329-L/TY	2.0	CU	<2.0	42.0	36.8	<2.0	----
Conductivity	---	E100/TY	1.0	µS/cm	1.0	74.4	76.2	1.1	----
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	<0.50	32.2	29.2	<0.50	----
pH	---	E108/TY	0.10	pH units	5.47	7.57	7.53	5.34	----
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	<10	65	65	<10	----
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	<3.0	11.8	19.8	<3.0	----
Turbidity	---	E121/TY	0.10	NTU	<0.10	8.76	12.8	<0.10	----
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	<2.0	30.1	28.9	<2.0	----
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	<0.0050	0.0108 ^{*T}	0.0276 ^{*T}	<0.0050	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	<0.10	2.38	3.28	<0.10	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	0.027	0.024	<0.020	----
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	<0.050	0.534	0.518	<0.050	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	0.043 ^{*T}	<0.020	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	<0.0010	0.0029	0.0027	<0.0010	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	4.18	4.33	<0.30	----
Cyanides									
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	<0.50	12.6	10.7	<0.50	----
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	<0.50	12.7	10.5	<0.50	----
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	<0.0030	0.304	0.303	<0.0030	----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	<0.00010	0.00068 ^{*T}	0.00062 ^{*T}	<0.00010	----
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	<0.00010	0.0116	0.0122	<0.00010	----



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	FB_SW_202307	SW17_SW_202	SW16_SW_202	TB_SW_20230	----
						04	30704	30704	704	
						SW	SW	SW	SW	
					Client sampling date / time	09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----	
					Result	Result	Result	Result	-----	
Total Metals										
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	----
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.018 ^{T,RRV}	<0.010	<0.010	<0.010	<0.010	----
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	0.0000121 ^T	0.0000121 ^T	<0.0000050	<0.0000050	----
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	<0.050	8.82	8.47	<0.050	<0.050	----
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	0.000048	0.000058	<0.000010	<0.000010	----
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	0.00078 ^T	0.00081 ^T	<0.00050	<0.00050	----
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	<0.00010	0.00027 ^T	0.00027 ^T	<0.00010	<0.00010	----
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	0.00136 ^T	0.00145 ^T	<0.00050	<0.00050	----
Iron, total	7439-89-6	E420/TY	0.010	mg/L	<0.010	0.462	0.467	<0.010	<0.010	----
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	<0.000050	0.000249 ^T	0.000267 ^T	<0.000050	<0.000050	----
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	<0.0010	0.0011 ^T	0.0011 ^T	<0.0010	<0.0010	----
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	<0.0050	3.37	2.87	<0.0050	<0.0050	----
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	<0.00010	0.0412	0.0492	<0.00010	<0.00010	----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	<0.000050	0.000163 ^T	0.000184 ^T	<0.000050	<0.000050	----
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	<0.00050	0.00111 ^T	0.00115 ^T	<0.00050	<0.00050	----
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	----
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	<0.050	0.832	0.875	<0.050	<0.050	----
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	<0.00020	0.00245	0.00258	<0.00020	<0.00020	----
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	<0.000050	0.000114 ^T	0.000098 ^T	<0.000050	<0.000050	----
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	0.17 ^{RRV}	2.39	2.58	<0.10	<0.10	----
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	<0.050	3.09	3.59	<0.050	<0.050	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	<0.00020	0.0252	0.0249	<0.00020	<0.00020	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	<0.50	1.44	1.43	<0.50	<0.50	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00015 ^{RRV}	<0.00010	<0.00010	<0.00010	<0.00010	----



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	FB_SW_202307	SW17_SW_202	SW16_SW_202	TB_SW_20230	----
						04	30704	30704	704	
						SW	SW	SW	SW	
					Client sampling date / time	09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----	
					Result	Result	Result	Result	-----	
Total Metals										
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00030	0.0108	0.0104	<0.00030		----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	<0.000010	0.000107 ^{-T}	0.000124 ^{-T}	<0.000010		----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	<0.00050	0.00124	0.00124	<0.00050		----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030		----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	0.00029	0.00030	<0.00020		----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	<0.0010	0.0228	0.0217	<0.0010		----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	<0.00010	0.00050	0.00049	<0.00010		----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	<0.00010	0.00882	0.00922	<0.00010		----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.017 ^{RRV}	<0.010	<0.010	<0.010		----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	<0.050	8.32	7.61	<0.050		----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	<0.00020	0.00102	0.00109	<0.00020		----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	<0.010	0.074	0.069	<0.010		----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	0.000055	0.000058	<0.000050		----
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010		----
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	<0.0050	2.77	2.49	<0.0050		----
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	<0.00010	0.0189	0.0292	<0.00010		----
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	<0.000050	0.000168	0.000393 ^{DTC}	<0.000050		----
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	<0.00050	0.00066	0.00062	<0.00050		----
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050		----
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	<0.050	0.705	0.757	<0.050		----



Page : 19 of 19
 Work Order : TY2306623
 Client : New Gold Inc. (Rainy River)
 Project : Surface Water

Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					FB_SW_202307 04 SW	SW17_SW_202 30704 SW	SW16_SW_202 30704 SW	TB_SW_20230 704 SW	----
					09-Jul-2023 12:45	09-Jul-2023 12:45	09-Jul-2023 13:55	10-Jul-2023 07:59	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2306623-016	TY2306623-017	TY2306623-018	TY2306623-019	-----
					Result	Result	Result	Result	----
Dissolved Metals									
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	<0.00020	0.00163	0.00173	<0.00020	----
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	<0.000050	0.000114	0.000096	<0.000050	----
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	0.136 ^{RRV}	1.72	1.92	<0.050	----
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	<0.050	3.09	3.54	<0.050	----
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	<0.00020	0.0221	0.0223	<0.00020	----
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	<0.50	1.31	1.32	<0.50	----
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	0.00012	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	<0.00090 ^{DLM}	0.00060	<0.00030	----
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	<0.000010	0.000093	0.000096	<0.000010	----
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	0.0180 ^{DTC}	0.0022	<0.0010	----
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	----
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	----
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	----
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	<10	37	34	<10	----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	1.1	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-8836

Aug 11, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Jul-17-2023

Client P.O.: TY2306623

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Philibert, Kelcey

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

1081 Barton Street

Thunder Bay, ON P7B 5N3

Attn: Christine Paradis

Sample #: **2023022820**
 Date Sampled: **Jul 08, 2023**
 Sample Matrix: **WATER**
 Description: **07/08/2023 09:15 SW20_SW_20230704 TY2306623-003**

Client PO #: **TY2306623**
 Date Received: **Jul 17, 2023**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Sample #: **2023022821** Client PO #: **TY2306623**
 Date Sampled: **Jul 08, 2023** Date Received: **Jul 17, 2023**
 Sample Matrix: **WATER**
 Description: **07/08/2023 16:00 SW22A_SW_20230704 TY2306623-010**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Sample #: **2023022822** Client PO #: **TY2306623**
 Date Sampled: **Jul 09, 2023** Date Received: **Jul 17, 2023**
 Sample Matrix: **WATER**
 Description: **07/09/2023 09:35 SW23_SW_20230704 TY2306623-013**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.03	0.03

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Sample #: **2023022823** Client PO #: **TY2306623**
 Date Sampled: **Jul 09, 2023** Date Received: **Jul 17, 2023**
 Sample Matrix: **WATER**
 Description: **07/09/2023 10:00 SW24_SW_20230704 TY2306623-014**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.02	0.02

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 22 °C upon receipt.

SRC Group # 2023-8836

Aug 11, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:

Environmental Division
 Thunder Bay
 Work Order Reference
TY2306623



Telephone : +1 807 623 6463

PO Number:
 Project:
 Turn Around Time (days): 10 Business
 Shipping Company:
 Shipping Date: 7/10/2023 7:59:00 AM
 COC Number: ALS-451173332

TY2306623

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments
						SW Kit	Ra-226 Bottle		
SW10_SW_20230704	4.88	7.16	18.34	07/08/2023 08:55	SW	X		11	
SW28A_SW_20230704	7.01	7.53	15.04	07/08/2023 09:45	SW	X		11	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW	X		12	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW		X	12	
SW02_SW_20230704	5.67	7.21	15.84	07/08/2023 11:40	SW	X		11	
SW06_SW_20230704	7.01	7.53	15.04	07/08/2023 12:00	SW	X		11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no <i>Ice Pack</i> Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	<i>10.8° 15.3</i> <i>13.9 10.7</i> <i>13.6</i> <i>13.9</i>	Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by <i>LV</i>	<i>7/11/23 9:26</i>			

7 Coolers

Manitoulin 3302521616

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number:						Containers Filtered		SW Kit	Ra-226 Bottle											
Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 7/10/2023 7:59:00 AM COC Number: ALS-451173332						Preservatives														
	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MIMER-BE													
Sample Code																			Number of Containers	Comments
SW15_SW_20230704	7.64	7.63	23.11	07/09/2023 12:00	SW	X													11	
FB_SW_20230704				07/09/2023 12:45	SW	X													11	
SW17_SW_20230704	8.9	7.99	22.7	07/09/2023 12:45	SW	X													11	
SW16_SW_20230704	8.92	7.59	23.17	07/09/2023 13:55	SW	X													11	
TB_SW_20230704				07/10/2023 07:59	SW	X													11	


Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		
Received by	LV 7/11/23 9:26			Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com


Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are samples for human consumption / use? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no		
Received by LV	7/11/23 9:26	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO		Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO	
Time Sensitive Hold Time	YES	<input checked="" type="radio"/> NO		Confirmed all as accurate as per COC, Sample Remarks or PM			
Client:	New Gold			Client ✓	Work Contact ✓	Quote ✓	
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL			
Mode of Delivery:	<input checked="" type="radio"/> Courier		Drop Off	Project ✓	PO ✓	Site/LSD ✓	
Courier	Manitoulin			Overall-Description-Entered	Yes	<input checked="" type="radio"/> NA	
Waybill Number	330 252 1616			Received date/time as per COC	✓		
Temperature			Cooler Count 7	Recipients match CoC or Sample Remarks	<input checked="" type="radio"/> Yes	No	
Cooling Method	None	Ice	<input checked="" type="radio"/> Ice Packs	Billing Instruction added to remarks	<input checked="" type="radio"/> Yes	NA	
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST			
Matrix:	<input checked="" type="radio"/> Water	Soil	Air	Biota	Other		
DW Schedule 24 Bottles Correct?			Yes	No			
DW Metals pH Check <2			Yes	No			
Regulation Circled, Works # present	Yes	No - Reject?					
# of Bottles:	Sample Count		23				
Green/white	19 Routine, 19 BD						
Purple/white	19 Nkts, 19 DOC, 19 Toc						
Warm red/white	(1+19) Tot. Met. 19 Diss. Metals						
Yellow/black	19 Tot. Hg, 19 Diss. Hg						
Light blue/white							
Orange/black							
Others (detail)	4 Radium 19 CN (Cyanide)						
Comments on Samples and Bottles:							
* Fr. 9 (SWZ1A) received one extra Metals.							
* All Fraction (except Fr. 4, 12, 16, 18) received							
Samples Requiring Preservation or Filtering:							
Layout Staff Initials	LV 7/11/23 11:15						
Date and Time of Layout							
				Login Staff Initials: 			

Project Name: Rainy River Location: Chapple Project Number: Project Manager:		Environmental Division Thunder Bay Work Order Reference TY2306623			Containers Filtered		SW Kit N	Ra-226 Bottle N												
PO Number: Project: Turn Around Time (days): 10 Business Shipping Company: Shipping Date: 7/10/2023 7:59:00 AM COC Number: ALS-451173332		 Telephone : +1 807 623 6463 TY2306623			Preservatives															
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE												Number of Containers	Comments
SW10_SW_20230704	4.88	7.16	18.34	07/08/2023 08:55	SW	X													11	
SW28A_SW_20230704	7.01	7.53	15.04	07/08/2023 09:45	SW	X													11	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW	X													12	
SW20_SW_20230704	5.22	7.25	18.78	07/08/2023 10:15	SW		X												12	
SW02_SW_20230704	5.67	7.21	15.84	07/08/2023 11:40	SW	X													11	
SW06_SW_20230704	7.01	7.53	15.04	07/08/2023 12:00	SW	X													11	

Signature Data/Time 7/10/2023 7:59:00 AM		Shipping Details Method of Shipment: Courier On Ice: yes / no <i>Ice Pack</i> Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		ATTN 10.8° 15.3 13.9 10.7 13.6 13.9		Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com	
Shipped by		Received by <i>LV 7/11/23 9:28</i>					

7 Coolers

Manitoulin 3302521616

Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:

Containers
 Filtered: SW Kit Ra-226 Bottle
Preservatives
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 7/10/2023 7:59:00 AM
 COC Number: ALS-451173332

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	Number of Containers	Comments
✓ SW25_SW_20230704	5.26	7.35	20.63	07/08/2023 15:05	SW	X		11	
✓ SW26_SW_20230704	5.46	7.49	18	07/08/2023 15:25	SW	X		11	
✓ SW21A_SW_20230704	5.62	7.27	22.35	07/08/2023 15:50	SW	X		11	
✓ SW27_SW_20230704	3.95	7.24	22.56	07/08/2023 16:20	SW	X		11	
✓ SW22A_SW_20230704	4.72	7.28	20.16	07/08/2023 17:00	SW	X		12	
✓ SW22A_SW_20230704	4.72	7.28	20.16	07/08/2023 17:00	SW	X		12	

Signature _____ **Date/Time** 7/10/2023 7:59:00 AM
Shipping Details
 Method of Shipment: Courier
 On Ice: Yes / no
 Shipped: Air/Ground
 Lab Name: ALS Thunder Bay
 Lab Phone: _____
ATTN _____
Special Instructions:
 Email Invoice to: rainyriver.accounts1@newgold.com
 Email Report to: rainyriver.labresults@newgold.com

Received by **LV** 7/11/23 9:26
 T. Coopers
 M. Johnston

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 7/10/2023 7:59:00 AM
 COC Number: ALS-451173332

Containers	Filtered	Preservatives
SW Kit	N	
Ra-226 Bottle	N	

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	Number of Containers	Comments
SW15_SW_20230704	7.64	7.63	23.11	07/09/2023 12:00	SW	X		11	
FB_SW_20230704				07/09/2023 12:45	SW	X		11	
SW17_SW_20230704	8.9	7.99	22.7	07/09/2023 12:45	SW	X		11	
SW16_SW_20230704	8.92	7.59	23.17	07/09/2023 13:55	SW	X		11	
TB_SW_20230704				07/10/2023 07:59	SW	X		11	

Signature Shipped by Received by	Date/Time 7/10/2023 7:59:00 AM 7/11/23 9:26	Shipping Details Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	ATTN	Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
--	---	---	------	---

Drinking Water (DW) Samples (client use)	
Are samples taken from a Regulated DW System?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are samples for human consumption / use?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Samples from a Regulated DW System require an Authorized DW COC form	

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	7/10/2023 7:59:00 AM	Method of Shipment: Courier On Ice: yes / no		
Received by LV	7/11/23 9:26	Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO		Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO	
Time Sensitive Hold Time	YES	<input checked="" type="radio"/> NO		Confirmed all as accurate as per COC, Sample Remarks or PM			
Client:	New Gold			Client ✓	Work Contact ✓	Quote ✓	
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL			
Mode of Delivery:	<input checked="" type="radio"/> Courier		Drop Off	Project ✓	PO ✓	Site/LSD ✓	
Courier	Manitowish			Overall Description Entered		Yes	<input checked="" type="radio"/> NA
Waybill Number	330 252 1616			Received date/time as per COC			
Temperature			Cooler Count 7	Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	No
Cooling Method	None	Ice	<input checked="" type="radio"/> Ice Packs	Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	NA
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST			
Matrix:	<input checked="" type="radio"/> Water	Soil	Air	Biota	Other		
DW Schedule 24 Bottles Correct?			Yes	No			
DW Metals pH Check <2			Yes	No			
Regulation Circled, Works # present		Yes	No - Reject?				
# of Bottles:	Sample Count		23				
Green/white	19 Routine, 19 BD						
Purple/white	19 Nkts, 19 DOC, 19 TOC						
Warm red/white	(1+19) Tot. Met. 19 Diss. Metals						
Yellow/black	19 Tot. Hg, 19 Diss. Hg						
Light blue/white							
Orange/black							
Others (detail)	4 Radium 19 CN (Cyanide)						
Comments on Samples and Bottles:							
* Fr. 9 (SW21A) received one extra Metals.							
* All Fraction (except Fr. 4, 12, 15, 18) received							
Samples Requiring Preservation or Filtering:							
Layout Staff Initials				LV 7/11/23 11:15			
Date and Time of Layout				Login Staff Initials:			
				Validation			
Validation errors resolved?		<input checked="" type="radio"/> Yes	No				
Internal Sublet CoC created		<input checked="" type="radio"/> Yes	NA				
Login Comments:				12 bottles.			

CERTIFICATE OF ANALYSIS

Work Order	: TY2307728	Page	: 1 of 23
Amendment	: 1	Laboratory	: ALS Environmental - Thunder Bay
Client	: New Gold Inc. (Rainy River)	Account Manager	: Christine Paradis
Contact	: Garnet.Cornell@newgold.com Garnet Cornell	Address	: 1081 Barton Street Thunder Bay ON Canada P7B 5N3
Address	: 24 Marr Rd. Barwick ON Canada P0W 1A0	Telephone	: +1 807 623 6463
Telephone	: 807 234 8170	Date Samples Received	: 09-Aug-2023 09:04
Project	: Surface Water	Date Analysis Commenced	: 09-Aug-2023
PO	: 4700002620	Issue Date	: 22-Sep-2023 15:42
C-O-C number	: ----		
Sampler	: ----		
Site	: New Gold Inc. (Rainy River)		
Quote number	: New Gold Rainy River Project - Picka Project		
No. of samples received	: 20		
No. of samples analysed	: 20		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Administration, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Daron Mooney	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Kinny Wu	Lab Analyst	Metals, Burnaby, British Columbia
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Inorganics, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Metals, Thunder Bay, Ontario
Walt Kippenhuck	Supervisor - Inorganics	Inorganics, Waterloo, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
°C	degrees celsius
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Amendment (22/09/2023): This report has been amended and re-released to allow the reporting of additional analytical data. Un-ionized Ammonia and Field Data added.

Qualifiers

Qualifier	Description
< T	A measureable trace amount: Interpret with caution.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	3.71	3.8	4.98	3.18	5.35
pH, field	----	EF001/TY	0.10	pH units	7.38	7.46	7.75	7.29	7.71
Temperature, field	----	EF001/TY	0.10	°C	22.6	21.7	21.4	21.9	19.7
Physical Tests									
Acidity (as CaCO ₃)	----	E283/TY	2.0	mg/L	2.0	2.4	<2.0	3.1	<2.0
Colour, true	----	E329-L/TY	2.0	CU	60.7	122	110	109	61.0
Conductivity	----	E100/TY	1.0	µS/cm	416	348	187	346	421
Hardness (as CaCO ₃), dissolved	----	EC100/TY	0.50	mg/L	211	178	106	158	211
pH	----	E108/TY	0.10	pH units	8.16	8.09	8.05	8.02	8.14
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	282	260	157	265	294
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	4.0	4.4	<3.0	6.4	3.8
Turbidity	----	E121/TY	0.10	NTU	2.71	4.19	2.01	3.92	2.26
Alkalinity, total (as CaCO ₃)	----	E290/TY	2.0	mg/L	187	163	97.4	144	188
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0137 ^{^T}	0.0150 ^{^T}	0.126 ^{^T}	0.0186 ^{^T}	0.0102 ^{^T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	0.0030	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	18.0	13.2	0.90	22.7	17.9
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.059	0.052	0.030	0.039	0.048
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.883	1.45	0.992	1.25	1.11
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0220	0.0259	0.0034	0.0158	0.0244
Sulfate (as SO ₄)	14808-79-8	E235.SO4/TY	0.30	mg/L	11.3	2.36	0.35	<0.30	11.2
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	0.0036 ^{^T}	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	23.3	33.1	31.8	33.7	25.2
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	23.6	32.3	30.9	32.2	24.6
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0732	0.161	0.0762	0.110	0.0784
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00014 [†]	<0.00010	<0.00010	<0.00010	0.00014 [†]
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00186 [†]	0.00259 [†]	0.00127 [†]	0.00188 [†]	0.00177 [†]
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0164	0.0215	0.00927	0.0149	0.0162
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	0.000023 [†]	0.000020	0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.026 [†]	0.027 [†]	0.017 [†]	0.021 [†]	0.026 [†]
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000081 [†]	0.0000081 [†]	0.0000080 [†]	0.0000080 [†]	0.0000060 [†]
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	51.4	41.6	25.1	36.3	50.9
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	0.000020	0.000014	0.000016	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	0.00059 [†]	0.00074 [†]	0.00052 [†]	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00021 [†]	0.00031 [†]	0.00014 [†]	0.00050 [†]	0.00019 [†]
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00092 [†]	0.00144 [†]	0.00072 [†]	0.00080 [†]	0.00086 [†]
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.198	0.459	0.296	0.667	0.211
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000065 [†]	0.000130 [†]	0.000079 [†]	0.000104 [†]	0.000055 [†]
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0072 [†]	0.0077 [†]	0.0029 [†]	0.0055 [†]	0.0073 [†]
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	20.8	18.0	11.0	16.5	20.4
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.127	0.159	0.0251	0.506	0.130
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000583 [†]	0.000542 [†]	0.000274 [†]	0.000167 [†]	0.000496 [†]
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00153 [†]	0.00205 [†]	0.00123 [†]	0.00162 [†]	0.00151 [†]
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.068	0.077	<0.050	0.075	0.069
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.81	1.27	0.480	0.877	1.78
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00204	0.00164	0.00138	0.00137	0.00201
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000202 [†]	0.000209 [†]	0.000173 [†]	0.000239 [†]	0.000198 [†]
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.68	4.40	1.91	2.51	4.76



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Total Metals									
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	7.07	8.98	0.978	13.0	6.95
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.126	0.131	0.0501	0.0967	0.124
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	4.49	1.58	<0.50	0.70	4.38
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00021	<0.00010	0.00016	0.00013	0.00019
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00387 ^{DLM}	<0.00804 ^{DLM}	0.00280	<0.00495 ^{DLM}	0.00386
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000738 ST	0.000547 ST	0.000127 ST	0.000246 ST	0.000719 ST
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00086	0.00136	0.00065	0.00079	0.00090
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0044 ST	<0.0030 ^{DTC}	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00027	0.00045	<0.00020	0.00033	0.00023
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0091	0.0115	0.0062	0.0074	0.0065
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00013	<0.00010	<0.00010	<0.00010	0.00011
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00174	0.00249	0.00123	0.00178	0.00169
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0164	0.0209	0.00937	0.0149	0.0170
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.027	0.029	0.014	0.021	0.028
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	52.0	43.1	25.6	38.2	53.3
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00017	0.00025	0.00012	0.00046	0.00017
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00065	0.00146	0.00110	0.00040	0.00058
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.082	0.227	0.177	0.371	0.083



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Dissolved Metals									
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0076	0.0075	0.0022	0.0050	0.0074
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	19.7	17.0	10.2	15.2	19.0
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.103	0.133	0.0166	0.532	0.104
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000552	0.000505	0.000232	0.000136	0.000559
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00131	0.00174	0.00088	0.00140	0.00129
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	0.051
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.86	1.24	0.480	0.846	1.80
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00183	0.00126	0.00119	0.00125	0.00183
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000235	0.000230	0.000152	0.000240	0.000225
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.46	4.00	1.69	2.17	4.58
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.98	7.53	0.816	10.5	5.71
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.122	0.127	0.0509	0.0978	0.130
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	4.39	1.44	<0.50	0.66	4.61
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00012	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00058	0.00118	0.00050	<0.00078 ^{DLM}	0.00052
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000748	0.000539	0.000119	0.000250	0.000753
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00059	0.00083	<0.00050	<0.00050	0.00058
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0035	0.0013	0.0051	0.0123	0.0012
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	0.00041	<0.00030	0.00034	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field

Speciated Metals



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
					Client sampling date / time	05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005	
					Result	Result	Result	Result	Result	
Speciated Metals										
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	0.000529	----	0.000288	0.000738	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	67	90	78	90	63	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2I	0.005	Bq/L	----	----	----	<0.005	<0.005	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

				SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW	
Client sampling date / time				05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	3.99	3.47	4.11	3.95	4.78
pH, field	----	EF001/TY	0.10	pH units	7.44	6.93	6.94	7.08	7.30
Temperature, field	----	EF001/TY	0.10	°C	26.2	22.8	20.0	21.7	22.6
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	3.2	4.0	2.7	2.3
Colour, true	----	E329-L/TY	2.0	CU	84.2	54.7	49.3	189	194
Conductivity	----	E100/TY	1.0	µS/cm	337	413	430	295	297
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	167	202	214	160	157
pH	----	E108/TY	0.10	pH units	8.09	8.03	7.98	8.00	8.07
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	252	288	271	239	256
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	7.0	3.0	13.8	15.7	10.3
Turbidity	----	E121/TY	0.10	NTU	3.21	1.54	9.18	36.5	31.8
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	159	164	190	151	151
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0181 ^{*T}	0.0078 ^{*T}	0.0160 ^{*T}	0.0300 ^{*T}	0.0239 ^{*T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	13.1	27.3	18.0	4.08	4.11
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.042	0.054	0.045	<0.020	0.027
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.31	0.847	0.749	1.37	1.54
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0300	0.0194	0.0074	0.0331	0.0319
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	1.53	13.3	15.0	2.70	3.27
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0028
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0022 ^{*T}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0031 ^{*T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	32.7	21.9	21.2	44.4	46.4



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	32.0	20.8	19.5	46.2 ^{DLM}	43.8 ^{DLM}
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.116	0.0309	0.424	1.20	1.07
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00012 ^{†T}	0.00013 ^{†T}	0.00013 ^{†T}	0.00026 ^{†T}	0.00031 ^{†T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00278 ^{†T}	0.00166 ^{†T}	0.00207 ^{†T}	0.00406 ^{†T}	0.00405 ^{†T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0108	0.0186	0.0275	0.0300	0.0290
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	0.000082 ^{†T}	0.000064 ^{†T}
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.024 ^{†T}	0.023 ^{†T}	0.028 ^{†T}	0.022 ^{†T}	0.021 ^{†T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000070 ^{†T}	0.0000050	0.0000080 ^{†T}	0.0000251 ^{†T}	0.0000261 ^{†T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	39.8	51.0	54.0	42.9	41.5
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000013	<0.000010	0.000062	0.000160	0.000146
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00081 ^{†T}	0.00251 ^{†T}	0.00216 ^{†T}
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00045 ^{†T}	0.00015 ^{†T}	0.00042 ^{†T}	0.00119 ^{†T}	0.00107 ^{†T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00060 ^{†T}	0.00062 ^{†T}	0.00120 ^{†T}	0.00310 ^{†T}	0.00294 ^{†T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.425	0.240	0.684	1.96	1.75
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000128 ^{†T}	<0.000050	0.000261 ^{†T}	0.00113 ^{†T}	0.00103 ^{†T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0058 ^{†T}	0.0092 ^{†T}	0.0083 ^{†T}	0.0065 ^{†T}	0.0060 ^{†T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	17.8	17.8	19.6	15.7	15.4
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.905	0.196	0.488	0.758	0.737
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000055 ^{†T}
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000372 ^{†T}	0.000641 ^{†T}	0.000796 ^{†T}	0.000710 ^{†T}	0.000754 ^{†T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00171 ^{†T}	0.00096 ^{†T}	0.00152 ^{†T}	0.00436 ^{†T}	0.00411 ^{†T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.119	0.065	0.075	0.149	0.136
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.95	2.41	2.52	1.99	2.11
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00193	0.00195	0.00253	0.00391	0.00372
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000213 ^{†T}	0.000183 ^{†T}	0.000216 ^{†T}	0.000323 ^{†T}	0.000318 ^{†T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	3.02	2.92	3.46	7.10	6.91
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	7.50	6.39	6.44	4.15	4.34
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.101	0.147	0.151	0.102	0.102
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.16	5.13	5.63	1.58	2.00
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	0.000018 ^{±T}	0.000016 ^{±T}
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00026	0.00026
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00600 ^{DLM}	0.00134	0.0159	0.0410	0.0407
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000515 ^{±T}	0.000624 ^{±T}	0.000946 ^{±T}	0.000698 ^{±T}	0.000714 ^{±T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00106	0.00057	0.00184	0.00472	0.00440
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0041 ^{±T}	0.0057 ^{±T}	0.0054 ^{±T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00030	<0.00020	0.00055	0.00154	0.00152
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0089	0.0074	0.0116	0.0353	0.0480
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	0.00010	0.00011	0.00024	0.00030
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00257	0.00158	0.00189	0.00319	0.00326
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.00968	0.0203	0.0270	0.0219	0.0214
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	0.000026	0.000034
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.025	0.022	0.031	0.022	0.022
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000077	0.0000066
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	40.8	53.8	55.7	41.1	40.6
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00034	0.00014	0.00027	0.00059	0.00058
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00063	0.00059	0.00071	0.00194	0.00193
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.115	0.105	0.122	0.392	0.375
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	0.000256	0.000258



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0059	0.0088	0.0086	0.0053	0.0051
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	15.9	16.5	18.1	13.9	13.6
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.692	0.193	0.445	0.650	0.592
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000363	0.000595	0.000845	0.000756	0.000837
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00138	0.00079	0.00107	0.00267	0.00272
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.068	<0.050	<0.050	0.054	0.055
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.97	2.34	2.41	1.73	1.88
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00160	0.00192	0.00169	0.00121	0.00141
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000243	0.000170	0.000191	0.000324	0.000331
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	2.80	2.95	2.42	4.51	4.53
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	6.06	5.20	5.39	3.29	3.39
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.106	0.152	0.166	0.0987	0.104
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.27	5.24	5.93	1.69	1.93
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00014	0.00015
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00056	0.00058	0.00199	0.00696	0.00983
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000500	0.000598	0.000942	0.000654	0.000672
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00064	<0.00050	0.00062	0.00166	0.00165
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	<0.0010	0.0022	0.0014	<0.0010
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	0.00118	0.00146
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Speciated Metals									
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	----	----	----	0.000388



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW21A_SW_20	SW27_SW_202	SW26_SW_202	SW23_SW_202	SW24_SW_202
						230804	30804	30804	30804	30804
						SW	SW	SW	SW	SW
					Client sampling date / time	05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	93	55	55	118	117	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.1	<1.0	<1.0	<1.0	1.2	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	----	0.008	<0.005	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	5.79	----	6.82	7.26	1.93
pH, field	----	EF001/TY	0.10	pH units	7.20	----	7.18	7.18	6.95
Temperature, field	----	EF001/TY	0.10	°C	24.4	----	25.3	24.4	21.0
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	2.4	<2.0	<2.0	<2.0	<2.0
Colour, true	----	E329-L/TY	2.0	CU	257	<2.0	32.5	26.4	130
Conductivity	----	E100/TY	1.0	µS/cm	173	<1.0	74.7	69.5	331
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	95.8	<0.50	33.2	30.1	177
pH	----	E108/TY	0.10	pH units	7.95	5.65	7.62	7.61	8.09
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	169	<10	55	52	242
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	10.3	<3.0	15.7	9.3	13.7
Turbidity	----	E121/TY	0.10	NTU	19.3	<0.10	5.72	5.34	5.33
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	83.8	<2.0	28.6	27.1	162
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0146 ^{^T}	<0.0050	0.0064 ^{^T}	<0.0050	0.0171 ^{^T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	1.82	<0.10	2.35	2.30	8.54
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	<0.020	0.023	<0.020	0.041
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.23	<0.050	0.454	0.890	1.46
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0322	<0.0010	0.0017	0.0014	0.0488
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	3.47	<0.30	3.73	3.41	2.31
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	40.6	<0.50	11.0 ^{DTC}	12.0	36.5



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	39.4 ^{DLM}	0.63 ^{*T}	10.9 ^{DTC}	10.8	36.5
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.582	<0.0030	0.254	0.172	0.146
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00018 ^{*T}	<0.00010	<0.00010	<0.00010	0.00022 ^{*T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00302 ^{*T}	<0.00010	0.00059 ^{*T}	0.00046 ^{*T}	0.00335 ^{*T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0201	<0.00010	0.0108	0.00957	0.0213
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000042 ^{*T}	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.015 ^{*T}	<0.010	<0.010	<0.010	0.021 ^{*T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000200 ^{*T}	<0.0000050	0.0000110 ^{*T}	0.0000080 ^{*T}	0.0000100 ^{*T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	23.0	<0.050	8.40	7.91	43.6
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000062	<0.000010	0.000042	0.000033	0.000014
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00119 ^{*T}	<0.00050	0.00088 ^{*T}	0.00067 ^{*T}	0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00045 ^{*T}	<0.00010	0.00021 ^{*T}	0.00011 ^{*T}	0.00037 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00262 ^{*T}	<0.00050	0.00131 ^{*T}	0.00114 ^{*T}	0.00154 ^{*T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	1.13	<0.010	0.344	0.185	0.622
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000724 ^{*T}	<0.000050	0.000213 ^{*T}	0.000129 ^{*T}	0.000100 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0038 ^{*T}	<0.0010	<0.0010	<0.0010	0.0050 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	9.40	<0.0050	3.06	2.41	16.0
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.145	<0.00010	0.0364	0.0157	0.197
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	0.0000054 ^{*T}	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000397 ^{*T}	<0.000050	0.000163 ^{*T}	0.000154 ^{*T}	0.000478 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00258 ^{*T}	<0.00050	0.00110 ^{*T}	0.00082 ^{*T}	0.00265 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.116	<0.050	<0.050	<0.050	0.184
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.31	<0.050	0.803	0.782	1.99
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00242	<0.00020	0.00243	0.00215	0.00241
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000247 ^{*T}	<0.000050	0.000104 ^{*T}	0.000114 ^{*T}	0.000256 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.70	<0.10	2.26	2.02	5.60
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	3.01	<0.050	3.09	3.02	5.59
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0547	<0.00020	0.0231	0.0223	0.102
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.55	<0.50	1.49	1.34	1.60
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	0.000011 ^{^T}	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	0.00023	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	0.00059	<0.00010	0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0275	<0.00030	0.00917	<0.00870 ^{DLM}	0.00683
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000378 ^{^T}	<0.000010	0.000088 ^{^T}	0.000074 ^{^T}	0.000430 ^{^T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00309	<0.00050	0.00106	0.00075	0.00116
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030 ^{DTC}	<0.0030	0.0078 ^{^T}	<0.0030	0.0039 ^{^T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00120	<0.00020	0.00026	0.00022	0.00049
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0726	<0.0010	0.0184	0.0158	0.0140
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00016	<0.00010	<0.00010	<0.00010	0.00020
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00262	<0.00010	0.00050	0.00040	0.00312
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0156	<0.00010	0.00942	0.00908	0.0206
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	0.000030	<0.000020	<0.000020	<0.000020	0.000021
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.016	<0.010	<0.010	<0.010	0.024
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000066	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	24.4	<0.050	9.08	8.58	46.2
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00017	<0.00010	<0.00010	<0.00010	0.00031
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00219	<0.00020	0.00094	0.00087	0.00123
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.470	<0.010	0.050	0.027	0.159
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000281	<0.000050	<0.000050	<0.000050	<0.000050



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0038	<0.0010	<0.0010	<0.0010	0.0058
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	8.46	<0.0050	2.55	2.11	14.9
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0574	<0.00010	0.0156	0.00425	0.170
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000429	<0.000050	0.000159	0.000126	0.000486
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00183	<0.00050	0.00052	<0.00050	0.00227
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.052	<0.050	<0.050	<0.050	0.090
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.21	<0.050	0.780	0.758	2.06
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00136	<0.00020	0.00169	0.00167	0.00214
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000242	<0.000050	0.000138	0.000094	0.000278
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.42	<0.050	2.22	1.62	5.34
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	2.50	<0.050	2.50	2.50	4.67
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0559	<0.00020	0.0236	0.0223	0.104
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.76	<0.50	2.17	1.39	1.65
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	0.00022	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.0113	<0.00030	0.00082	0.00070	0.00163
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000357	<0.000010	0.000080	0.000065	0.000444
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00161	<0.00050	<0.00050	<0.00050	0.00083
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0049	<0.0010	0.0019	<0.0010	0.0014
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00139	<0.00030	<0.00030	<0.00030	0.00051
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Speciated Metals									
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	----	----	----	0.00146



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
					Client sampling date / time	06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	3.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	103	<10	29	28	104	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.2	<1.0	1.3	<1.0	1.4	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
					Client sampling date / time	06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020	
					Result	Result	Result	Result	Result	
Field Tests										
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	1.86	----	4.32	5.06	----	
pH, field	----	EF001/TY	0.10	pH units	6.78	----	6.95	7.25	----	
Temperature, field	----	EF001/TY	0.10	°C	23.6	----	19.0	16.1	----	
Physical Tests										
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	4.4	<2.0	4.3	3.6	----	
Colour, true	----	E329-L/TY	2.0	CU	96.7	<2.0	50.8	150	----	
Conductivity	----	E100/TY	1.0	µS/cm	318	<1.0	392	203	----	
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	187	<0.50	198	115	----	
pH	----	E108/TY	0.10	pH units	7.88	5.44	7.90	7.87	----	
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	228	<10	237	164	----	
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	4.7	<3.0	7.1	15.1	----	
Turbidity	----	E121/TY	0.10	NTU	2.98	<0.10	4.63	4.13	----	
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	176	<2.0	177	110	----	
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0219 ^{*T}	<0.0050	0.0141 ^{*T}	0.0677 ^{*T}	----	
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	<0.0010	<0.0010	----	
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	<0.10	<0.10	15.9	0.19	----	
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.054	<0.020	0.033	0.034	----	
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.38	<0.050	0.911	1.94	----	
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	----	
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	----	
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0241	<0.0010	0.0126	0.0025	----	
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	<0.30	10.3	<0.30	1.06	
Cyanides										
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----	
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----	
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----	
Organic / Inorganic Carbon										



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
					Client sampling date / time	06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020	
					Result	Result	Result	Result	Result	
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	34.8	<0.50	22.1	32.5	----	
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	33.0	<0.50	19.4	31.4	----	
Total Metals										
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0662	<0.0030	0.184	0.110	----	
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	0.00012 ^{*T}	<0.00010	----	
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00193 ^{*T}	<0.00010	0.00158 ^{*T}	0.00171 ^{*T}	----	
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0215	<0.00010	0.0279	0.0185	----	
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	----	
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----	
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.013 ^{*T}	<0.010	0.022 ^{*T}	0.010	----	
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000050	<0.0000050	<0.0000050	0.0000090 ^{*T}	----	
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	43.3	<0.050	52.0	27.5	----	
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	<0.000010	0.000026	0.000017	----	
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00125 ^{*T}	0.00064 ^{*T}	----	
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00069 ^{*T}	<0.00010	0.00058 ^{*T}	0.00058 ^{*T}	----	
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00093 ^{*T}	<0.00050	----	
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.886	<0.010	0.853	0.881	----	
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000075 ^{*T}	<0.000050	0.000118 ^{*T}	0.000135 ^{*T}	----	
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0041 ^{*T}	<0.0010	0.0080 ^{*T}	0.0017 ^{*T}	----	
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	18.1	<0.0050	17.6	11.2	----	
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.418	<0.00010	1.41	0.433	----	
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000124 ^{*T}	<0.000050	0.000709 ^{*T}	0.000089 ^{*T}	----	
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00185 ^{*T}	<0.00050	0.00146 ^{*T}	0.00089 ^{*T}	----	
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.077	<0.050	0.065	<0.050	----	
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	0.208	<0.050	2.41	0.583	----	
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00065	<0.00020	0.00230	0.00164	----	
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000210 ^{*T}	<0.000050	0.000144 ^{*T}	0.000182 ^{*T}	----	



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
Client sampling date / time					06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020
					Result	Result	Result	Result	Result
Total Metals									
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	8.78	<0.10	2.89	8.57	----
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	0.461	<0.050	6.04	0.990	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0966	<0.00020	0.130	0.0498	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	<0.50	<0.50	4.04	<0.50	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00013	<0.00010	<0.00010	<0.00010	----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00217	<0.00030	0.00710	<0.00393 ^{DLM}	----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000326 ST	<0.000010	0.000741 ST	0.000079 ST	----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00061	<0.00050	0.00095	0.00053	----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0039 ST	<0.0030	----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	<0.00020	0.00025	<0.00020	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0084	<0.0010	0.0084	0.0182	----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00192	<0.00010	0.00142	0.00148	----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0229	<0.00010	0.0283	0.0169	----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.015	<0.010	0.024	0.011	----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	46.3	<0.050	51.2	28.6	----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00068	<0.00010	0.00047	0.00035	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
Client sampling date / time					06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020
					Result	Result	Result	Result	Result
Dissolved Metals									
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00050	<0.00020	0.00059	0.00029	----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.583	<0.010	0.383	0.489	----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0048	<0.0010	0.0082	0.0016	----
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	17.4	<0.0050	17.1	10.6	----
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.417	<0.00010	1.34	0.238	----
Mercury, dissolved	7439-97-6	E509/WT	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000176	<0.000050	0.000712	0.000059	----
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00167	<0.00050	0.00084	0.00067	----
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.054	<0.050	<0.050	<0.050	----
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	0.276	<0.050	2.41	0.594	----
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00057	<0.00020	0.00186	0.00138	----
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000250	<0.000050	0.000165	0.000174	----
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	8.32	<0.050	2.34	8.55	----
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	0.372	<0.050	5.10	0.825	----
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.101	<0.00020	0.136	0.0522	----
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	<0.50	<0.50	3.96	<0.50	----
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00049	<0.00030	0.00080	0.00059	----
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000339	<0.000010	0.000769	0.000072	----
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0022	<0.0010	0.0024	0.0013	----
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
					Client sampling date / time	06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020	
					Result	Result	Result	Result	Result	
Dissolved Metals										
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field	----
Speciated Metals										
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	----	----	----	----	0.000623
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	2.5	<2.0	<2.0	3.0	3.0	----
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	86	<10	70	85	85	----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.0	5.7	2.4	1.5	1.5	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-10128

Aug 24, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Aug-11-2023

Client P.O.: TY2307728

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Snook, Vicky

-
- * Test methods and data are validated by the laboratory's Quality Assurance Program.
 - * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
 - * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
 - * Data marked as "by Client" has been provided by the client and may affect the validity of results.
 - * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
 - * Additional information is available upon request.
 - * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

1081 Barton Street

Thunder Bay, ON P7B 5N3

Attn: Christine Paradis

Sample #:	2023026353	Client PO #:	TY2307728
Date Sampled:	Aug 05, 2023	Date Received:	Aug 11, 2023
Sample Matrix:	WATER		
Description:	08/05/2023 12:45 SW20_SW_20230804 TY2307728-004		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Sample #: **2023026354** Client PO #: **TY2307728**
 Date Sampled: **Aug 05, 2023** Date Received: **Aug 11, 2023**
 Sample Matrix: **WATER**
 Description: **08/05/2023 13:10 SW22A_SW_20230804 TY2307728-005**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Sample #:	2023026355	Client PO #:	TY2307728
Date Sampled:	Aug 06, 2023	Date Received:	Aug 11, 2023
Sample Matrix:	WATER		
Description:	08/06/2023 09:20 SW23_SW_20230804 TY2307728-009		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Sample #: **2023026356** Client PO #: **TY2307728**
 Date Sampled: **Aug 06, 2023** Date Received: **Aug 11, 2023**
 Sample Matrix: **WATER**
 Description: **08/06/2023 09:45 SW24_SW_20230804 TY2307728-010**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/7/2023 1:11:00 PM COC Number: ALS-451455497						Containers SW Kit Ra-226 Bottle									Number of Containers	Comments
						Filtered N N										
						Preservatives										
						NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl HG)								
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl HG)							Number of Containers	Comments
SW22A_SW_20230804	5.35	7.71	19.73	08/05/2023 14:10	SW		X	x							12	
SW21A_SW_20230804	3.99	7.44	26.16	08/05/2023 16:00	SW	X									11	
SW27_SW_20230804	3.47	6.93	22.81	08/05/2023 16:35	SW	X									11	
SW26_SW_20230804	4.11	6.94	20.02	08/06/2023 08:25	SW	X									11	
SW23_SW_20230804	3.95	7.08	21.67	08/06/2023 10:20	SW	X									12	
1-TEEPLE_CULVERT_MM_20230804				08/08/2023	SW			x								

Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	8/7/2023 1:11:00 PM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by				

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/7/2023 1:11:00 PM COC Number: ALS-451455497						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle									Number of Containers	Comments
						N	N												
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl HG)											
SW24_SW_20230804	4.78	7.3	22.57	08/06/2023 10:45	SW	X		x						12					
SW15_SW_20230804	5.79	7.2	24.45	08/06/2023 11:25	SW	X								11					
FB_SW_20230804				08/06/2023 12:00	SW	X								11					
SW17_SW_20230804	6.82	7.18	25.32	08/06/2023 12:05	SW	X								11					
SW16_SW_20230804	7.26	7.18	24.38	08/06/2023 14:05	SW	X								11					

Shipped by	Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
	Received by	8/7/2023 1:11:00 PM			
			Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/7/2023 1:11:00 PM COC Number: ALS-451455497						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle								Number of Containers	Comments
						N	N											
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MIMER-BE	MEHG-T-GCAF-VA (Methyl HG)										
SW03_SW_20230804	1.93	6.95	21.04	08/06/2023 15:30	SW	X		X							11			
SW29_SW_20230804	1.86	6.78	23.63	08/06/2023 16:05	SW	X									11			
TB_SW_20230804				08/06/2023 17:37	SW	X									11			
SW25_SW_20230804	4.32	6.95	19.01	08/06/2023 20:45	SW	X									11			
SW02_SW_20230804	5.06	7.25	16.14	08/07/2023 08:55	SW	X									11			

Shipped by	Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
	Received by		Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		
		8/7/2023 1:11:00 PM			Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input checked="" type="checkbox"/> No
Are samples for human consumption / use? Yes <input checked="" type="checkbox"/> No
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	8/7/2023 1:11:00 PM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by				

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO	Priority/Emergency Service Requested		YES	NO
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO	Confirmed all as accurate as per COC, Sample Remarks or PM			
Client:		New Gold		Client		Work Contact	
Client:		New Gold		Client		Quote	
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL			
Mode of Delivery:		<input checked="" type="radio"/> Courier	Drop Off	Project		<input checked="" type="checkbox"/> PO	Site/LSD
Courier		Manitowish		Overall Description Entered		Yes	<input checked="" type="radio"/> NA
Waybill Number		3302577507		Received date/time as per COC		<input checked="" type="checkbox"/>	
Temperature 14.0, 18.4, 9.6, 9.8, 10.8, 6.6, 10.6		Cooler Count		Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	No
Cooling Method		None	Ice	Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	NA
Cooling Method		None	Ice	Sample Remarks/Specification Doc checked		<input checked="" type="checkbox"/>	
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST			
Matrix:	Water	Soil	Air	Biota	Other		
DW Schedule 24 Bottles Correct?		Yes	No	Submission Issues communicated		Yes	<input checked="" type="radio"/> NA
DW Metals pH Check <2		Yes	No	Sample Info communicated via Remarks		Yes	<input checked="" type="radio"/> NA
Regulation Circled, Works # present		Yes	No - Reject?	Planned Event Submission			
# of Bottles:		Sample Count		Planned Event Submission		<input checked="" type="radio"/> Yes	No
Green/white		19 routine, 19 BOD		Sample Name entered as per CoC			
Purple/white		19 nutrient, 19 TOC, 19 DOC		Sampling Date and time entered as per CoC			
Warm red/white		19 total metal, 19 diss metal, 19 rad:um		Containers selected in layout order			
Yellow/black		19 total Hg, 19 diss Hg		Sales items entered from QUOTE ONLY			
Light blue/white				(and/or verified as correct)			
Orange/black				Field Data/EC298A removed if not on COC		Yes	<input checked="" type="radio"/> NA
Others (detail)		19 cyanide		Bottle Allocation Verified			
6 Methyl Hg		2 x 19 orgg		Guideline added or auto-allocated			
Others (detail)		19 cyanide		Due dates updated			
Others (detail)		2 x 19 orgg		VALIDATION			
Comments on Samples and Bottles:				Validation errors resolved?		<input checked="" type="radio"/> Yes	No
Samples Requiring Preservation or Filtering:				Internal Sublet CoC created		<input checked="" type="radio"/> Yes	NA
Layout Staff Initials				Login Comments:			
Date and Time of Layout		Aug 9 th 2023 12:49		Login Staff Initials:			



CERTIFICATE OF ANALYSIS

Work Order	: TY2307728	Page	: 1 of 22
Client	: New Gold Inc. (Rainy River)	Laboratory	: ALS Environmental - Thunder Bay
Contact	: Garnet.Cornell@newgold.com Garnet Cornell	Account Manager	: Christine Paradis
Address	: 24 Marr Rd. Barwick ON Canada P0W 1A0	Address	: 1081 Barton Street Thunder Bay ON Canada P7B 5N3
Telephone	: 807 234 8170	Telephone	: +1 807 623 6463
Project	: Surface Water	Date Samples Received	: 09-Aug-2023 09:04
PO	: 4700002620	Date Analysis Commenced	: 09-Aug-2023
C-O-C number	: ----	Issue Date	: 28-Aug-2023 16:05
Sampler	: ----		
Site	: New Gold Inc. (Rainy River)		
Quote number	: New Gold Rainy River Project - Picka Project		
No. of samples received	: 20		
No. of samples analysed	: 20		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Daron Mooney	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Kinny Wu	Lab Analyst	Metals, Burnaby, British Columbia
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Inorganics, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Metals, Thunder Bay, Ontario
Walt Kippenhuck	Supervisor - Inorganic	Inorganics, Waterloo, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
-	no units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

<i>Qualifier</i>	<i>Description</i>
< T	<i>A measureable trace amount: Interpret with caution.</i>
DLM	<i>Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).</i>
DTC	<i>Dissolved concentration exceeds total. Results were confirmed by re-analysis.</i>



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001 Result	TY2307728-002 Result	TY2307728-003 Result	TY2307728-004 Result	TY2307728-005 Result
Physical Tests									
Acidity (as CaCO3)	---	E283/TY	2.0	mg/L	2.0	2.4	<2.0	3.1	<2.0
Colour, true	---	E329-L/TY	2.0	CU	60.7	122	110	109	61.0
Conductivity	---	E100/TY	1.0	µS/cm	416	348	187	346	421
Hardness (as CaCO3), dissolved	---	EC100/TY	0.50	mg/L	211	178	106	158	211
pH	---	E108/TY	0.10	pH units	8.16	8.09	8.05	8.02	8.14
Solids, total dissolved [TDS]	---	E162/TY	10	mg/L	282	260	157	265	294
Solids, total suspended [TSS]	---	E160/TY	3.0	mg/L	4.0	4.4	<3.0	6.4	3.8
Turbidity	---	E121/TY	0.10	NTU	2.71	4.19	2.01	3.92	2.26
Alkalinity, total (as CaCO3)	---	E290/TY	2.0	mg/L	187	163	97.4	144	188
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0137 ^{*T}	0.0150 ^{*T}	0.126 ^{*T}	0.0186 ^{*T}	0.0102 ^{*T}
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	18.0	13.2	0.90	22.7	17.9
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.059	0.052	0.030	0.039	0.048
Kjeldahl nitrogen, total [TKN]	---	E318/TY	0.050	mg/L	0.883	1.45	0.992	1.25	1.11
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0220	0.0259	0.0034	0.0158	0.0244
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	11.3	2.36	0.35	<0.30	11.2
Cyanides									
Cyanide, free	---	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	0.0036 ^{*T}	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	---	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	E358-L/WT	0.50	mg/L	23.3	33.1	31.8	33.7	25.2
Carbon, total organic [TOC]	---	E355-L/WT	0.50	mg/L	23.6	32.3	30.9	32.2	24.6
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0732	0.161	0.0762	0.110	0.0784
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00014 ^{*T}	<0.00010	<0.00010	<0.00010	0.00014 ^{*T}



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Total Metals									
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00186 ^{*T}	0.00259 ^{*T}	0.00127 ^{*T}	0.00188 ^{*T}	0.00177 ^{*T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0164	0.0215	0.00927	0.0149	0.0162
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	0.000023 ^{*T}	0.000020	0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.026 ^{*T}	0.027 ^{*T}	0.017 ^{*T}	0.021 ^{*T}	0.026 ^{*T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000081 ^{*T}	0.0000081 ^{*T}	0.0000080 ^{*T}	0.0000080 ^{*T}	0.0000060 ^{*T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	51.4	41.6	25.1	36.3	50.9
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	0.000020	0.000014	0.000016	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	0.00059 ^{*T}	0.00074 ^{*T}	0.00052 ^{*T}	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00021 ^{*T}	0.00031 ^{*T}	0.00014 ^{*T}	0.00050 ^{*T}	0.00019 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00092 ^{*T}	0.00144 ^{*T}	0.00072 ^{*T}	0.00080 ^{*T}	0.00086 ^{*T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.198	0.459	0.296	0.667	0.211
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000065 ^{*T}	0.000130 ^{*T}	0.000079 ^{*T}	0.000104 ^{*T}	0.000055 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0072 ^{*T}	0.0077 ^{*T}	0.0029 ^{*T}	0.0055 ^{*T}	0.0073 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	20.8	18.0	11.0	16.5	20.4
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.127	0.159	0.0251	0.506	0.130
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000583 ^{*T}	0.000542 ^{*T}	0.000274 ^{*T}	0.000167 ^{*T}	0.000496 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00153 ^{*T}	0.00205 ^{*T}	0.00123 ^{*T}	0.00162 ^{*T}	0.00151 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.068	0.077	<0.050	0.075	0.069
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.81	1.27	0.480	0.877	1.78
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00204	0.00164	0.00138	0.00137	0.00201
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000202 ^{*T}	0.000209 ^{*T}	0.000173 ^{*T}	0.000239 ^{*T}	0.000198 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.68	4.40	1.91	2.51	4.76
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	7.07	8.98	0.978	13.0	6.95
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.126	0.131	0.0501	0.0967	0.124
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	4.49	1.58	<0.50	0.70	4.38
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Total Metals									
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00021	<0.00010	0.00016	0.00013	0.00019
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00387 ^{DLM}	<0.00804 ^{DLM}	0.00280	<0.00495 ^{DLM}	0.00386
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000738 ^{-T}	0.000547 ^{-T}	0.000127 ^{-T}	0.000246 ^{-T}	0.000719 ^{-T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00086	0.00136	0.00065	0.00079	0.00090
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0044 ^{-T}	<0.0030 ^{DTC}	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00027	0.00045	<0.00020	0.00033	0.00023
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0091	0.0115	0.0062	0.0074	0.0065
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00013	<0.00010	<0.00010	<0.00010	0.00011
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00174	0.00249	0.00123	0.00178	0.00169
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0164	0.0209	0.00937	0.0149	0.0170
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.027	0.029	0.014	0.021	0.028
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	52.0	43.1	25.6	38.2	53.3
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00017	0.00025	0.00012	0.00046	0.00017
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00065	0.00146	0.00110	0.00040	0.00058
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.082	0.227	0.177	0.371	0.083
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0076	0.0075	0.0022	0.0050	0.0074
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	19.7	17.0	10.2	15.2	19.0
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.103	0.133	0.0166	0.532	0.104
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
Client sampling date / time					05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005
					Result	Result	Result	Result	Result
Dissolved Metals									
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000552	0.000505	0.000232	0.000136	0.000559
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00131	0.00174	0.00088	0.00140	0.00129
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	0.051
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.86	1.24	0.480	0.846	1.80
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00183	0.00126	0.00119	0.00125	0.00183
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000235	0.000230	0.000152	0.000240	0.000225
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.46	4.00	1.69	2.17	4.58
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.98	7.53	0.816	10.5	5.71
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.122	0.127	0.0509	0.0978	0.130
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	4.39	1.44	<0.50	0.66	4.61
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00012	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00058	0.00118	0.00050	<0.00078 ^{DLM}	0.00052
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000748	0.000539	0.000119	0.000250	0.000753
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00059	0.00083	<0.00050	<0.00050	0.00058
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0035	0.0013	0.0051	0.0123	0.0012
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	0.00041	<0.00030	0.00034	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Speciated Metals									
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	0.000529	----	0.000288	0.000738
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	67	90	78	90	63
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW06_SW_202 30804 SW	SW10_SW_202 30804 SW	SW28A_SW_20 230804 SW	SW20_SW_202 30804 SW	SW22A_SW_20 230804 SW
					Client sampling date / time	05-Aug-2023 12:00	05-Aug-2023 12:40	05-Aug-2023 13:10	05-Aug-2023 13:45	05-Aug-2023 14:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-001	TY2307728-002	TY2307728-003	TY2307728-004	TY2307728-005	
					Result	Result	Result	Result	Result	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/21	0.005	Bq/L	----	----	----	<0.005	<0.005	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	3.2	4.0	2.7	2.3
Colour, true	----	E329-L/TY	2.0	CU	84.2	54.7	49.3	189	194
Conductivity	----	E100/TY	1.0	µS/cm	337	413	430	295	297
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	167	202	214	160	157
pH	----	E108/TY	0.10	pH units	8.09	8.03	7.98	8.00	8.07
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	252	288	271	239	256
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	7.0	3.0	13.8	15.7	10.3
Turbidity	----	E121/TY	0.10	NTU	3.21	1.54	9.18	36.5	31.8
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	159	164	190	151	151
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0181 ^{±T}	0.0078 ^{±T}	0.0160 ^{±T}	0.0300 ^{±T}	0.0239 ^{±T}
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	13.1	27.3	18.0	4.08	4.11
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.042	0.054	0.045	<0.020	0.027
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.31	0.847	0.749	1.37	1.54
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0300	0.0194	0.0074	0.0331	0.0319
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	1.53	13.3	15.0	2.70	3.27
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0028
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0022 ^{±T}
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0031 ^{±T}
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	32.7	21.9	21.2	44.4	46.4
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	32.0	20.8	19.5	46.2 ^{DLM}	43.8 ^{DLM}
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.116	0.0309	0.424	1.20	1.07
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00012 ^{±T}	0.00013 ^{±T}	0.00013 ^{±T}	0.00026 ^{±T}	0.00031 ^{±T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00278 ^{±T}	0.00166 ^{±T}	0.00207 ^{±T}	0.00406 ^{±T}	0.00405 ^{±T}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Total Metals									
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0108	0.0186	0.0275	0.0300	0.0290
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	0.000082 ^{*T}	0.000064 ^{*T}
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.024 ^{*T}	0.023 ^{*T}	0.028 ^{*T}	0.022 ^{*T}	0.021 ^{*T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000070 ^{*T}	0.0000050	0.0000080 ^{*T}	0.0000251 ^{*T}	0.0000261 ^{*T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	39.8	51.0	54.0	42.9	41.5
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000013	<0.000010	0.000062	0.000160	0.000146
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00081 ^{*T}	0.00251 ^{*T}	0.00216 ^{*T}
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00045 ^{*T}	0.00015 ^{*T}	0.00042 ^{*T}	0.00119 ^{*T}	0.00107 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00060 ^{*T}	0.00062 ^{*T}	0.00120 ^{*T}	0.00310 ^{*T}	0.00294 ^{*T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.425	0.240	0.684	1.96	1.75
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000128 ^{*T}	<0.000050	0.000261 ^{*T}	0.00113 ^{*T}	0.00103 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0058 ^{*T}	0.0092 ^{*T}	0.0083 ^{*T}	0.0065 ^{*T}	0.0060 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	17.8	17.8	19.6	15.7	15.4
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.905	0.196	0.488	0.758	0.737
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000055 ^{*T}
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000372 ^{*T}	0.000641 ^{*T}	0.000796 ^{*T}	0.000710 ^{*T}	0.000754 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00171 ^{*T}	0.00096 ^{*T}	0.00152 ^{*T}	0.00436 ^{*T}	0.00411 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.119	0.065	0.075	0.149	0.136
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.95	2.41	2.52	1.99	2.11
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00193	0.00195	0.00253	0.00391	0.00372
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000213 ^{*T}	0.000183 ^{*T}	0.000216 ^{*T}	0.000323 ^{*T}	0.000318 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	3.02	2.92	3.46	7.10	6.91
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	7.50	6.39	6.44	4.15	4.34
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.101	0.147	0.151	0.102	0.102
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.16	5.13	5.63	1.58	2.00
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	0.000018 ^{*T}	0.000016 ^{*T}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Total Metals									
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00026	0.00026
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00600 ^{DLM}	0.00134	0.0159	0.0410	0.0407
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000515 ^{*T}	0.000624 ^{*T}	0.000946 ^{*T}	0.000698 ^{*T}	0.000714 ^{*T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00106	0.00057	0.00184	0.00472	0.00440
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0041 ^{*T}	0.0057 ^{*T}	0.0054 ^{*T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00030	<0.00020	0.00055	0.00154	0.00152
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0089	0.0074	0.0116	0.0353	0.0480
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	0.00010	0.00011	0.00024	0.00030
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00257	0.00158	0.00189	0.00319	0.00326
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.00968	0.0203	0.0270	0.0219	0.0214
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	0.000026	0.000034
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.025	0.022	0.031	0.022	0.022
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000077	0.0000066
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	40.8	53.8	55.7	41.1	40.6
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00034	0.00014	0.00027	0.00059	0.00058
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00063	0.00059	0.00071	0.00194	0.00193
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.115	0.105	0.122	0.392	0.375
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	0.000256	0.000258
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0059	0.0088	0.0086	0.0053	0.0051
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	15.9	16.5	18.1	13.9	13.6
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.692	0.193	0.445	0.650	0.592
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000363	0.000595	0.000845	0.000756	0.000837



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW21A_SW_20 230804 SW	SW27_SW_202 30804 SW	SW26_SW_202 30804 SW	SW23_SW_202 30804 SW	SW24_SW_202 30804 SW
Client sampling date / time					05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010
					Result	Result	Result	Result	Result
Dissolved Metals									
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00138	0.00079	0.00107	0.00267	0.00272
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.068	<0.050	<0.050	0.054	0.055
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.97	2.34	2.41	1.73	1.88
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00160	0.00192	0.00169	0.00121	0.00141
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000243	0.000170	0.000191	0.000324	0.000331
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	2.80	2.95	2.42	4.51	4.53
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	6.06	5.20	5.39	3.29	3.39
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.106	0.152	0.166	0.0987	0.104
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.27	5.24	5.93	1.69	1.93
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00014	0.00015
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00056	0.00058	0.00199	0.00696	0.00983
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000500	0.000598	0.000942	0.000654	0.000672
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00064	<0.00050	0.00062	0.00166	0.00165
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	<0.0010	0.0022	0.0014	<0.0010
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	0.00118	0.00146
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Speciated Metals									
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	----	----	----	0.000388
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	93	55	55	118	117
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.1	<1.0	<1.0	<1.0	1.2
Radiological Parameters									



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW21A_SW_20	SW27_SW_202	SW26_SW_202	SW23_SW_202	SW24_SW_202
						230804	30804	30804	30804	30804
						SW	SW	SW	SW	SW
					Client sampling date / time	05-Aug-2023 16:00	05-Aug-2023 16:35	06-Aug-2023 08:25	06-Aug-2023 10:20	06-Aug-2023 10:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-006	TY2307728-007	TY2307728-008	TY2307728-009	TY2307728-010	
					Result	Result	Result	Result	Result	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/21	0.005	Bq/L	----	----	----	0.008	<0.005	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	2.4	<2.0	<2.0	<2.0	<2.0
Colour, true	----	E329-L/TY	2.0	CU	257	<2.0	32.5	26.4	130
Conductivity	----	E100/TY	1.0	µS/cm	173	<1.0	74.7	69.5	331
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	95.8	<0.50	33.2	30.1	177
pH	----	E108/TY	0.10	pH units	7.95	5.65	7.62	7.61	8.09
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	169	<10	55	52	242
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	10.3	<3.0	15.7	9.3	13.7
Turbidity	----	E121/TY	0.10	NTU	19.3	<0.10	5.72	5.34	5.33
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	83.8	<2.0	28.6	27.1	162
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0146 ^{*T}	<0.0050	0.0064 ^{*T}	<0.0050	0.0171 ^{*T}
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	1.82	<0.10	2.35	2.30	8.54
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	<0.020	0.023	<0.020	0.041
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.23	<0.050	0.454	0.890	1.46
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0322	<0.0010	0.0017	0.0014	0.0488
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	3.47	<0.30	3.73	3.41	2.31
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	40.6	<0.50	11.0 ^{DTC}	12.0	36.5
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	39.4 ^{DLM}	0.63 ^{*T}	10.9 ^{DTC}	10.8	36.5
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.582	<0.0030	0.254	0.172	0.146
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00018 ^{*T}	<0.00010	<0.00010	<0.00010	0.00022 ^{*T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00302 ^{*T}	<0.00010	0.00059 ^{*T}	0.00046 ^{*T}	0.00335 ^{*T}



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Total Metals									
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0201	<0.00010	0.0108	0.00957	0.0213
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000042 ^{*T}	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.015 ^{*T}	<0.010	<0.010	<0.010	0.021 ^{*T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000200 ^{*T}	<0.0000050	0.0000110 ^{*T}	0.0000080 ^{*T}	0.0000100 ^{*T}
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	23.0	<0.050	8.40	7.91	43.6
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000062	<0.000010	0.000042	0.000033	0.000014
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00119 ^{*T}	<0.00050	0.00088 ^{*T}	0.00067 ^{*T}	0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00045 ^{*T}	<0.00010	0.00021 ^{*T}	0.00011 ^{*T}	0.00037 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00262 ^{*T}	<0.00050	0.00131 ^{*T}	0.00114 ^{*T}	0.00154 ^{*T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	1.13	<0.010	0.344	0.185	0.622
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000724 ^{*T}	<0.000050	0.000213 ^{*T}	0.000129 ^{*T}	0.000100 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0038 ^{*T}	<0.0010	<0.0010	<0.0010	0.0050 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	9.40	<0.0050	3.06	2.41	16.0
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.145	<0.00010	0.0364	0.0157	0.197
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	0.0000054 ^{*T}	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000397 ^{*T}	<0.000050	0.000163 ^{*T}	0.000154 ^{*T}	0.000478 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00258 ^{*T}	<0.00050	0.00110 ^{*T}	0.00082 ^{*T}	0.00265 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.116	<0.050	<0.050	<0.050	0.184
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.31	<0.050	0.803	0.782	1.99
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00242	<0.00020	0.00243	0.00215	0.00241
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000247 ^{*T}	<0.000050	0.000104 ^{*T}	0.000114 ^{*T}	0.000256 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.70	<0.10	2.26	2.02	5.60
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	3.01	<0.050	3.09	3.02	5.59
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0547	<0.00020	0.0231	0.0223	0.102
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.55	<0.50	1.49	1.34	1.60
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	0.000011 ^{*T}	<0.000010	<0.000010	<0.000010	<0.000010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Total Metals									
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	0.00023	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	0.00059	<0.00010	0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0275	<0.00030	0.00917	<0.00870 ^{DLM}	0.00683
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000378 ^{*T}	<0.000010	0.000088 ^{*T}	0.000074 ^{*T}	0.000430 ^{*T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00309	<0.00050	0.00106	0.00075	0.00116
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030 ^{DTC}	<0.0030	0.0078 ^{*T}	<0.0030	0.0039 ^{*T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00120	<0.00020	0.00026	0.00022	0.00049
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0726	<0.0010	0.0184	0.0158	0.0140
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00016	<0.00010	<0.00010	<0.00010	0.00020
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00262	<0.00010	0.00050	0.00040	0.00312
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0156	<0.00010	0.00942	0.00908	0.0206
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	0.000030	<0.000020	<0.000020	<0.000020	0.000021
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.016	<0.010	<0.010	<0.010	0.024
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000066	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	24.4	<0.050	9.08	8.58	46.2
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00017	<0.00010	<0.00010	<0.00010	0.00031
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00219	<0.00020	0.00094	0.00087	0.00123
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.470	<0.010	0.050	0.027	0.159
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000281	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0038	<0.0010	<0.0010	<0.0010	0.0058
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	8.46	<0.0050	2.55	2.11	14.9
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0574	<0.00010	0.0156	0.00425	0.170
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000429	<0.000050	0.000159	0.000126	0.000486



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 30804 SW	FB_SW_202308 04 SW	SW17_SW_202 30804 SW	SW16_SW_202 30804 SW	SW03_SW_202 30804 SW
Client sampling date / time					06-Aug-2023 11:25	06-Aug-2023 12:00	06-Aug-2023 12:05	06-Aug-2023 14:05	06-Aug-2023 15:30
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-011	TY2307728-012	TY2307728-013	TY2307728-014	TY2307728-015
					Result	Result	Result	Result	Result
Dissolved Metals									
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00183	<0.00050	0.00052	<0.00050	0.00227
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.052	<0.050	<0.050	<0.050	0.090
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.21	<0.050	0.780	0.758	2.06
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00136	<0.00020	0.00169	0.00167	0.00214
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000242	<0.000050	0.000138	0.000094	0.000278
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.42	<0.050	2.22	1.62	5.34
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	2.50	<0.050	2.50	2.50	4.67
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0559	<0.00020	0.0236	0.0223	0.104
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.76	<0.50	2.17	1.39	1.65
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	0.00022	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.0113	<0.00030	0.00082	0.00070	0.00163
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000357	<0.000010	0.000080	0.000065	0.000444
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00161	<0.00050	<0.00050	<0.00050	0.00083
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0049	<0.0010	0.0019	<0.0010	0.0014
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00139	<0.00030	<0.00030	<0.00030	0.00051
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Speciated Metals									
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	----	----	----	0.00146
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	3.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	103	<10	29	28	104
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.2	<1.0	1.3	<1.0	1.4

Page : 17 of 22
Work Order : TY2307728
Client : New Gold Inc. (Rainy River)
Project : Surface Water



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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
Client sampling date / time					06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020
					Result	Result	Result	Result	Result
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	4.4	<2.0	4.3	3.6	----
Colour, true	----	E329-L/TY	2.0	CU	96.7	<2.0	50.8	150	----
Conductivity	----	E100/TY	1.0	µS/cm	318	<1.0	392	203	----
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	187	<0.50	198	115	----
pH	----	E108/TY	0.10	pH units	7.88	5.44	7.90	7.87	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	228	<10	237	164	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	4.7	<3.0	7.1	15.1	----
Turbidity	----	E121/TY	0.10	NTU	2.98	<0.10	4.63	4.13	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	176	<2.0	177	110	----
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0219 ^{±T}	<0.0050	0.0141 ^{±T}	0.0677 ^{±T}	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	<0.10	<0.10	15.9	0.19	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.054	<0.020	0.033	0.034	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.38	<0.050	0.911	1.94	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0241	<0.0010	0.0126	0.0025	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	<0.30	10.3	<0.30	1.06
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	34.8	<0.50	22.1	32.5	----
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	33.0	<0.50	19.4	31.4	----
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0662	<0.0030	0.184	0.110	----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	0.00012 ^{±T}	<0.00010	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
					Client sampling date / time	06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020	
					Result	Result	Result	Result	Result	
Total Metals										
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00193 ^{*T}	<0.00010	0.00158 ^{*T}	0.00171 ^{*T}	----	
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0215	<0.00010	0.0279	0.0185	----	
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	----	
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----	
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.013 ^{*T}	<0.010	0.022 ^{*T}	0.010	----	
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000050	<0.0000050	<0.0000050	0.0000090 ^{*T}	----	
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	43.3	<0.050	52.0	27.5	----	
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	<0.000010	0.000026	0.000017	----	
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00125 ^{*T}	0.00064 ^{*T}	----	
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00069 ^{*T}	<0.00010	0.00058 ^{*T}	0.00058 ^{*T}	----	
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00093 ^{*T}	<0.00050	----	
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.886	<0.010	0.853	0.881	----	
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000075 ^{*T}	<0.000050	0.000118 ^{*T}	0.000135 ^{*T}	----	
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0041 ^{*T}	<0.0010	0.0080 ^{*T}	0.0017 ^{*T}	----	
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	18.1	<0.0050	17.6	11.2	----	
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.418	<0.00010	1.41	0.433	----	
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000124 ^{*T}	<0.000050	0.000709 ^{*T}	0.000089 ^{*T}	----	
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00185 ^{*T}	<0.00050	0.00146 ^{*T}	0.00089 ^{*T}	----	
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.077	<0.050	0.065	<0.050	----	
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	0.208	<0.050	2.41	0.583	----	
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00065	<0.00020	0.00230	0.00164	----	
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000210 ^{*T}	<0.000050	0.000144 ^{*T}	0.000182 ^{*T}	----	
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	8.78	<0.10	2.89	8.57	----	
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----	
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	0.461	<0.050	6.04	0.990	----	
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0966	<0.00020	0.130	0.0498	----	
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	<0.50	<0.50	4.04	<0.50	----	



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
					Client sampling date / time	06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020	
					Result	Result	Result	Result	Result	
Total Metals										
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		----
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	0.00013	<0.00010	<0.00010	<0.00010		----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00217	<0.00030	0.00710	<0.00393 ^{DLM}		----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000326 ^{-T}	<0.000010	0.000741 ^{-T}	0.000079 ^{-T}		----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00061	<0.00050	0.00095	0.00053		----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0039 ^{-T}	<0.0030		----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	<0.00020	0.00025	<0.00020		----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0084	<0.0010	0.0084	0.0182		----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010		----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00192	<0.00010	0.00142	0.00148		----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0229	<0.00010	0.0283	0.0169		----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020		----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.015	<0.010	0.024	0.011		----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	46.3	<0.050	51.2	28.6		----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010		----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050		----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00068	<0.00010	0.00047	0.00035		----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00050	<0.00020	0.00059	0.00029		----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.583	<0.010	0.383	0.489		----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		----
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0048	<0.0010	0.0082	0.0016		----
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	17.4	<0.0050	17.1	10.6		----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
Client sampling date / time					06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020
					Result	Result	Result	Result	Result
Dissolved Metals									
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.417	<0.00010	1.34	0.238	----
Mercury, dissolved	7439-97-6	E509/WT	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000176	<0.000050	0.000712	0.000059	----
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00167	<0.00050	0.00084	0.00067	----
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.054	<0.050	<0.050	<0.050	----
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	0.276	<0.050	2.41	0.594	----
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00057	<0.00020	0.00186	0.00138	----
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000250	<0.000050	0.000165	0.000174	----
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	8.32	<0.050	2.34	8.55	----
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	0.372	<0.050	5.10	0.825	----
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.101	<0.00020	0.136	0.0522	----
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	<0.50	<0.50	3.96	<0.50	----
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00049	<0.00030	0.00080	0.00059	----
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000339	<0.000010	0.000769	0.000072	----
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0022	<0.0010	0.0024	0.0013	----
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	----
Speciated Metals									
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	----	----	----	----	0.000623
Aggregate Organics									



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW29_SW_202 30804 SW	TB_SW_20230 804 SW	SW25_SW_202 30804 SW	SW02_SW_202 30804 SW	1 - TEEPLE CULVERT_MM_ 20230804 SW
					Client sampling date / time	06-Aug-2023 16:05	06-Aug-2023 17:37	06-Aug-2023 20:45	07-Aug-2023 08:55	08-Aug-2023 12:01
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2307728-016	TY2307728-017	TY2307728-018	TY2307728-019	TY2307728-020	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	2.5	<2.0	<2.0	3.0	----	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	86	<10	70	85	----	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.0	5.7	2.4	1.5	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-10128

Aug 24, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Aug-11-2023

Client P.O.: TY2307728

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Snook, Vicky

-
- * Test methods and data are validated by the laboratory's Quality Assurance Program.
 - * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
 - * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
 - * Data marked as "by Client" has been provided by the client and may affect the validity of results.
 - * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
 - * Additional information is available upon request.
 - * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023026353	Client PO #:	TY2307728
Date Sampled:	Aug 05, 2023	Date Received:	Aug 11, 2023
Sample Matrix:	WATER		
Description:	08/05/2023 12:45 SW20_SW_20230804 TY2307728-004		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Sample #: **2023026354** Client PO #: **TY2307728**
 Date Sampled: **Aug 05, 2023** Date Received: **Aug 11, 2023**
 Sample Matrix: **WATER**
 Description: **08/05/2023 13:10 SW22A_SW_20230804 TY2307728-005**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Sample #: **2023026355** Client PO #: **TY2307728**
 Date Sampled: **Aug 06, 2023** Date Received: **Aug 11, 2023**
 Sample Matrix: **WATER**
 Description: **08/06/2023 09:20 SW23_SW_20230804 TY2307728-009**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Sample #: **2023026356** Client PO #: **TY2307728**
 Date Sampled: **Aug 06, 2023** Date Received: **Aug 11, 2023**
 Sample Matrix: **WATER**
 Description: **08/06/2023 09:45 SW24_SW_20230804 TY2307728-010**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 18.1 °C upon receipt.

SRC Group # 2023-10128

Aug 24, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/7/2023 1:11:00 PM COC Number: ALS-451455497						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle									Number of Containers	Comments
						N	N												
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl HG)											
SW22A_SW_20230804	5.35	7.71	19.73	08/05/2023 14:10	SW		X	x						12					
SW21A_SW_20230804	3.99	7.44	26.16	08/05/2023 16:00	SW	X								11					
SW27_SW_20230804	3.47	6.93	22.81	08/05/2023 16:35	SW	X								11					
SW26_SW_20230804	4.11	6.94	20.02	08/06/2023 08:25	SW	X								11					
SW23_SW_20230804	3.95	7.08	21.67	08/06/2023 10:20	SW	X								12					
1-TEEPLE_CULVERT_MM_20230804				08/08/2023	SW			x											

Signature Shipped by Received by	Data/Time 8/7/2023 1:11:00 PM	Shipping Details Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	ATTN	Special Instructions: Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/7/2023 1:11:00 PM COC Number: ALS-451455497						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle									Number of Containers	Comments
						N	N												
						NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl HG)											
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl HG)											
SW24_SW_20230804	4.78	7.3	22.57	08/06/2023 10:45	SW	X		x						12					
SW15_SW_20230804	5.79	7.2	24.45	08/06/2023 11:25	SW	X								11					
FB_SW_20230804				08/06/2023 12:00	SW	X								11					
SW17_SW_20230804	6.82	7.18	25.32	08/06/2023 12:05	SW	X								11					
SW16_SW_20230804	7.26	7.18	24.38	08/06/2023 14:05	SW	X								11					

Shipped by	Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
	Received by				
		8/7/2023 1:11:00 PM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/7/2023 1:11:00 PM COC Number: ALS-451455497						Containers Filtered Preservatives		SW Kit	Ra-226 Bottle								Number of Containers	Comments
						N	N											
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NG-SW-P-TB	RA226-MIMER-BE	MEHG-T-GCAF-VA (Methyl HG)										
SW03_SW_20230804	1.93	6.95	21.04	08/06/2023 15:30	SW	X		x							11			
SW29_SW_20230804	1.86	6.78	23.63	08/06/2023 16:05	SW	X									11			
TB_SW_20230804				08/06/2023 17:37	SW	X									11			
SW25_SW_20230804	4.32	6.95	19.01	08/06/2023 20:45	SW	X									11			
SW02_SW_20230804	5.06	7.25	16.14	08/07/2023 08:55	SW	X									11			

Shipped by	Signature	Data/Time	Shipping Details	ATTN	Special Instructions:
	Received by		Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		
		8/7/2023 1:11:00 PM			Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

Drinking Water (DW) Samples (client use)
Are samples taken from a Regulated DW System? Yes <input checked="" type="checkbox"/> No
Are samples for human consumption / use? Yes <input checked="" type="checkbox"/> No
Samples from a Regulated DW System require an Authorized DW COC form

Sample Receipt Details (ALS use only)							
Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated							
Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA							
Initial Cooler Temperatures °C				Final Cooler Temperatures °C			

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	8/7/2023 1:11:00 PM	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by				

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION				
Priority/Emergency Service Requested		YES	<input checked="" type="radio"/> NO	Priority/Emergency Service Requested		YES	<input type="radio"/> NO	
Time Sensitive Hold Time		YES	<input checked="" type="radio"/> NO	Confirmed all as accurate as per COC, Sample Remarks or PM				
Client:		New Gold		Client		Work Contact		
Client:		New Gold		Client		Quote		
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL				
Mode of Delivery:		Courier	Drop Off	Project		PO	Site/LSD	
Courier		Manitowish		Overall Description Entered		Yes	<input checked="" type="radio"/> NA	
Waybill Number		3302577507		Received date/time as per COC		<input checked="" type="radio"/>		
Temperature 14.0, 18.4, 9.6, 9.8, 10.8, 6.6, 10.6		Cooler Count		Recipients match CoC or Sample Remarks		<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooling Method		None	Ice	Billing Instruction added to remarks		<input checked="" type="radio"/> Yes	<input type="radio"/> NA	
Cooling Method		None	Ice	Sample Remarks/Specification Doc checked		<input checked="" type="radio"/>		
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST				
Matrix:		Water	Soil	Air	Biota	Other		
DW Schedule 24 Bottles Correct?		Yes		No				
DW Metals pH Check <2		Yes		No				
Regulation Circled, Works # present		Yes		No - Reject?				
# of Bottles:		Sample Count		19		Planned Event Submission		
Green/white		19 routine, 19 BOD				Yes		
Purple/white		19 nutrient, 19 TOC, 19 DOC				No		
Warm red/white		19 total metal, 19 diss metal, 19 rad:um						
Yellow/black		19 total Hg, 19 diss Hg						
Light blue/white								
Orange/black								
Others (detail)		19 cyanide						
6 Methyl Hg		2 x 19 orgg						
Comments on Samples and Bottles:								
Samples Requiring Preservation or Filtering:								
DOC, diss metal								
Layout Staff Initials		[Signature]		Date and Time of Layout		Aug 9 th 2023 12:49		
Login Staff Initials:		[Signature]						



CERTIFICATE OF ANALYSIS

Work Order	: TY2308936	Page	: 1 of 12
Amendment	: 1	Laboratory	: ALS Environmental - Thunder Bay
Client	: New Gold Inc. (Rainy River)	Account Manager	: Christine Paradis
Contact	: Garnet.Cornell@newgold.com Garnet Cornell	Address	: 1081 Barton Street Thunder Bay ON Canada P7B 5N3
Address	: 24 Marr Rd. Barwick ON Canada P0W 1A0	Telephone	: +1 807 623 6463
Telephone	: 807 234 8170	Date Samples Received	: 08-Sep-2023 12:14
Project	: Surface Water	Date Analysis Commenced	: 08-Sep-2023
PO	: 4700002620	Issue Date	: 02-Oct-2023 13:44
C-O-C number	: ----		
Sampler	: ----		
Site	: New Gold Inc. (Rainy River)		
Quote number	: New Gold Rainy River Project - Picka Project		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Cassandra Grzelewski	Team Leader - Inorganics	Administration, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Nik Perkio	Inorganics Analyst	Inorganics, Waterloo, Ontario
Nik Perkio	Inorganics Analyst	Metals, Waterloo, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Inorganics, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Metals, Thunder Bay, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
°C	degrees celsius
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Amendment (02/10/2023): This report has been amended and re-released to allow the reporting of additional analytical data. Un-ionized Ammonia and Field Data added.

Qualifiers

Qualifier	Description
< T	A measureable trace amount: Interpret with caution.
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

					SW25_SW_202 30904 SW	SW26_SW_202 30904 SW	SW27_SW_202 30904 SW	SW22A_SW_20 230904 SW	SW06_SW_202 30904 SW
Client sampling date / time					06-Sep-2023 09:00	06-Sep-2023 09:45	06-Sep-2023 10:30	06-Sep-2023 11:25	06-Sep-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-001	TY2308936-002	TY2308936-003	TY2308936-004	TY2308936-005
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	3.62	3.79	1.81	2.50	1.81
pH, field	----	EF001/TY	0.10	pH units	6.93	7.65	7.21	7.33	7.21
Temperature, field	----	EF001/TY	0.10	°C	15.4	15.4	15.7	17.6	15.7
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	4.8	<2.0	5.7	4.9	6.6
Colour, true	----	E329-L/TY	2.0	CU	26.3	27.7	45.2	69.1	45.1
Conductivity	----	E100/TY	1.0	µS/cm	796	813	491	364	491
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	335	406	248	187	256
pH	----	E108/TY	0.10	pH units	7.87	8.26	8.04	8.03	8.01
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	602	519	299	244	304
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	11.5	4.9	5.5	5.9	5.9
Turbidity	----	E121/TY	0.10	NTU	8.28	5.70	2.73	5.59	3.45
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	125	246	226	175	228
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0089 ^{*T}	0.0078 ^{*T}	0.0093 ^{*T}	0.0296 ^{*T}	0.0090 ^{*T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	155	68.3	25.0	14.8	24.7
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.042	0.056	0.069	0.063	0.042
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.439	0.524	0.917	1.44	0.910
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.039 ^{*T}	<0.040 ^{DLDS}	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.020 ^{DLDS}	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0014	0.0013	0.0243	0.0813	0.0230
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	41.6	107	9.29	2.56	9.08
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30904 SW	SW26_SW_202 30904 SW	SW27_SW_202 30904 SW	SW22A_SW_20 230904 SW	SW06_SW_202 30904 SW
Client sampling date / time					06-Sep-2023 09:00	06-Sep-2023 09:45	06-Sep-2023 10:30	06-Sep-2023 11:25	06-Sep-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-001	TY2308936-002	TY2308936-003	TY2308936-004	TY2308936-005
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	10.6	12.0	19.9	29.6	20.5
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	10.4	11.8	20.2	33.8	20.8
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.354	0.208	0.0266 ^{±T}	0.180	0.0294 ^{±T}
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00013 ^{±T}	0.00011 ^{±T}	<0.00010	0.00012 ^{±T}	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00091 ^{±T}	0.00190 ^{±T}	0.00204 ^{±T}	0.00365 ^{±T}	0.00205 ^{±T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0554	0.0494	0.0233	0.0152	0.0231
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.034 ^{±T}	0.041 ^{±T}	0.023 ^{±T}	0.023 ^{±T}	0.022 ^{±T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000138 ^{±T}	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	94.3	88.6	58.2	40.9	57.8
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000046	0.000028	<0.000010	0.000019	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00094 ^{±T}	0.00080 ^{±T}	<0.00050	0.00084 ^{±T}	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00028 ^{±T}	0.00022 ^{±T}	0.00037 ^{±T}	0.00034 ^{±T}	0.00035 ^{±T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00200 ^{±T}	0.00131 ^{±T}	<0.00050	0.00093 ^{±T}	<0.00050
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.570	0.318	0.441	0.605	0.428
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000199 ^{±T}	0.000113 ^{±T}	<0.000050	0.000118 ^{±T}	<0.000050
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0345 ^{±T}	0.0248 ^{±T}	0.0078 ^{±T}	0.0055 ^{±T}	0.0078 ^{±T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	19.2	37.9	22.6	18.5	23.5
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.154	0.0726	1.20	0.360	1.16
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.00115 ^{±T}	0.00140 ^{±T}	0.000214 ^{±T}	0.000439 ^{±T}	0.000210 ^{±T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00148 ^{±T}	0.00155 ^{±T}	0.00098 ^{±T}	0.00204 ^{±T}	0.00106 ^{±T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	0.106	0.198	0.102
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	7.78	6.04	3.30	2.38	3.31
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00465	0.00302	0.00239	0.00186	0.00231
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000137 ^{±T}	0.000132 ^{±T}	0.000140 ^{±T}	0.000222 ^{±T}	0.000103 ^{±T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	4.34	4.02	1.86	3.08	1.86



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30904 SW	SW26_SW_202 30904 SW	SW27_SW_202 30904 SW	SW22A_SW_20 230904 SW	SW06_SW_202 30904 SW
Client sampling date / time					06-Sep-2023 09:00	06-Sep-2023 09:45	06-Sep-2023 10:30	06-Sep-2023 11:25	06-Sep-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-001	TY2308936-002	TY2308936-003	TY2308936-004	TY2308936-005
					Result	Result	Result	Result	Result
Total Metals									
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	13.0	16.8	7.10	7.64	7.31
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.796	0.380	0.156	0.112	0.160
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	14.3	36.6	3.74	1.61	3.82
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0159	<0.0150 ^{DLM}	<0.00150 ^{DLM}	0.0110	0.00157
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.00135 ^{*T}	0.00234 ^{*T}	0.000311 ^{*T}	0.000495 ^{*T}	0.000296 ^{*T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00123	0.00106	<0.00050	0.00118	<0.00050
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0060 ^{*T}	<0.0030	<0.0030	<0.0030	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00043	0.00029	<0.00020	0.00035	<0.00020
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0026	0.0046	0.0030	0.0074	0.0032
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00012	<0.00010	<0.00010	0.00011	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00068	0.00166	0.00193	0.00329	0.00198
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0556	0.0458	0.0227	0.0125	0.0233
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.034	0.042	0.023	0.023	0.023
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	103	101	61.9	44.9	65.5
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00015	0.00015	0.00033	0.00023	0.00034
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00121	0.00104	<0.00020	0.00058	<0.00020
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.072	0.043	0.168	0.192	0.170



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 30904 SW	SW26_SW_202 30904 SW	SW27_SW_202 30904 SW	SW22A_SW_20 230904 SW	SW06_SW_202 30904 SW
Client sampling date / time					06-Sep-2023 09:00	06-Sep-2023 09:45	06-Sep-2023 10:30	06-Sep-2023 11:25	06-Sep-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-001	TY2308936-002	TY2308936-003	TY2308936-004	TY2308936-005
					Result	Result	Result	Result	Result
Dissolved Metals									
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0394	0.0316	0.0090	0.0065	0.0099
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	18.9	37.3	22.6	18.1	22.4
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.142	0.0628	1.28	0.245	1.26
Mercury, dissolved	7439-97-6	E509/WT	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.00113	0.00139	0.000210	0.000377	0.000204
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00099	0.00107	0.00087	0.00167	0.00090
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	0.103	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	7.52	6.09	3.41	2.43	3.41
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00402	0.00248	0.00229	0.00153	0.00227
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000125	0.000184	0.000163	0.000251	0.000171
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.38	3.41	1.72	2.56	1.76
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	12.6	16.2	7.12	7.38	7.28
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.818	0.394	0.156	0.112	0.162
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	14.1	35.8	3.44	1.33	3.39
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00031	0.00055	<0.00030	0.00091	<0.00030
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00127	0.00222	0.000286	0.000505	0.000296
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	0.00058	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0018	0.0010	0.0016	<0.0010	<0.0010
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field

Aggregate Organics



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW25_SW_202 30904 SW	SW26_SW_202 30904 SW	SW27_SW_202 30904 SW	SW22A_SW_20 230904 SW	SW06_SW_202 30904 SW
					Client sampling date / time	06-Sep-2023 09:00	06-Sep-2023 09:45	06-Sep-2023 10:30	06-Sep-2023 11:25	06-Sep-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-001	TY2308936-002	TY2308936-003	TY2308936-004	TY2308936-005	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	26	29	47	79	56	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	----	<0.005	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

SW02_SW_202
 30904
 SW

----	----	----	----
------	------	------	------

Client sampling date / time

06-Sep-2023
 12:05

----	----	----	----
------	------	------	------

Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-006	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	5.02	----	----	----	----
pH, field	----	EF001/TY	0.10	pH units	7.23	----	----	----	----
Temperature, field	----	EF001/TY	0.10	°C	15.7	----	----	----	----
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	----	----	----	----
Colour, true	----	E329-L/TY	2.0	CU	137	----	----	----	----
Conductivity	----	E100/TY	1.0	µS/cm	205	----	----	----	----
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	120	----	----	----	----
pH	----	E108/TY	0.10	pH units	8.03	----	----	----	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	168	----	----	----	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	<3.0	----	----	----	----
Turbidity	----	E121/TY	0.10	NTU	1.71	----	----	----	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	109	----	----	----	----
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0282 °T	----	----	----	----
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	----	----	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	0.44	----	----	----	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.031	----	----	----	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.09	----	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	----	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	----	----	----	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0028	----	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	----	----	----	----
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	----	----	----	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	----	----	----	----
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	----	----	----	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	30.8	----	----	----	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

SW02_SW_202
 30904
 SW

----	----	----	----
------	------	------	------

Client sampling date / time

06-Sep-2023
 12:05

----	----	----	----
------	------	------	------

Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-006	-----	-----	-----	-----
					Result	----	----	----	----

Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	31.1	----	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0503	----	----	----	----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00132 ^{±T}	----	----	----	----
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0166	----	----	----	----
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	----	----	----	----
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	----	----	----	----
Boron, total	7440-42-8	E420/TY	0.010	mg/L	<0.010	----	----	----	----
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	----	----	----	----
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	27.0	----	----	----	----
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	----	----	----	----
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	----	----	----	----
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00028 ^{±T}	----	----	----	----
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	----	----	----	----
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.593	----	----	----	----
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000067 ^{±T}	----	----	----	----
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0014 ^{±T}	----	----	----	----
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	10.8	----	----	----	----
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.162	----	----	----	----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	----	----	----	----
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000070 ^{±T}	----	----	----	----
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00075 ^{±T}	----	----	----	----
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	----	----	----	----
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	0.977	----	----	----	----
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00190	----	----	----	----
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000162 ^{±T}	----	----	----	----
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	9.14	----	----	----	----
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	----	----	----	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

SW02_SW_202
 30904
 SW

----	----	----	----
------	------	------	------

Client sampling date / time

06-Sep-2023
 12:05

----	----	----	----
------	------	------	------

Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-006	-----	-----	-----	-----
					Result	----	----	----	----

Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	0.937	----	----	----	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0511	----	----	----	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	<0.50	----	----	----	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	----	----	----	----
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	----	----	----	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00139	----	----	----	----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000070 sT	----	----	----	----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	<0.00050	----	----	----	----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	----	----	----	----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00024	----	----	----	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0165	----	----	----	----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00122	----	----	----	----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0166	----	----	----	----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	----	----	----	----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	----	----	----	----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	<0.010	----	----	----	----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	----	----	----	----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	30.7	----	----	----	----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	----	----	----	----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00025	----	----	----	----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00034	----	----	----	----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.431	----	----	----	----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	----	----	----	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW02_SW_202 30904 SW	----	----	----	----
					Client sampling date / time	06-Sep-2023 12:05	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-006	-----	-----	-----	-----	
					Result	----	----	----	----	
Dissolved Metals										
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0021	----	----	----	----	
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	10.6	----	----	----	----	
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.138	----	----	----	----	
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	----	----	----	----	
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000062	----	----	----	----	
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00067	----	----	----	----	
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	----	----	----	----	
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	0.969	----	----	----	----	
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00172	----	----	----	----	
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000148	----	----	----	----	
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	8.88	----	----	----	----	
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----	
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	0.940	----	----	----	----	
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0516	----	----	----	----	
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	<0.50	----	----	----	----	
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	----	----	----	----	
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----	
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00064	----	----	----	----	
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000068	----	----	----	----	
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	----	----	----	----	
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0061	----	----	----	----	
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	----	----	----	----	
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	----	----	----	----	
Dissolved metals filtration location	----	EP421/TY	-	-	Field	----	----	----	----	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	----	----	----	----	



Analytical Results

Sub-Matrix: **Surface Water**
 (Matrix: **Water**)

					Client sample ID	SW02_SW_202	----	----	----	----
						30904				
						SW				
					Client sampling date / time	06-Sep-2023	----	----	----	----
						12:05				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2308936-006	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	72	----	----	----	----	----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	----	----	----	----	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-11581

Sep 26, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Sep-12-2023

Client P.O.: TY2308936

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Snook, Vicky

-
- * Test methods and data are validated by the laboratory's Quality Assurance Program.
 - * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
 - * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
 - * Data marked as "by Client" has been provided by the client and may affect the validity of results.
 - * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
 - * Additional information is available upon request.
 - * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-11581

Sep 26, 2023

ALS, Thunder Bay Analytical

1081 Barton Street

Thunder Bay, ON P7B 5N3

Attn: Christine Paradis

Sample #:	2023030717	Client PO #:	TY2308936
Date Sampled:	Sep 06, 2023	Date Received:	Sep 12, 2023
Sample Matrix:	WATER		
Description:	09/06/2023 10:25 SW22A_SW_20230904 TY2308936-004		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 20.1 °C upon receipt.

SRC Group # 2023-11581

Sep 26, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Project Name: Rainy River
Location: Chapple
Project Number:
Project Manager:
PO Number:
Project:
Turn Around Time (days): 10 Business Days
Shipping Company:
Shipping Date: 8/8/2023 8:26:00 AM
COC Number: ALS-451203097

Containers	SW kit	Re-226 Bottle											
Filtered	Y	N											
Preservatives													

Environmental Division
 Thunder Bay
 Work Order Reference
TY2308936



Telephone : +1 807 623 6463

Sample Code	Field Temp (°C)	Field pH (pH Units)	Field Dissolved Oxygen (mg/L)	Date and Time	Matrix	NG-SW-P_TB	RA226-MMER-BE										Number of Containers	Comments
SW25_SW_20230904	15.37	6.93	3.62	2023-09-06 9:00	SW	x											11	
SW26_SW_20230904	15.36	7.65	3.79	2023-09-06 9:45	SW	x											11	
SW27_SW_20230904	15.67	7.21	1.81	2023-09-06 10:30	SW	x											11	
SW22A_SW_20230904	17.65	7.33	2.50	2023-09-06 11:25	SW	x	x										12	
SW06_SW_20230904	15.67	7.21	1.81	2023-09-06 12:00	SW	x											11	
SW02_SW_20230904	15.70	7.23	5.02	2023-09-06 12:05	SW	x											11	

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	2023-08-08 8:26	Method of Shipment: Courier		
Received by	LV 9/8/23 12:14	On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:	TY2308936	Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com

7 Coolers
 + Ice pack
 Manitoulin
 3302637166
 13.9
 11.1
 9.9
 11.9
 9.1
 10.4
 13.4

Intake and Login Verification Form

SAMPLE INTAKE			
Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO	
Time Sensitive Hold Time	YES	<input checked="" type="radio"/> NO	
Client:	New Cold		
SAMPLE RECEIPT INFORMATION			
Mode of Delivery:	<input checked="" type="radio"/> Courier	Drop Off	
Courier	Maritowin		
Waybill Number	3302637166		
Temperature	13.9, 11.1, 9.9, 11.9, 9.1, 10.4, 13.1	Cooler Count	7
Cooling Method	None	Ice	<input checked="" type="radio"/> Ice Packs
SAMPLE MATRIX/BOTTLE INFORMATION			
Matrix:	<input checked="" type="radio"/> Water	Soil	Air
	Biota	Other	
DW Schedule 24 Bottles Correct?	Yes	No	
DW Metals pH Check <2	Yes	No	
Regulation Circled, Works # present	<input checked="" type="radio"/> Yes	No - Reject?	
# of Bottles:	12	Sample Count	6
Green/white	6 Routine 6 BOD		
Purple/white	6 Nutrients 6 TOC 6 DOC		
Warm red/white	6 Tot Metals 6 Diss Metals		
Yellow/black	6 Tot Hg 6 Diss Hg		
Light blue/white			
Orange/black			
Others (detail)	6 Cyanide 6 X2 O49 1 Radium		
Comments on Samples and Bottles:			
Samples Requiring Preservation or Filtering:			
Layout Staff Initials	SSA		
Date and Time of Layout	Aug 08, 23 13:13 Sep 08, 23		

ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO	
Confirmed all as accurate as per COC, Sample Remarks or PM			
Client	<input checked="" type="checkbox"/>	Work Contact	<input checked="" type="checkbox"/>
		Quote	<input checked="" type="checkbox"/>
RECEIPT DETAIL			
Project	<input checked="" type="checkbox"/>	PO	<input checked="" type="checkbox"/>
		Site/LSD	<input checked="" type="checkbox"/>
Overall Description Entered	Yes	<input checked="" type="radio"/> NA	
Received date/time as per COC	<input checked="" type="checkbox"/>		
Recipients match CoC or Sample Remarks	<input checked="" type="radio"/> Yes	No	
Billing Instruction added to remarks	<input checked="" type="radio"/> Yes	NA	
Sample Remarks/Specification Doc checked			
Submission Issues communicated	Yes	<input checked="" type="radio"/> NA	
Sample Info communicated via Remarks	Yes	<input checked="" type="radio"/> NA	
VERIFICATION CHECKLIST			
Planned Event Submission	<input checked="" type="radio"/> Yes	No	
Sample Name entered as per CoC	<input checked="" type="checkbox"/>		
Sampling Date and time entered as per CoC	<input checked="" type="checkbox"/>		
Containers selected in layout order	<input checked="" type="checkbox"/>		
Sales items entered from QUOTE ONLY (and/or verified as correct)	<input checked="" type="checkbox"/>		
Field Data/EC298A removed if not on COC	Yes	<input checked="" type="radio"/> NA	
Bottle Allocation Verified	<input checked="" type="checkbox"/>		
Guideline added or auto-allocated	<input checked="" type="checkbox"/>		
Due dates updated	<input checked="" type="checkbox"/>		
VALIDATION			
Validation errors resolved?	<input checked="" type="radio"/> Yes	No	
Internal Sublet CoC created	<input checked="" type="radio"/> Yes	NA	
Login Comments:			
Login Staff Initials:			

CERTIFICATE OF ANALYSIS

Work Order	: TY2310241	Page	: 1 of 24
Amendment	: 1	Laboratory	: ALS Environmental - Thunder Bay
Client	: New Gold Inc. (Rainy River)	Account Manager	: Christine Paradis
Contact	: Garnet.Cornell@newgold.com Garnet Cornell	Address	: 1081 Barton Street Thunder Bay ON Canada P7B 5N3
Address	: 24 Marr Rd. Barwick ON Canada P0W 1A0	Telephone	: +1 807 623 6463
Telephone	: 807 234 8170	Date Samples Received	: 06-Oct-2023 08:45
Project	: Surface Water	Date Analysis Commenced	: 06-Oct-2023
PO	: 4700002620	Issue Date	: 16-Nov-2023 14:31
C-O-C number	: ----		
Sampler	: ----		
Site	: New Gold Inc. (Rainy River)		
Quote number	: New Gold Rainy River Project - Picka Project		
No. of samples received	: 17		
No. of samples analysed	: 17		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Daron Mooney	Laboratory Assistant	Administration, Thunder Bay, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Inorganics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Metals, Waterloo, Ontario
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Manuel Tavaratello	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Inorganics, Thunder Bay, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Metals, Thunder Bay, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
°C	degrees celsius
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Amendment (16/11/2023): This report has been amended and re-released to allow the reporting of additional analytical data. Field Data and un-ionized Ammonia added.

Qualifiers

Qualifier	Description
< T	A measureable trace amount: Interpret with caution.
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).



Page : 4 of 24
Work Order : TY2310241 Amendment 1
Client : New Gold Inc. (Rainy River)
Project : Surface Water

RRV *Reported result verified by repeat analysis.*



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

				SW03_SW_202 31003 SW	SW23_SW_202 31003 SW	SW24_SW_202 31003 SW	SW06_SW_202 31003 SW	FB_SW_202310 03 SW	
Client sampling date / time				03-Oct-2023 09:15	03-Oct-2023 11:00	03-Oct-2023 11:25	03-Oct-2023 12:00	03-Oct-2023 12:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-001 Result	TY2310241-002 Result	TY2310241-003 Result	TY2310241-004 Result	TY2310241-005 Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	0.34	0.29	0.48	0.34	----
pH, field	----	EF001/TY	0.10	pH units	7.41	7.50	7.46	7.41	----
Temperature, field	----	EF001/TY	0.10	°C	15.4	17.4	17.0	15.4	----
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	3.0	3.3	2.6	4.0	2.2
Colour, true	----	E329-L/TY	2.0	CU	96.3	134	138	99.5	<2.0
Conductivity	----	E100/TY	1.0	µS/cm	427	322	319	426	1.1
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	222	174	173	225	<0.50
pH	----	E108/TY	0.10	pH units	7.98	8.05	8.04	8.00	5.49
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	298	260	256	305	<10
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	<3.0	12.7	8.1	<3.0	<3.0
Turbidity	----	E121/TY	0.10	NTU	2.62	28.2	23.5	3.20	0.11
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	224	179	174	224	<2.0
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0153 ^{-T}	0.0588 ^{-T}	0.0263 ^{-T}	0.0137 ^{-T}	<0.0050
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	12.2	3.85	4.08	12.1	<0.10
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.044	0.058	0.060	0.046	<0.020
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.21	1.30	1.46	1.45	<0.050
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0519	0.0402	0.0431	0.0576	<0.0010
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	6.61	1.09	1.62	6.30	<0.30
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31003 SW	SW23_SW_202 31003 SW	SW24_SW_202 31003 SW	SW06_SW_202 31003 SW	FB_SW_202310 03 SW
Client sampling date / time					03-Oct-2023 09:15	03-Oct-2023 11:00	03-Oct-2023 11:25	03-Oct-2023 12:00	03-Oct-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-001	TY2310241-002	TY2310241-003	TY2310241-004	TY2310241-005
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	32.0	42.8	43.1	33.5	<0.50
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	32.9	39.4	39.4	34.2	<0.50
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0466	0.678	0.610	0.0442	<0.0030
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00020 ^{DLM}	<0.00020 ^{DLM}	0.00020	0.00013 ^{†T}	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00264 ^{†T}	0.00459 ^{†T}	0.00448 ^{†T}	0.00260 ^{†T}	<0.00010
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0284	0.0280	0.0277	0.0284	<0.00010
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000040 ^{DLM}	0.000044 ^{†T}	0.000042 ^{†T}	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000100 ^{DLM}	<0.000100 ^{DLM}	<0.000100 ^{DLM}	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.026 ^{†T}	0.023 ^{†T}	0.022 ^{†T}	0.018 ^{†T}	<0.010
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000100 ^{DLM}	0.0000147 ^{†T}	0.0000126 ^{†T}	<0.0000050	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	63.4	45.1	42.9	60.6	<0.050
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000020 ^{DLM}	0.000084	0.000074	<0.000010	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00100 ^{DLM}	0.00148 ^{†T}	0.00132 ^{†T}	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00048 ^{†T}	0.00089 ^{†T}	0.00084 ^{†T}	0.00047 ^{†T}	<0.00010
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00598 ^{†T}	0.00298 ^{†T}	0.00291 ^{†T}	0.00606 ^{†T}	<0.00050
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.346	1.40	1.28	0.351	<0.010
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	<0.000100 ^{DLM}	0.000688 ^{†T}	0.000640 ^{†T}	<0.000050	<0.000050
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0052 ^{†T}	0.0057 ^{†T}	0.0055 ^{†T}	0.0052 ^{†T}	<0.0010
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	18.1	17.3	16.7	17.4	<0.0050
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.349	0.722	0.657	0.375	<0.00010
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000273 ^{†T}	0.000706 ^{†T}	0.000718 ^{†T}	0.000272 ^{†T}	<0.000050
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00272 ^{†T}	0.00353 ^{†T}	0.00343 ^{†T}	0.00269 ^{†T}	<0.00050
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.118	0.128	0.136	0.115	<0.050
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	3.19	2.58	2.66	3.25	<0.050
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00364	0.00325	0.00300	0.00366	<0.00020
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000172 ^{†T}	0.000270 ^{†T}	0.000292 ^{†T}	0.000232 ^{†T}	<0.000050
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.65	7.26	6.95	5.57	<0.10



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31003 SW	SW23_SW_202 31003 SW	SW24_SW_202 31003 SW	SW06_SW_202 31003 SW	FB_SW_202310 03 SW
Client sampling date / time					03-Oct-2023 09:15	03-Oct-2023 11:00	03-Oct-2023 11:25	03-Oct-2023 12:00	03-Oct-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-001	TY2310241-002	TY2310241-003	TY2310241-004	TY2310241-005
					Result	Result	Result	Result	Result
Total Metals									
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000020 ^{DLM}	<0.000020 ^{DLM}	<0.000020 ^{DLM}	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	5.51	4.03	4.01	5.40	0.074
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.129	0.116	0.111	0.124	<0.00020
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	3.02	1.01	1.09	2.84	<0.50
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00040 ^{DLM}	<0.00040 ^{DLM}	<0.00040 ^{DLM}	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000020 ^{DLM}	<0.000020 ^{DLM}	<0.000020 ^{DLM}	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00020 ^{DLM}	<0.00020 ^{DLM}	<0.00020 ^{DLM}	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00020 ^{DLM}	<0.00020 ^{DLM}	<0.00020 ^{DLM}	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00300 ^{DLM}	0.0223	0.0211	<0.00252 ^{DLM}	<0.00030
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00020 ^{DLM}	<0.00020 ^{DLM}	<0.00020 ^{DLM}	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000486 ^{†T}	0.000701 ^{†T}	0.000715 ^{†T}	0.000482 ^{†T}	<0.000010
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	<0.00100 ^{DLM}	0.00292	0.00263	0.00062	<0.00050
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0060 ^{DLM}	<0.0060 ^{DLM}	<0.0060 ^{DLM}	<0.0030	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00040 ^{DLM}	0.00100	0.00089	0.00034	<0.00020
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0096	0.0503	0.0550	0.0119	<0.0010
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00012	0.00018	0.00017	0.00013	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00254	0.00381	0.00366	0.00251	<0.00010
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0256	0.0205	0.0204	0.0263	<0.00010
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.017	0.018	0.018	0.017	<0.010
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	0.0000082	0.0000051	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	58.7	41.8	41.5	59.6	<0.050
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00043	0.00056	0.00052	0.00044	<0.00010
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00349	0.00412	0.00242	0.00820	<0.00020
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.274	0.379	0.369	0.264	<0.010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31003 SW	SW23_SW_202 31003 SW	SW24_SW_202 31003 SW	SW06_SW_202 31003 SW	FB_SW_202310 03 SW
Client sampling date / time					03-Oct-2023 09:15	03-Oct-2023 11:00	03-Oct-2023 11:25	03-Oct-2023 12:00	03-Oct-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-001 Result	TY2310241-002 Result	TY2310241-003 Result	TY2310241-004 Result	TY2310241-005 Result
Dissolved Metals									
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	0.000197	0.000188	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0052	0.0049	0.0054	0.0050	<0.0010
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	18.2	17.0	16.9	18.6	<0.0050
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.365	0.696	0.655	0.354	<0.00010
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000255	0.000674	0.000640	0.000269	<0.000050
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00248	0.00262	0.00264	0.00260	<0.00050
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.103	0.077	0.066	0.105	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	3.12	2.32	2.44	3.12	<0.050
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00325	0.00148	0.00166	0.00341	<0.00020
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000323	0.000327	0.000373	0.000312	<0.000050
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	5.88	6.25	6.15	5.86	<0.050
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	5.50	3.91	4.01	5.48	0.151 ^{RRV}
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.117	0.101	0.100	0.117	<0.00020
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	2.69	1.12	1.17	2.71	<0.50
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00094	0.00860	0.00900	0.00118	<0.00030
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000460	0.000653	0.000696	0.000471	<0.000010
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	0.00122	0.00120	<0.00050	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0015	0.0026	0.0015	0.0047	<0.0010
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	0.00081	0.00078	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field

Aggregate Organics



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW03_SW_202 31003 SW	SW23_SW_202 31003 SW	SW24_SW_202 31003 SW	SW06_SW_202 31003 SW	FB_SW_202310 03 SW
					Client sampling date / time	03-Oct-2023 09:15	03-Oct-2023 11:00	03-Oct-2023 11:25	03-Oct-2023 12:00	03-Oct-2023 12:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-001	TY2310241-002	TY2310241-003	TY2310241-004	TY2310241-005	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	83	96	103	86	<10	<10
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.4	1.1	<1.0	<1.0	<1.0	1.6
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	0.02	0.08	----	----	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 31003 SW	SW17_SW_202 31003 SW	SW16_SW_202 31003 SW	SW22A_SW_20 231003 SW	SW26_SW_202 31003 SW
Client sampling date / time					03-Oct-2023 12:15	03-Oct-2023 12:45	03-Oct-2023 14:15	04-Oct-2023 10:30	04-Oct-2023 11:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-006	TY2310241-007	TY2310241-008	TY2310241-009	TY2310241-010
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	7.43	8.12	8.96	1.29	1.14
pH, field	----	EF001/TY	0.10	pH units	8.12	8.25	8.21	7.14	7.46
Temperature, field	----	EF001/TY	0.10	°C	20.0	19.5	20.1	15.8	15.9
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	2.6	2.5	<2.0	<2.0
Colour, true	----	E329-L/TY	2.0	CU	119	29.4	27.6	41.5	26.8
Conductivity	----	E100/TY	1.0	µS/cm	209	98.7	92.5	479	786
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	105	40.0	35.1	238	385
pH	----	E108/TY	0.10	pH units	8.10	7.79	7.75	8.14	8.22
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	168	60	64	292	488
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	5.3	45.1	22.5	3.9	4.3
Turbidity	----	E121/TY	0.10	NTU	16.8	32.8	15.2	6.27	5.63
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	104	39.3	35.0	210	284
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0166 ^{*T}	0.0230 ^{*T}	<0.0050	0.0098 ^{*T}	0.0064 ^{*T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	0.0015	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	2.50	3.16	3.47	24.6	57.0
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.034	0.026	0.024	0.070	0.046
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.792	0.358	0.438	1.13	0.492
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.040 ^{DLDS}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	0.010	<0.020 ^{DLDS}
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0216	0.0010	<0.0010	0.0481	0.0018
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	5.58	5.45	6.12	17.2	76.3
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	29.3	13.5	12.2	21.2	13.9



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 31003 SW	SW17_SW_202 31003 SW	SW16_SW_202 31003 SW	SW22A_SW_20 231003 SW	SW26_SW_202 31003 SW
Client sampling date / time					03-Oct-2023 12:15	03-Oct-2023 12:45	03-Oct-2023 14:15	04-Oct-2023 10:30	04-Oct-2023 11:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-006	TY2310241-007	TY2310241-008	TY2310241-009	TY2310241-010
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	26.7	12.6	11.1	23.1	13.3
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.346	1.04	0.369	0.0878	0.0971
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00017 ^{*T}	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00215 ^{*T}	0.00089 ^{*T}	0.00064 ^{*T}	0.00236 ^{*T}	0.00152 ^{*T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0210	0.0202	0.0135	0.0202	0.0469
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000027 ^{*T}	0.000047 ^{*T}	0.000021 ^{*T}	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.017 ^{*T}	<0.010	<0.010	0.024 ^{*T}	0.037 ^{*T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000106 ^{*T}	0.0000254 ^{*T}	0.0000159 ^{*T}	<0.0000050	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	26.7	11.7	9.90	55.2	97.8
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000042	0.000199	0.000082	0.000013	0.000017
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00080 ^{*T}	0.00252 ^{*T}	0.00094 ^{*T}	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00030 ^{*T}	0.00086 ^{*T}	0.00032 ^{*T}	0.00028 ^{*T}	0.00022 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00274 ^{*T}	0.00260 ^{*T}	0.00165 ^{*T}	0.00838 ^{*T}	0.00095 ^{*T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.824	1.52	0.530	0.336	0.325
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000590 ^{*T}	0.000887 ^{*T}	0.000376 ^{*T}	0.000190 ^{*T}	0.000058 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0045 ^{*T}	0.0022 ^{*T}	0.0014 ^{*T}	0.0084 ^{*T}	0.0192 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	9.97	4.32	3.77	24.8	36.8
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0710	0.0598	0.0331	0.328	0.179
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000607 ^{*T}	0.000269 ^{*T}	0.000243 ^{*T}	0.000558 ^{*T}	0.000936 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00220 ^{*T}	0.00270 ^{*T}	0.00133 ^{*T}	0.00170 ^{*T}	0.00117 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.090	0.062	<0.050	0.135	<0.050
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.90	1.25	1.08	3.54	6.72
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00226	0.00530	0.00341	0.00243	0.00327
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000211 ^{*T}	0.000114 ^{*T}	0.000081 ^{*T}	0.000169 ^{*T}	0.000121 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	3.91	4.00	2.46	4.01	4.31
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 31003 SW	SW17_SW_202 31003 SW	SW16_SW_202 31003 SW	SW22A_SW_20 231003 SW	SW26_SW_202 31003 SW
Client sampling date / time					03-Oct-2023 12:15	03-Oct-2023 12:45	03-Oct-2023 14:15	04-Oct-2023 10:30	04-Oct-2023 11:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-006	TY2310241-007	TY2310241-008	TY2310241-009	TY2310241-010
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	4.42	4.14	4.44	8.84	13.8
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0700	0.0323	0.0282	0.148	0.364
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	2.32	1.85	2.20	6.01	25.3
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	<0.00010	0.000023 ^{^T}	<0.00010	<0.00010	<0.00010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	0.00012	0.00014	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0111	0.0350	0.0124	0.00336	0.00370
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000429 ^{^T}	0.000169 ^{^T}	0.000141 ^{^T}	0.00110 ^{^T}	0.00175 ^{^T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00233	0.00348	0.00147	0.00085	0.00078
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	0.0069 ^{^T}	0.0031 ^{^T}	0.0070 ^{^T}	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00093	0.00062	0.00036	<0.00020	<0.00020
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0636	0.0199	0.0196	0.0192	0.0032
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00014	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00182	0.00054	0.00046	0.00212	0.00130
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0154	0.00990	0.00953	0.0200	0.0441
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.013	<0.010	<0.010	0.021	0.033
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	0.0000082	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	25.4	10.0	8.80	55.4	93.8
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00010	<0.00010	<0.00010	0.00023	0.00015
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00287	0.00134	0.00138	0.00076	0.00081
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.316	0.048	0.037	0.075	0.063
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000242	<0.000050	<0.000050	<0.000050	<0.000050



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW15_SW_202 31003 SW	SW17_SW_202 31003 SW	SW16_SW_202 31003 SW	SW22A_SW_20 231003 SW	SW26_SW_202 31003 SW
Client sampling date / time					03-Oct-2023 12:15	03-Oct-2023 12:45	03-Oct-2023 14:15	04-Oct-2023 10:30	04-Oct-2023 11:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-006	TY2310241-007	TY2310241-008	TY2310241-009	TY2310241-010
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0038	0.0012	0.0010	0.0077	0.0185
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	10.0	3.66	3.18	24.3	36.7
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0178	0.00900	0.00630	0.218	0.168
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000517	0.000211	0.000205	0.000505	0.000933
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00171	0.00063	0.00058	0.00158	0.00101
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.051	<0.050	<0.050	0.075	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.74	0.937	0.915	3.16	6.44
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00155	0.00205	0.00210	0.00205	0.00267
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000223	0.000140	0.000119	0.000216	0.000155
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.56	1.67	1.76	4.19	4.44
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	4.48	4.27	4.51	8.87	13.9
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0631	0.0266	0.0257	0.136	0.346
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	2.36	1.88	2.16	6.26	26.4
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	0.00015	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.0117	0.00175	0.00112	0.00060	0.00038
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000396	0.000110	0.000105	0.00111	0.00175
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00137	0.00056	<0.00050	0.00052	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	<0.0010	0.0019	0.0014	0.0020
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00100	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	2.0	<2.0



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW15_SW_202 31003 SW	SW17_SW_202 31003 SW	SW16_SW_202 31003 SW	SW22A_SW_20 231003 SW	SW26_SW_202 31003 SW
					Client sampling date / time	03-Oct-2023 12:15	03-Oct-2023 12:45	03-Oct-2023 14:15	04-Oct-2023 10:30	04-Oct-2023 11:10
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-006	TY2310241-007	TY2310241-008	TY2310241-009	TY2310241-010	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	64	24	28	56	29	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	1.0	<1.0	<1.0	<1.0	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/21	0.005	Bq/L	----	----	----	0.06	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW27_SW_202 31003 SW	TB_SW_20231 003 SW	SW10_SW_202 31003 SW	SW02_SW_202 31003 SW	SW20_SW_202 31003 SW
Client sampling date / time					04-Oct-2023 11:45	04-Oct-2023 12:00	04-Oct-2023 14:05	04-Oct-2023 15:00	04-Oct-2023 13:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-011	TY2310241-012	TY2310241-013	TY2310241-014	TY2310241-015
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	1.30	----	2.87	4.65	2.97
pH, field	----	EF001/TY	0.10	pH units	7.02	----	7.36	7.31	7.31
Temperature, field	----	EF001/TY	0.10	°C	15.8	----	14.8	15.7	16.2
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	2.8	2.3	<2.0	3.8	<2.0
Colour, true	----	E329-L/TY	2.0	CU	43.0	<2.0	64.8	108	59.3
Conductivity	----	E100/TY	1.0	µS/cm	505	<1.0	381	209	378
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	247	<0.50	190	112	179
pH	----	E108/TY	0.10	pH units	7.97	5.47	8.11	7.86	8.07
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	314	<10	244	181	239
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	5.9	<3.0	<3.0	<3.0	5.3
Turbidity	----	E121/TY	0.10	NTU	3.23	<0.10	4.25	2.29	4.73
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	216	<2.0	198	111	185
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0078 ^{-T}	<0.0050	0.0098 ^{-T}	0.0148 ^{-T}	0.0266 ^{-T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	28.3	<0.10	14.6	1.40	22.4
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.063	<0.020	0.046	<0.020	0.053
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.878	<0.050	0.928	0.946	1.10
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0487	<0.0010	0.0180	<0.0010	0.0131
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	19.9	<0.30	3.14	0.44	<0.30
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	18.8	<0.50	24.6	28.7	26.6



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW27_SW_202 31003 SW	TB_SW_20231 003 SW	SW10_SW_202 31003 SW	SW02_SW_202 31003 SW	SW20_SW_202 31003 SW
Client sampling date / time					04-Oct-2023 11:45	04-Oct-2023 12:00	04-Oct-2023 14:05	04-Oct-2023 15:00	04-Oct-2023 13:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-011	TY2310241-012	TY2310241-013	TY2310241-014	TY2310241-015
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	19.8	<0.50	24.7	29.2	27.4
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0220 ^{*T}	<0.0030	0.0749	0.0306	0.0936
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00221 ^{*T}	<0.00010	0.00167 ^{*T}	0.00118 ^{*T}	0.00151 ^{*T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0382	<0.00010	0.0218	0.0164	0.0188
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.025 ^{*T}	<0.010	0.028 ^{*T}	<0.010	0.018 ^{*T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	<0.0000050	0.0000064 ^{*T}	0.0000053 ^{*T}	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	61.6	<0.050	44.5	27.7	43.7
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	<0.000010	0.000011	<0.000010	0.000014
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00056 ^{*T}
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00041 ^{*T}	<0.00010	0.00023 ^{*T}	0.00025 ^{*T}	0.00038 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00070 ^{*T}	<0.00050	0.00051 ^{*T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.336	<0.010	0.341	0.374	0.512
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	<0.000050	<0.000050	0.000070 ^{*T}	<0.000050	0.000082 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0081 ^{*T}	<0.0010	0.0088 ^{*T}	0.0020 ^{*T}	0.0058 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	22.9	<0.0050	19.1	11.4	18.0
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	1.33	<0.00010	0.120	0.139	0.240
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000365 ^{*T}	<0.000050	0.000454 ^{*T}	0.000092 ^{*T}	0.000116 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00115 ^{*T}	<0.00050	0.00177 ^{*T}	0.00063 ^{*T}	0.00150 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.125	<0.050	0.055	<0.050	0.065
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	4.96	<0.050	2.29	1.92	1.47
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00290	<0.00020	0.00213	0.00343	0.00222
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000118 ^{*T}	<0.000050	0.000149 ^{*T}	0.000145 ^{*T}	0.000153 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.10	<0.10	3.11	9.58	2.62
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW27_SW_202 31003 SW	TB_SW_20231 003 SW	SW10_SW_202 31003 SW	SW02_SW_202 31003 SW	SW20_SW_202 31003 SW
Client sampling date / time					04-Oct-2023 11:45	04-Oct-2023 12:00	04-Oct-2023 14:05	04-Oct-2023 15:00	04-Oct-2023 13:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-011	TY2310241-012	TY2310241-013	TY2310241-014	TY2310241-015
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	8.92	<0.050	8.73	1.07	11.9
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.174	<0.00020	0.155	0.0538	0.110
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	7.09	<0.50	1.59	<0.50	0.59
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00073	<0.00030	0.00263	<0.00150 ^{DLM}	0.00298
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000668 ^{-T}	<0.000010	0.000578 ^{-T}	0.000071 ^{-T}	0.000320 ^{-T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	<0.00050	<0.00050	0.00086	<0.00050	0.00072
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	<0.00020	0.00028	<0.00020	0.00026
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0075	<0.0010	0.0080	0.0134	0.0049
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00204	<0.00010	0.00156	0.00110	0.00134
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0330	<0.00010	0.0204	0.0156	0.0166
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.023	<0.010	0.025	<0.010	0.014
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	60.1	<0.050	44.4	26.8	42.2
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00039	<0.00010	0.00019	0.00022	0.00029
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00026	<0.00020	0.00065	0.00026	0.00032
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.097	<0.010	0.178	0.285	0.213
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW27_SW_202 31003 SW	TB_SW_20231 003 SW	SW10_SW_202 31003 SW	SW02_SW_202 31003 SW	SW20_SW_202 31003 SW
Client sampling date / time					04-Oct-2023 11:45	04-Oct-2023 12:00	04-Oct-2023 14:05	04-Oct-2023 15:00	04-Oct-2023 13:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-011	TY2310241-012	TY2310241-013	TY2310241-014	TY2310241-015
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0077	<0.0010	0.0088	0.0024	0.0059
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	23.5	<0.0050	19.3	11.0	17.9
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	1.28	<0.00010	0.0956	0.130	0.212
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000310	<0.000050	0.000411	0.000078	0.000101
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00098	<0.00050	0.00173	0.00060	0.00126
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	0.094	<0.050	<0.050	<0.050	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	4.94	<0.050	2.31	1.89	1.44
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00284	<0.00020	0.00196	0.00321	0.00179
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000141	<0.000050	0.000163	0.000115	0.000186
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	5.58	<0.050	3.19	10.3	2.62
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	9.13	<0.050	8.69	1.05	12.1
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.165	<0.00020	0.146	0.0502	0.0994
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	7.23	<0.50	1.52	<0.50	0.53
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	<0.00030	0.00084 ^{DLM}	0.00037	0.00045
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000647	<0.000010	0.000587	0.000067	0.000306
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	0.00057	<0.00050	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	<0.0010	0.0010	0.0018	<0.0010
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	Field	Field	Field
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	Field	Field	Field
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	2.4	<2.0	<2.0	<2.0	<2.0



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW27_SW_202 31003 SW	TB_SW_20231 003 SW	SW10_SW_202 31003 SW	SW02_SW_202 31003 SW	SW20_SW_202 31003 SW
					Client sampling date / time	04-Oct-2023 11:45	04-Oct-2023 12:00	04-Oct-2023 14:05	04-Oct-2023 15:00	04-Oct-2023 13:45
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-011	TY2310241-012	TY2310241-013	TY2310241-014	TY2310241-015	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	51	<10	62	66	58	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/21	0.005	Bq/L	----	----	----	----	0.09	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 31003 SW	SW28A_SW_20 231003 SW	----	----	----
					04-Oct-2023 15:20	04-Oct-2023 15:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-016	TY2310241-017	-----	-----	-----
					Result	Result	----	----	----
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	6.14	4.65	----	----	----
pH, field	----	EF001/TY	0.10	pH units	7.33	7.31	----	----	----
Temperature, field	----	EF001/TY	0.10	°C	15.6	15.7	----	----	----
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	2.5	3.1	----	----	----
Colour, true	----	E329-L/TY	2.0	CU	31.1	68.7	----	----	----
Conductivity	----	E100/TY	1.0	µS/cm	655	543	----	----	----
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	309	275	----	----	----
pH	----	E108/TY	0.10	pH units	8.07	8.04	----	----	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	408	317	----	----	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	13.3	14.1	----	----	----
Turbidity	----	E121/TY	0.10	NTU	11.1	6.89	----	----	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	250	276	----	----	----
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0126 ^{^T}	0.0207 ^{^T}	----	----	----
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	----	----	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	65.1	20.6	----	----	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.058	<0.020	----	----	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.619	0.810	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.040 ^{DLDS}	<0.020	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.020 ^{DLDS}	<0.010	----	----	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0018	0.0014	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	23.8	1.41	----	----	----
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	----	----	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	----	----	----
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	----	----	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	16.2	23.8	----	----	----



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW25_SW_202 31003 SW	SW28A_SW_20 231003 SW	----	----	----
					Client sampling date / time	04-Oct-2023 15:20	04-Oct-2023 15:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-016	TY2310241-017	-----	-----	-----	
					Result	Result	----	----	----	
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	15.3	25.3	----	----	----	
Total Metals										
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.195	0.0276 ^{±T}	----	----	----	
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00012 ^{±T}	<0.00010	----	----	----	
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00131 ^{±T}	0.00292 ^{±T}	----	----	----	
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0478	0.0521	----	----	----	
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	----	----	----	
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	----	----	----	
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.022 ^{±T}	0.026 ^{±T}	----	----	----	
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000064 ^{±T}	0.0000127 ^{±T}	----	----	----	
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	83.8	64.2	----	----	----	
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000033	<0.000010	----	----	----	
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00051 ^{±T}	<0.00050	----	----	----	
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00055 ^{±T}	0.00169 ^{±T}	----	----	----	
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00105 ^{±T}	0.00053 ^{±T}	----	----	----	
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.687	1.07	----	----	----	
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000136 ^{±T}	<0.000050	----	----	----	
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0138 ^{±T}	0.0092 ^{±T}	----	----	----	
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	25.8	27.1	----	----	----	
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.948	2.07	----	----	----	
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	----	----	----	
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.00128 ^{±T}	0.000863 ^{±T}	----	----	----	
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00170 ^{±T}	0.00206 ^{±T}	----	----	----	
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	0.053	<0.050	----	----	----	
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	7.15	2.92	----	----	----	
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00372	0.00372	----	----	----	
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000180 ^{±T}	0.000190 ^{±T}	----	----	----	
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	3.84	6.72	----	----	----	
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW25_SW_202 31003 SW	SW28A_SW_20 231003 SW	----	----	----
					04-Oct-2023 15:20	04-Oct-2023 15:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-016	TY2310241-017	-----	-----	-----
					Result	Result	----	----	----
Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	8.64	3.81	----	----	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.320	0.171	----	----	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	8.46	0.88	----	----	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	----	----	----
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00678	0.00097	----	----	----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.00244 sT	0.00160 sT	----	----	----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00102	0.00057	----	----	----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0062 sT	0.0033 sT	----	----	----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00028	<0.00020	----	----	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0044	0.0038	----	----	----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00013	<0.00010	----	----	----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00103	0.00266	----	----	----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0428	0.0456	----	----	----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	----	----	----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.023	0.023	----	----	----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	0.0000062	----	----	----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	80.2	63.6	----	----	----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	----	----	----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00041	0.00155	----	----	----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00070	0.00050	----	----	----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.115	0.707	----	----	----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	----	----	----



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW25_SW_202 31003 SW	SW28A_SW_20 231003 SW	----	----	----
					Client sampling date / time	04-Oct-2023 15:20	04-Oct-2023 15:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-016	TY2310241-017	-----	-----	-----	
					Result	Result	----	----	----	
Dissolved Metals										
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0135	0.0095	----	----	----	
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	26.4	28.2	----	----	----	
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.889	1.98	----	----	----	
Mercury, dissolved	7439-97-6	E509/WT	0.000050	mg/L	<0.000050	<0.000050	----	----	----	
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.00128	0.000823	----	----	----	
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00152	0.00202	----	----	----	
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	----	----	----	
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	6.97	2.78	----	----	----	
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00313	0.00345	----	----	----	
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000204	0.000182	----	----	----	
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.41	7.18	----	----	----	
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	8.76	3.79	----	----	----	
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.305	0.164	----	----	----	
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	8.74	0.72	----	----	----	
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	----	----	----	
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00052	<0.00030	----	----	----	
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00247	0.00162	----	----	----	
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	----	----	----	
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0035	0.0025	----	----	----	
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	----	----	----	
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Field	----	----	----	
Dissolved metals filtration location	----	EP421/TY	-	-	Field	Field	----	----	----	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	8.4	----	----	----	



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW25_SW_202 31003 SW	SW28A_SW_20 231003 SW	----	----	----
					Client sampling date / time	04-Oct-2023 15:20	04-Oct-2023 15:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2310241-016	TY2310241-017	-----	-----	-----	
					Result	Result	----	----	----	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	32	62	----	----	----	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	1.2	----	----	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-12996

Oct 26, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Oct-11-2023

Client P.O.: TY2310241

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Snook, Vicky

- * Test methods and data are validated by the laboratory's Quality Assurance Program.
- * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
- * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
- * Data marked as "by Client" has been provided by the client and may affect the validity of results.
- * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
- * Additional information is available upon request.
- * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-12996

Oct 26, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023036697	Client PO #:	TY2310241
Date Sampled:	Oct 03, 2023	Date Received:	Oct 11, 2023
Sample Matrix:	WATER		
Description:	10/03/2023 10:00 SW23_SW_20231003 TY2310241-002		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.02	0.005

The temperature of the cooler was 16.1 °C upon receipt.

SRC Group # 2023-12996

Oct 26, 2023

ALS, Thunder Bay Analytical

Sample #:	2023036698	Client PO #:	TY2310241
Date Sampled:	Oct 03, 2023	Date Received:	Oct 11, 2023
Sample Matrix:	WATER		
Description:	10/03/2023 10:25 SW24_SW_20231003 TY2310241-003		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.008	0.005

The temperature of the cooler was 16.1 °C upon receipt.

SRC Group # 2023-12996

Oct 26, 2023

ALS, Thunder Bay Analytical

Sample #: **2023036699** Client PO #: **TY2310241**
 Date Sampled: **Oct 04, 2023** Date Received: **Oct 11, 2023**
 Sample Matrix: **WATER**
 Description: **10/04/2023 09:30 SW22A_SW_20231003 TY2310241-009**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.006	0.005

The temperature of the cooler was 16.1 °C upon receipt.

SRC Group # 2023-12996

Oct 26, 2023

ALS, Thunder Bay Analytical

Sample #:	2023036700	Client PO #:	TY2310241
Date Sampled:	Oct 04, 2023	Date Received:	Oct 11, 2023
Sample Matrix:	WATER		
Description:	10/04/2023 12:45 SW20_SW_20231003 TY2310241-015		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	0.009	0.005

The temperature of the cooler was 16.1 °C upon receipt.

SRC Group # 2023-12996


Oct 26, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION					
Priority/Emergency Service Requested		YES	NO	Priority/Emergency Service Requested		YES	NO		
Time Sensitive Hold Time		YES	NO	Confirmed all as accurate as per COC, Sample Remarks or PM					
Client:	New Goid			Client	<input checked="" type="checkbox"/> Work Contact	Quote	<input checked="" type="checkbox"/>		
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL					
Mode of Delivery:		<input checked="" type="checkbox"/> Courier	<input checked="" type="checkbox"/> Drop Off	Project		<input checked="" type="checkbox"/> PO	<input checked="" type="checkbox"/> Site/LSD		
Courier		Manitowish		Overall Description Entered		Yes	NA		
Waybill Number		3545		Received date/time as per COC					
Temperature		6.8 6.3 5.2 7.6 68 54	Cooler Count	Recipients match CoC or Sample Remarks		Yes	No		
Cooling Method		None	Ice	Billing Instruction added to remarks		Yes	NA		
		Ice Packs		Sample Remarks/Specification Doc checked					
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST					
Matrix:	Water	Soil	Air	Biota	Other	Submission Issues communicated			
DW Schedule 24 Bottles Correct?				Yes	No	Yes		NA	
DW Metals pH Check <2				Yes	No	Sample Info communicated via Remarks		Yes	NA
Regulation Circled, Works # present		Yes	No - Reject?	Planned Event Submission				<input checked="" type="checkbox"/> Yes	No
# of Bottles:	11	Sample Count	17	Sample Name entered as per CoC				<input checked="" type="checkbox"/>	
Green/white	17 WQ 17 BOD			Sampling Date and time entered as per CoC				<input checked="" type="checkbox"/>	
Purple/white	35 Prnts 17 BOD			Containers selected in layout order				<input checked="" type="checkbox"/>	
Warm red/white	17 Tmet 17 Dmet 4 Rev226			Sales items entered from QUOTE ONLY (and/or verified as correct)				<input checked="" type="checkbox"/>	
Yellow/black	17 THg 17 DHg 350G/B			Field Data/EC298A removed if not on COC				Yes	NA
Light blue/white				Bottle Allocation Verified				<input checked="" type="checkbox"/>	
Orange/black				Guideline added or auto-allocated				<input checked="" type="checkbox"/>	
Others (detail)		17 cyanide		Due dates updated				<input checked="" type="checkbox"/>	
Comments on Samples and Bottles:				VALIDATION					
				Validation errors resolved?		<input checked="" type="checkbox"/> Yes	No		
				Internal Sublet CoC created		<input checked="" type="checkbox"/> Yes	NA		
Samples Requiring Preservation or Filtering:				Login Comments:					
Layout Staff Initials				Login Staff Initials:					
Date and Time of Layout		MM 6/23 1044							

CERTIFICATE OF ANALYSIS

Work Order	: TY2311869	Page	: 1 of 12
Client	: New Gold Inc. (Rainy River)	Laboratory	: ALS Environmental - Thunder Bay
Contact	: Garnet.Cornell@newgold.com Garnet Cornell	Account Manager	: Christine Paradis
Address	: 24 Marr Rd. Barwick ON Canada P0W 1A0	Address	: 1081 Barton Street Thunder Bay ON Canada P7B 5N3
Telephone	: 807 234 8170	Telephone	: +1 807 623 6463
Project	: Surface Water	Date Samples Received	: 14-Nov-2023 09:05
PO	: 4700002620	Date Analysis Commenced	: 14-Nov-2023
C-O-C number	: ----	Issue Date	: 01-Dec-2023 13:04
Sampler	: ----		
Site	: New Gold Inc. (Rainy River)		
Quote number	: New Gold Rainy River Project - Picka Project		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Administration, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Jon Fisher	Production Manager, Environmental	Inorganics, Waterloo, Ontario
Jon Fisher	Production Manager, Environmental	Metals, Waterloo, Ontario
Julie Ruoho	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Kinny Wu	Lab Analyst	Metals, Burnaby, British Columbia
Nik Perkio	Inorganics Analyst	Inorganics, Waterloo, Ontario
Nik Perkio	Inorganics Analyst	Metals, Waterloo, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rhiannon Scheffee	Laboratory Assistant	Metals, Thunder Bay, Ontario
Taelur Kachur	Laboratory Analyst	Inorganics, Thunder Bay, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
 LOR: Limit of Reporting (detection limit).

Unit	Description
-	no units
°C	degrees celsius
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	Description
< T	A measureable trace amount: Interpret with caution.
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DTSE	Dissolved Se concentration exceeds total. Positive bias on D-Se suspected due to signal enhancement from volatile selenium species. Contact ALS if an alternative test to address this interference is needed.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31101 SW	SW22A_SW_20 231101 SW	SW21A_SW_20 231101 SW	SW27_SW_202 31101 SW	SW26_SW_202 31101 SW
Client sampling date / time					12-Nov-2023 11:35	12-Nov-2023 12:05	12-Nov-2023 15:15	12-Nov-2023 15:35	12-Nov-2023 16:05
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-001 Result	TY2311869-002 Result	TY2311869-003 Result	TY2311869-004 Result	TY2311869-005 Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	11.85	1.08	9.65	10.65	10.29
pH, field	----	EF001/TY	0.10	pH units	7.66	7.63	7.66	7.76	8.35
Temperature, field	----	EF001/TY	0.10	°C	1.65	2.18	1.94	2.48	2.81
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	3.1	3.1	3.1	2.1	<2.0
Colour, true	----	E329-L/TY	2.0	CU	23.1	18.1	33.3	29.3	29.3
Conductivity	----	E100/TY	1.0	µS/cm	917	1030	499	538	533
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	322	370	223	244	248
pH	----	E108/TY	0.10	pH units	7.99	8.00	7.95	8.08	8.20
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	606	677	317	340	327
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	5.4	4.0	3.6	3.2	3.8
Turbidity	----	E121/TY	0.10	NTU	3.86	2.14	2.46	3.18	3.26
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	156	154	174	180	162
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.459	0.0869 ^{±T}	0.0098 ^{±T}	<0.0050	<0.0050
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	0.0020	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	32.8	34.6	19.2	28.6	31.1
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.400 ^{DLDS}	0.065	0.036	0.037	0.043
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.58	1.71	0.917	0.695	0.702
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.814	1.19	0.188 ^{±T}	0.304	0.494
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.200 ^{DLDS}	0.025 ^{±T}	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0020	0.0014	0.0030	0.0020	0.0014
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	281	358	79.3	73.7	74.8
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	0.0027 ^{±T}	0.0026 ^{±T}	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31101 SW	SW22A_SW_20 231101 SW	SW21A_SW_20 231101 SW	SW27_SW_202 31101 SW	SW26_SW_202 31101 SW
Client sampling date / time					12-Nov-2023 11:35	12-Nov-2023 12:05	12-Nov-2023 15:15	12-Nov-2023 15:35	12-Nov-2023 16:05
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-001	TY2311869-002	TY2311869-003	TY2311869-004	TY2311869-005
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	17.2	13.3	22.0	15.8	19.1
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	14.9	13.3	18.7	15.8	15.7
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.142	0.0537	0.0614	0.0927	0.0909
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00737	0.00952	0.00033 ^{†T}	0.00018 ^{†T}	0.00027 ^{†T}
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00097 ^{†T}	0.00107 ^{†T}	0.00099 ^{†T}	0.00078 ^{†T}	0.00082 ^{†T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0348	0.0335	0.0255	0.0293	0.0290
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.067	0.084	0.038 ^{†T}	0.024 ^{†T}	0.027 ^{†T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000071 ^{†T}	0.0000071 ^{†T}	<0.0000050	<0.0000050	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	92.4	104	49.5	62.8	65.0
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000142	0.000259	0.000020	0.000010	0.000012
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00113 ^{†T}	0.00130 ^{†T}	0.00019 ^{†T}	0.00014 ^{†T}	0.00012 ^{†T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00180 ^{†T}	0.00221 ^{†T}	0.00092 ^{†T}	0.00154 ^{†T}	0.00112 ^{†T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.256	0.140	0.206	0.172	0.164
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000088 ^{†T}	<0.000050	<0.000050	0.000066 ^{†T}	0.000063 ^{†T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0127 ^{†T}	0.0146 ^{†T}	0.0117 ^{†T}	0.0072 ^{†T}	0.0073 ^{†T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	24.6	25.5	24.5	22.9	21.4
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0303	0.0286	0.0428	0.0268	0.0166
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.00560 ^{†T}	0.00723 ^{†T}	0.00150 ^{†T}	0.00111 ^{†T}	0.00141 ^{†T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00204 ^{†T}	0.00216 ^{†T}	0.00128 ^{†T}	0.00097 ^{†T}	0.00091 ^{†T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	22.4	27.4	3.98	3.05	2.84
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.0127	0.0159	0.00276	0.00160	0.00177
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000401 ^{†T}	0.000424 ^{†T}	0.000158 ^{†T}	0.000139 ^{†T}	0.000188 ^{†T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	3.88	3.46	4.29	3.68	3.49



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31101 SW	SW22A_SW_20 231101 SW	SW21A_SW_20 231101 SW	SW27_SW_202 31101 SW	SW26_SW_202 31101 SW
Client sampling date / time					12-Nov-2023 11:35	12-Nov-2023 12:05	12-Nov-2023 15:15	12-Nov-2023 15:35	12-Nov-2023 16:05
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-001	TY2311869-002	TY2311869-003	TY2311869-004	TY2311869-005
					Result	Result	Result	Result	Result
Total Metals									
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	53.4	64.8	16.0	12.6	11.6
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.443	0.527	0.203	0.193	0.238
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	103	126	28.0	27.0	27.4
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00542	0.00208	0.00237	0.00333	<0.00492 ^{DLM}
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	0.00011	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.00141 ^{*T}	0.00143 ^{*T}	0.00131 ^{*T}	0.00208 ^{*T}	0.00218 ^{*T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00088	0.00064	0.00076	0.00082	0.00079
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	<0.0030	0.0038 ^{*T}	0.0060 ^{*T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	0.00024	<0.00020
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0033	0.0018	0.0029	0.0044	0.0042
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00717	0.00963	0.00031	0.00018	0.00028
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00090	0.00104	0.00093	0.00077	0.00086
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0331	0.0328	0.0249	0.0281	0.0283
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.065	0.075	0.037	0.023	0.024
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	89.6	106	49.8	61.5	62.9
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	0.000117	0.000258	0.000012	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00098	0.00122	0.00013	<0.00010	<0.00010
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00134	0.00170	0.00118	0.00120	0.00101
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.035	0.020	0.065	0.043	0.042



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW03_SW_202 31101 SW	SW22A_SW_20 231101 SW	SW21A_SW_20 231101 SW	SW27_SW_202 31101 SW	SW26_SW_202 31101 SW
Client sampling date / time					12-Nov-2023 11:35	12-Nov-2023 12:05	12-Nov-2023 15:15	12-Nov-2023 15:35	12-Nov-2023 16:05
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-001	TY2311869-002	TY2311869-003	TY2311869-004	TY2311869-005
					Result	Result	Result	Result	Result
Dissolved Metals									
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0121	0.0147	0.0118	0.0076	0.0066
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	24.0	25.6	24.0	22.1	22.0
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.00278	0.00067	0.0150	0.0117	0.00536
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.00540	0.00716	0.00154	0.00111	0.00135
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00171	0.00202	0.00119	0.00084	0.00077
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	22.1	27.9	3.97	3.13	2.92
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.0127	0.0158	0.00266	0.00152	0.00179
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000493	0.000588 ^{DTSE}	0.000204	0.000181	0.000199
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.58	3.36	4.18	3.46	3.16
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	55.0	67.6	16.8	12.7	12.4
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.427	0.525	0.198	0.200	0.235
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	104	129	27.8	26.8	26.6
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	0.00060	0.00067
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	0.00011	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00140	0.00144	0.00129	0.00203	0.00216
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	0.0021	0.0043
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory

Speciated Metals



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW03_SW_202 31101 SW	SW22A_SW_20 231101 SW	SW21A_SW_20 231101 SW	SW27_SW_202 31101 SW	SW26_SW_202 31101 SW
					Client sampling date / time	12-Nov-2023 11:35	12-Nov-2023 12:05	12-Nov-2023 15:15	12-Nov-2023 15:35	12-Nov-2023 16:05
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-001	TY2311869-002	TY2311869-003	TY2311869-004	TY2311869-005	
					Result	Result	Result	Result	Result	
Speciated Metals										
Methylmercury (as MeHg), total	22967-92-6	E536/VA	0.000020	µg/L	0.000068	0.000044	----	----	----	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	40	47	59	46	44	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.6	1.9	1.1	1.2	<1.0	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2I	0.005	Bq/L	----	<0.005	----	----	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

SW25_SW_202
 31101
 SW

----	----	----	----
------	------	------	------

Client sampling date / time

12-Nov-2023
 16:25

----	----	----	----
------	------	------	------

Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-006	-----	-----	-----	-----
					Result	----	----	----	----

Field Tests

Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	12.77	----	----	----	----
pH, field	----	EF001/TY	0.10	pH units	8.02	----	----	----	----
Temperature, field	----	EF001/TY	0.10	°C	2.40	----	----	----	----

Physical Tests

Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	----	----	----	----
Colour, true	----	E329-L/TY	2.0	CU	32.5	----	----	----	----
Conductivity	----	E100/TY	1.0	µS/cm	528	----	----	----	----
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	244	----	----	----	----
pH	----	E108/TY	0.10	pH units	8.18	----	----	----	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	340	----	----	----	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	8.8	----	----	----	----
Turbidity	----	E121/TY	0.10	NTU	5.96	----	----	----	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	159	----	----	----	----

Anions and Nutrients

Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	<0.0050	----	----	----	----
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	----	----	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	32.7	----	----	----	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.043	----	----	----	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.807	----	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.667	----	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	----	----	----	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0014	----	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	78.8	----	----	----	----

Cyanides

Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	----	----	----	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	----	----	----	----
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	----	----	----	----

Organic / Inorganic Carbon

Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	18.7	----	----	----	----
---------------------------------	------	-----------	------	------	------	------	------	------	------



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

SW25_SW_202
 31101
 SW

----	----	----	----
------	------	------	------

Client sampling date / time

12-Nov-2023
 16:25

----	----	----	----
------	------	------	------

Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-006	-----	-----	-----	-----
					Result	----	----	----	----

Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	15.9	----	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.156	----	----	----	----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00038 ^{±T}	----	----	----	----
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00084 ^{±T}	----	----	----	----
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0294	----	----	----	----
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	----	----	----	----
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	----	----	----	----
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.028 ^{±T}	----	----	----	----
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000050	----	----	----	----
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	64.0	----	----	----	----
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000025	----	----	----	----
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	----	----	----	----
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00021 ^{±T}	----	----	----	----
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00136 ^{±T}	----	----	----	----
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.298	----	----	----	----
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000133 ^{±T}	----	----	----	----
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0063 ^{±T}	----	----	----	----
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	20.0	----	----	----	----
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0282	----	----	----	----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	----	----	----	----
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.00154 ^{±T}	----	----	----	----
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00102 ^{±T}	----	----	----	----
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	----	----	----	----
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	2.84	----	----	----	----
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00205	----	----	----	----
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000228 ^{±T}	----	----	----	----
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	3.72	----	----	----	----
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	----	----	----	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

Client sample ID

SW25_SW_202
 31101
 SW

Client sampling date / time

12-Nov-2023
 16:25

Analyte CAS Number Method/Lab LOR Unit

TY2311869-006

Result

Total Metals

Sodium, total	7440-23-5	E420/TY	0.050	mg/L	12.0	----	----	----	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.263	----	----	----	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	28.3	----	----	----	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	----	----	----	----
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00600	----	----	----	----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.00206 ^{±T}	----	----	----	----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00098	----	----	----	----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0100	----	----	----	----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00022	----	----	----	----

Dissolved Metals

Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0055	----	----	----	----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00038	----	----	----	----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00081	----	----	----	----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0273	----	----	----	----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	----	----	----	----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	----	----	----	----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.025	----	----	----	----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	----	----	----	----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	64.4	----	----	----	----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	----	----	----	----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00085	----	----	----	----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.052	----	----	----	----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	----	----	----	----



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW25_SW_202	---	---	---	---
						31101				
						SW				
					Client sampling date / time	12-Nov-2023	---	---	---	---
						16:25				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-006	-----	-----	-----	-----	-----
					Result	---	---	---	---	---
Dissolved Metals										
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0064	---	---	---	---	---
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	20.2	---	---	---	---	---
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.00472	---	---	---	---	---
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	---	---	---	---	---
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.00149	---	---	---	---	---
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00077	---	---	---	---	---
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	---	---	---	---	---
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	2.94	---	---	---	---	---
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00172	---	---	---	---	---
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000224	---	---	---	---	---
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	3.27	---	---	---	---	---
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	---	---	---	---	---
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	12.5	---	---	---	---	---
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.262	---	---	---	---	---
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	27.8	---	---	---	---	---
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	---	---	---	---	---
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	---	---	---	---	---
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	---	---	---	---	---
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	---	---	---	---	---
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00055	---	---	---	---	---
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	---	---	---	---	---
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00206	---	---	---	---	---
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	---	---	---	---	---
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0057	---	---	---	---	---
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	---	---	---	---	---
Dissolved mercury filtration location	----	EP509/WT	-	-	Laboratory	---	---	---	---	---
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	---	---	---	---	---
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	---	---	---	---	---



Analytical Results

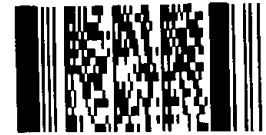
Sub-Matrix: **Surface Water**
 (Matrix: **Water**)

					Client sample ID	SW25_SW_202	----	----	----	----
						31101				
						SW				
					Client sampling date / time	12-Nov-2023	----	----	----	----
						16:25				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2311869-006	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	45	----	----	----	----	----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	----	----	----	----	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

H2311869



Telephone : +1 807 623 6463

Project Name: Rainy River Location: Chapple Project Number: Project Manager: PO Number: Project: Turn Around Time (days): 10 Business Days Shipping Company: Shipping Date: 8/8/2023 8:26:00 AM COC Number: ALS-451203097						Containers Filtered Preservatives		SW Kits	Ra-226 Bottle	MeHg Bottle											
Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		
						NG-SW-P-TB	RA226-MMER-BE	MEHG-T-GCAF-VA (Methyl Hg)													
SW03_SW_20231101	11.85	7.66	1.65	2023-11-12 11:35	SW	X		X											12		
SW22A_SW_20231101	11.08	7.63	2.18	2023-11-12 12:05	SW	X	X	X											13		
SW21A_SW_20231101	9.65	7.66	1.94	2023-11-12 15:15	SW	X													11		
SW27_SW_20231101	10.65	7.76	2.48	2023-11-12 15:35	SW	X													11		
SW26_SW_20231101	10.29	8.35	2.81	2023-11-12 16:05	SW	X													11		
SW25_SW_20231101	12.77	8.02	2.40	2023-11-12 16:25	SW	X													11		

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	2023-08-08 8:26	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by	LV 11/14/23 9:05			

7.6
7.8
7.1
7.9

7.0
7.3
8.0

Manitoulin
330 276 9818
4 Coolers + 3 pails
+ ice pack

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested		YES	NO	Priority/Emergency Service Requested		YES	NO
Time Sensitive Hold Time		YES	NO	Confirmed all as accurate as per COC, Sample Remarks or PM			
Client:		New Cold - Rainy River		Client		Work Contact	Quote
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL			
Mode of Delivery:		Courier	Drop Off	Project		PO	Site/LSD
Courier		Manipulin		Overall Description Entered			
Waybill Number		3302769818		Received date/time as per COC			
Temperature 7-6, 7-8, 7-1, 7-1, 7-0, 7-3, 8-0		Cooler Count 4+3		Recipients match CoC or Sample Remarks			
Cooling Method		None	Ice	Billing Instruction added to remarks			
			Ice Packs	Sample Remarks/Specification Doc checked			
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST			
Matrix:	Water	Soil	Air	Biota	Other	Submission Issues communicated	
DW Schedule 24 Bottles Correct?			Yes	No	Sample Info communicated via Remarks		
DW Metals pH Check <2			Yes	No	Planned Event Submission		
Regulation Circled, Works # present		Yes	No - Reject?	Sample Name entered as per CoC			
# of Bottles:	Sample Count		6	Sampling Date and time entered as per CoC			
Green/white	6 routine, 6 BOD			Containers selected in layout order			
Purple/white	6 nutrients, 6 DOC			Sales items entered from QUOTE ONLY (and/or verified as correct)			
Warm red/white	6 mt met, 6 diox met, 1 Rad			Field Data/EC298A removed if not on COC			
Yellow/black	6 mt Hg, 6 diox Hg, 6 200ul, 6 v			Bottle Allocation Verified			
Light blue/white				Guideline added or auto-allocated			
Orange/black				Due dates updated			
Others (detail)				VALIDATION			
6 cyanide				Validation errors resolved?			
Comments on Samples and Bottles:				Internal Sublet CoC created			
Samples Requiring Preservation or Filtering:				Login Comments:			
Layout Staff Initials		8809		Login Staff Initials:		8809	
Date and Time of Layout		Nov 14, 23 10:28am					



CERTIFICATE OF ANALYSIS

<p>Work Order : TY2312943</p> <p>Client : New Gold Inc. (Rainy River)</p> <p>Contact : Garnet.Cornell@newgold.com Garnet Cornell</p> <p>Address : 24 Marr Rd. Barwick ON Canada P0W 1A0</p> <p>Telephone : 807 234 8170</p> <p>Project : ----</p> <p>PO : 4700002620</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : New Gold Inc. (Rainy River)</p> <p>Quote number : New Gold Rainy River Project - Picka Project</p> <p>No. of samples received : 4</p> <p>No. of samples analysed : 4</p>	<p>Page : 1 of 7</p> <p>Laboratory : ALS Environmental - Thunder Bay</p> <p>Account Manager : Christine Paradis</p> <p>Address : 1081 Barton Street Thunder Bay ON Canada P7B 5N3</p> <p>Telephone : +1 807 623 6463</p> <p>Date Samples Received : 13-Dec-2023 09:20</p> <p>Date Analysis Commenced : 13-Dec-2023</p> <p>Issue Date : 22-Dec-2023 16:57</p>
---	--

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Daron Mooney	Laboratory Assistant	Administration, Thunder Bay, Ontario
Julie Ruoho	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Nik Perkio	Inorganics Analyst	Inorganics, Waterloo, Ontario
Nik Perkio	Inorganics Analyst	Metals, Waterloo, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
-	no units
°C	degrees celsius
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

<i>Qualifier</i>	<i>Description</i>
< T	A measureable trace amount: Interpret with caution.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW26_SW_202 31205 SW	SW27_SW_202 31205 SW	SW21A_SW_20 231205 SW	SW22A_SW_20 231205 SW	----
Client sampling date / time					11-Dec-2023 11:50	11-Dec-2023 13:30	11-Dec-2023 13:45	11-Dec-2023 14:25	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312943-001	TY2312943-002	TY2312943-003	TY2312943-004	-----
					Result	Result	Result	Result	----
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	11.98	7.90	4.52	5.05	----
pH, field	----	EF001/TY	0.10	pH units	8.27	7.68	7.51	7.35	----
Temperature, field	----	EF001/TY	0.10	°C	-0.20	<0.10	-0.16	-0.04	----
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	2.6	4.7	4.8	----
Colour, true	----	E329-L/TY	2.0	CU	80.7	66.4	84.6	80.3	----
Conductivity	----	E100/TY	1.0	µS/cm	413	475	448	453	----
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	215	243	209	220	----
pH	----	E108/TY	0.10	pH units	8.14	8.03	7.84	7.87	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	275	316	304	304	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	<3.0	25.2	3.0	3.4	----
Turbidity	----	E121/TY	0.10	NTU	7.75	17.4	2.27	2.95	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	183	201	182	188	----
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0201 ^{±T}	0.0771 ^{±T}	0.0258 ^{±T}	0.0230 ^{±T}	----
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	17.6	18.0	33.0	30.8	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	0.041	0.024	0.020	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.853	0.901	1.11	1.07	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.021 ^{±T}	<0.020	<0.020	<0.020	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	<0.0010	0.0013	0.0432	0.0306	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	19.4	36.6	10.3	13.6	----
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	----
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	0.0028 ^{±T}	<0.0020	<0.0020	<0.0020	----
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW26_SW_202	SW27_SW_202	SW21A_SW_20	SW22A_SW_20	----
						31205	31205	231205	231205	
						SW	SW	SW	SW	
					Client sampling date / time	11-Dec-2023	11-Dec-2023	11-Dec-2023	11-Dec-2023	----
						11:50	13:30	13:45	14:25	
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312943-001	TY2312943-002	TY2312943-003	TY2312943-004	-----	
					Result	Result	Result	Result	----	
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	25.2	23.6	30.1	28.9		----
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	24.2	22.8	29.1	28.1		----
Total Metals										
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.211	0.781	0.0725	0.103		----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00010	0.00011 ^{^T}	<0.00010	<0.00010		----
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00112 ^{^T}	0.00126 ^{^T}	0.00096 ^{^T}	0.00095 ^{^T}		----
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0257	0.0333	0.0242	0.0239		----
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	0.000038 ^{^T}	<0.000020	<0.000020		----
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050		----
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.018 ^{^T}	0.016 ^{^T}	0.016 ^{^T}	0.020 ^{^T}		----
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	0.0000176 ^{^T}	0.0000069 ^{^T}	0.0000059 ^{^T}		----
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	52.3	59.6	48.8	52.3		----
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000030	0.000108	<0.000010	0.000013		----
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	0.00177 ^{^T}	<0.00050	<0.00050		----
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00018 ^{^T}	0.00078 ^{^T}	0.00060 ^{^T}	0.00053 ^{^T}		----
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00139 ^{^T}	0.00200 ^{^T}	0.00075 ^{^T}	0.00081 ^{^T}		----
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.447	1.31	0.906	0.809		----
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000216 ^{^T}	0.000566 ^{^T}	0.000074 ^{^T}	0.000098 ^{^T}		----
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0069 ^{^T}	0.0073 ^{^T}	0.0078 ^{^T}	0.0081 ^{^T}		----
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	19.2	22.3	21.0	20.5		----
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0263	0.405	0.471	0.400		----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050		----
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000575 ^{^T}	0.000553 ^{^T}	0.000410 ^{^T}	0.000400 ^{^T}		----
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00123 ^{^T}	0.00227 ^{^T}	0.00175 ^{^T}	0.00166 ^{^T}		----
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	0.057	0.081	0.054		----
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	2.25	2.86	2.89	2.63		----
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00216	0.00322	0.00233	0.00230		----
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000113 ^{^T}	0.000136 ^{^T}	0.000150 ^{^T}	0.000162 ^{^T}		----
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.30	6.80	6.44	6.05		----



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW26_SW_202 31205 SW	SW27_SW_202 31205 SW	SW21A_SW_20 231205 SW	SW22A_SW_20 231205 SW	----
Client sampling date / time					11-Dec-2023 11:50	11-Dec-2023 13:30	11-Dec-2023 13:45	11-Dec-2023 14:25	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312943-001	TY2312943-002	TY2312943-003	TY2312943-004	-----
					Result	Result	Result	Result	----
Total Metals									
Silver, total	7440-22-4	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	5.88	8.58	14.0	13.0	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.144	0.154	0.132	0.132	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	7.07	13.4	4.51	5.53	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	<0.00010	0.00011 ST	<0.00010	<0.00010	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	0.00011	<0.00010	<0.00010	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00776	0.0248	0.00297	0.00383	----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, total	7440-61-1	E420/TY	0.00010	mg/L	0.00174 ST	0.00183 ST	0.000791 ST	0.000931 ST	----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00111	0.00277	0.00073	0.00084	----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0100	0.0119	<0.0030	<0.0030	----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00034	0.00065	0.00029	0.00031	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0122	0.0106	0.0086	0.0083	----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00108	0.00092	0.00093	0.00088	----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0238	0.0259	0.0223	0.0228	----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.018	0.017	0.015	0.016	----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	53.0	59.9	49.0	52.7	----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00010	0.00020	0.00048	0.00043	----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00108	0.00094	0.00054	0.00058	----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.186	0.139	0.614	0.535	----



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW26_SW_202 31205 SW	SW27_SW_202 31205 SW	SW21A_SW_20 231205 SW	SW22A_SW_20 231205 SW	----
Client sampling date / time					11-Dec-2023 11:50	11-Dec-2023 13:30	11-Dec-2023 13:45	11-Dec-2023 14:25	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312943-001	TY2312943-002	TY2312943-003	TY2312943-004	-----
					Result	Result	Result	Result	----
Dissolved Metals									
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000061	<0.000050	<0.000050	<0.000050	----
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0068	0.0073	0.0072	0.0076	----
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	20.0	22.7	21.0	21.5	----
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0187	0.173	0.394	0.358	----
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000570	0.000540	0.000355	0.000382	----
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00102	0.00108	0.00152	0.00151	----
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	----
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	2.26	2.74	2.90	2.85	----
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00178	0.00162	0.00211	0.00210	----
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000173	0.000154	0.000168	0.000173	----
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	4.79	4.74	6.05	5.74	----
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	6.19	8.97	13.9	13.2	----
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.137	0.150	0.129	0.133	----
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	6.75	12.2	4.27	5.20	----
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	0.00014	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00168	0.00164	0.00063	0.00078	----
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.00178	0.00174	0.000741	0.000872	----
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	0.00050	<0.00050	<0.00050	----
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0074	0.0042	0.0011	0.0016	----
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	----
Dissolved mercury filtration location	----	EP509/WT	-	-	Laboratory	Laboratory	Laboratory	Laboratory	----
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	Laboratory	Laboratory	Laboratory	----

Aggregate Organics



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW26_SW_202 31205 SW	SW27_SW_202 31205 SW	SW21A_SW_20 231205 SW	SW22A_SW_20 231205 SW	----
					Client sampling date / time	11-Dec-2023 11:50	11-Dec-2023 13:30	11-Dec-2023 13:45	11-Dec-2023 14:25	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312943-001	TY2312943-002	TY2312943-003	TY2312943-004	-----	----
					Result	Result	Result	Result	----	----
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	----
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	70	69	82	80		----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	1.0	<1.0	1.0	<1.0		----
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	----	----	----	<0.005		----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-16012

Dec 22, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Dec-15-2023

Client P.O.: TY2312943

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Snook, Vicky

-
- * Test methods and data are validated by the laboratory's Quality Assurance Program.
 - * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
 - * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
 - * Data marked as "by Client" has been provided by the client and may affect the validity of results.
 - * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
 - * Additional information is available upon request.
 - * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-16012

Dec 22, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023045471	Client PO #:	TY2312943
Date Sampled:	Dec 11, 2023	Date Received:	Dec 15, 2023
Sample Matrix:	WATER		
Description:	12/11/2023 13:25 SW22A_SW_20231205 TY2312943-004		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 10.3 °C upon receipt.

SRC Group # 2023-16012

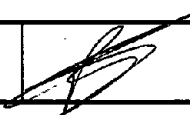
Dec 22, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO		Priority/Emergency Service Requested	YES	<input checked="" type="radio"/> NO	
Time Sensitive Hold Time	YES	<input checked="" type="radio"/> NO		Confirmed all as accurate as per COC, Sample Remarks or PM			
Client:	New Gold			Client	<input checked="" type="checkbox"/>	Work Contact	<input checked="" type="checkbox"/>
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL			
Mode of Delivery:	<input checked="" type="radio"/> Courier	Drop Off		Project	PO	<input checked="" type="checkbox"/> Site/LSO <input checked="" type="checkbox"/>	
Courier	Manitoulin			Overall Description Entered	<input checked="" type="radio"/> Yes <input type="radio"/> NA		
Waybill Number	330 282 6164			Received date/time as per COC	<input checked="" type="checkbox"/>		
Temperature	10.7	Cooler Count		Recipients match CoC or Sample Remarks	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Cooling Method	<input checked="" type="radio"/> None	Ice	<input checked="" type="radio"/> Ice Packs	Billing Instruction added to remarks	<input checked="" type="radio"/> Yes <input type="radio"/> NA		
SAMPLE MATRIX/BOTTLE INFORMATION				VERIFICATION CHECKLIST			
Matrix:	<input checked="" type="radio"/> Water	Soil	Air	Biota	Other		
DW Schedule 24 Bottles Correct?				<input checked="" type="radio"/> Yes <input type="radio"/> No			
DW Metals pH Check <2				<input checked="" type="radio"/> Yes <input type="radio"/> No			
Regulation Circled, Works # present		<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Reject?		Planned Event Submission			
# of Bottles: 12		Sample Count 4		<input checked="" type="radio"/> Yes <input type="radio"/> No			
Green/white	4 Routine, 4 BOD			Sample Name entered as per CoC			
Purple/white	4 Nuts, 4 TOC, 4 DOC			Sampling Date and time entered as per CoC			
Warm red/white	4 Tot Metals, 4 Diss. Metals			Containers selected in layout order			
Yellow/black	4 Tot Hg, 4 Diss. Hg			Sales items entered from QUOTE ONLY (and/or verified as correct)			
Light blue/white				Field Data/EC298A removed if not on COC			
Orange/black				Yes <input type="radio"/> NA <input checked="" type="radio"/>			
Others (detail)	4 Cyanide			Bottle Allocation Verified			
	4 x 2 OGG			<input checked="" type="checkbox"/>			
	1 Radium			Guideline added or auto-allocated			
Comments on Samples and Bottles:				Due dates updated			
Samples Requiring Preservation or Filtering:				Validation			
DOC, Diss. Metals, Diss. Hg → FP				Validation errors resolved?			
Layout Staff Initials				<input checked="" type="radio"/> Yes <input type="radio"/> No			
Date and Time of Layout				Internal Sublet CoC created			
LV 12/13/23 11:15				<input checked="" type="radio"/> Yes <input type="radio"/> NA			
Login Staff Initials:				Login Comments:			
							



CERTIFICATE OF ANALYSIS

<p>Work Order : TY2312874</p> <p>Client : New Gold Inc. (Rainy River)</p> <p>Contact : Garnet.Cornell@newgold.com Garnet Cornell</p> <p>Address : 24 Marr Rd. Barwick ON Canada P0W 1A0</p> <p>Telephone : 807 234 8170</p> <p>Project : Surface Water</p> <p>PO : 4700002620</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : New Gold Inc. (Rainy River)</p> <p>Quote number : New Gold Rainy River Project - Picka Project</p> <p>No. of samples received : 13</p> <p>No. of samples analysed : 13</p>	<p>Page : 1 of 22</p> <p>Laboratory : ALS Environmental - Thunder Bay</p> <p>Account Manager : Christine Paradis</p> <p>Address : 1081 Barton Street Thunder Bay ON Canada P7B 5N3</p> <p>Telephone : +1 807 623 6463</p> <p>Date Samples Received : 12-Dec-2023 09:12</p> <p>Date Analysis Commenced : 12-Dec-2023</p> <p>Issue Date : 28-Dec-2023 15:41</p>
--	---

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Cassandra Grzelewski	Team Leader - Inorganics	Administration, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Inorganics, Thunder Bay, Ontario
Cassandra Grzelewski	Team Leader - Inorganics	Metals, Thunder Bay, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Julie Ruoho	Account Manager	External Subcontracting, Saskatoon, Saskatchewan
Julie Ruoho	Teamleader Wet Chem	Inorganics, Thunder Bay, Ontario
Nik Perkio	Inorganics Analyst	Inorganics, Waterloo, Ontario
Nik Perkio	Inorganics Analyst	Metals, Waterloo, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Shannon Veltri	Supervisor - Water Chemistry	Inorganics, Thunder Bay, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
-	no units
°C	degrees celsius
µS/cm	microsiemens per centimetre
Bq/L	becquerels per litre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

<i>Qualifier</i>	<i>Description</i>
< T	<i>A measureable trace amount: Interpret with caution.</i>
DLM	<i>Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).</i>
RRV	<i>Reported result verified by repeat analysis.</i>



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW24_SW_202 31205 SW	SW23_SW_202 31205 SW	SW03_SW_202 31205 SW	SW20_SW_202 31205 SW	SW28A_SW_20 231205 SW
Client sampling date / time					08-Dec-2023 16:00	08-Dec-2023 16:40	08-Dec-2023 16:45	09-Dec-2023 14:20	09-Dec-2023 14:40
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-001	TY2312874-003	TY2312874-004	TY2312874-005	TY2312874-006
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	8.79	9.48	9.52	4.44	9.68
pH, field	----	EF001/TY	0.10	pH units	7.25	7.28	7.33	7.42	7.99
Temperature, field	----	EF001/TY	0.10	°C	-0.20	0.21	0.33	0.34	0.56
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	6.8	5.8	4.8	5.1	<2.0
Colour, true	----	E329-L/TY	2.0	CU	145	140	73.6	85.8	69.5
Conductivity	----	E100/TY	1.0	µS/cm	375	368	463	426	234
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	185	180	218	180	130
pH	----	E108/TY	0.10	pH units	7.68	7.73	7.89	7.79	8.04
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	286	284	310	294	177
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	21.5	11.5	6.7	3.7	<3.0
Turbidity	----	E121/TY	0.10	NTU	17.5	14.8	8.90	6.16	1.31
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	152	153	182	152	127
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0732 ^{±T}	0.0569 ^{±T}	0.0533 ^{±T}	0.0376 ^{±T}	0.0106 ^{±T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	15.1	15.1	27.8	43.0	1.67
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.030	0.034	0.039	0.020	0.020
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.22	1.22	1.08	1.04	1.04
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	0.052 ^{±T}	0.050 ^{±T}	0.029 ^{±T}	<0.020	0.056 ^{±T}
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0073	0.0072	0.0077	0.0071	<0.0010
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	24.3	23.8	27.6	9.36	0.69
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW24_SW_202 31205 SW	SW23_SW_202 31205 SW	SW03_SW_202 31205 SW	SW20_SW_202 31205 SW	SW28A_SW_20 231205 SW
Client sampling date / time					08-Dec-2023 16:00	08-Dec-2023 16:40	08-Dec-2023 16:45	09-Dec-2023 14:20	09-Dec-2023 14:40
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-001	TY2312874-003	TY2312874-004	TY2312874-005	TY2312874-006
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	34.3	36.1	29.2	28.9	28.9
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	37.2	37.8	29.8	29.8	29.8
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.570	0.460	0.307	0.159	0.0234 ^{±T}
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	0.00066 ^{±T}	0.00062 ^{±T}	0.00047 ^{±T}	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00109 ^{±T}	0.00105 ^{±T}	0.00099 ^{±T}	0.00085 ^{±T}	0.00073 ^{±T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0229	0.0224	0.0259	0.0192	0.0139
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	0.000034 ^{±T}	0.000028 ^{±T}	0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.017 ^{±T}	0.016 ^{±T}	0.019 ^{±T}	0.014 ^{±T}	0.012 ^{±T}
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000198 ^{±T}	0.0000435 ^{±T}	0.0000109 ^{±T}	0.0000059 ^{±T}	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	43.7	44.7	54.2	44.2	30.9
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000094	0.000075	0.000053	0.000018	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00134 ^{±T}	0.00106 ^{±T}	0.00079 ^{±T}	0.00064 ^{±T}	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00062 ^{±T}	0.00054 ^{±T}	0.00055 ^{±T}	0.00036 ^{±T}	0.00011 ^{±T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00238 ^{±T}	0.00568 ^{±T}	0.00165 ^{±T}	0.00114 ^{±T}	0.00087 ^{±T}
Iron, total	7439-89-6	E420/TY	0.010	mg/L	1.11	0.971	0.701	0.758	0.135
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000413 ^{±T}	0.000347 ^{±T}	0.000219 ^{±T}	0.000161 ^{±T}	<0.000050
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0070 ^{±T}	0.0065 ^{±T}	0.0078 ^{±T}	0.0065 ^{±T}	0.0041 ^{±T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	17.6	17.3	20.8	18.3	13.3
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.144	0.122	0.244	0.127	0.00922
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000678 ^{±T}	0.000636 ^{±T}	0.000733 ^{±T}	0.000274 ^{±T}	0.000380 ^{±T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00256 ^{±T}	0.00235 ^{±T}	0.00217 ^{±T}	0.00192 ^{±T}	0.00086 ^{±T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	3.54	3.46	3.94	1.52	1.02
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00346	0.00310	0.00294	0.00181	0.00160
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000184 ^{±T}	0.000162 ^{±T}	0.000179 ^{±T}	0.000153 ^{±T}	0.000120 ^{±T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	7.01	6.70	6.17	6.76	2.60



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW24_SW_202 31205 SW	SW23_SW_202 31205 SW	SW03_SW_202 31205 SW	SW20_SW_202 31205 SW	SW28A_SW_20 231205 SW
Client sampling date / time					08-Dec-2023 16:00	08-Dec-2023 16:40	08-Dec-2023 16:45	09-Dec-2023 14:20	09-Dec-2023 14:40
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-001	TY2312874-003	TY2312874-004	TY2312874-005	TY2312874-006
					Result	Result	Result	Result	Result
Total Metals									
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	9.28	9.10	13.1	18.9	1.53
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.119	0.117	0.144	0.108	0.0668
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	8.94	9.02	9.96	3.95	0.84
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	0.00011	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.0183	0.0161	0.0108	0.00588	<0.00087 ^{DLM}
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000928 ST	0.000876 ST	0.00112 ST	0.000589 ST	0.000561 ST
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00215	0.00182	0.00145	0.00093	<0.00050
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	0.0075 ST	0.0161	0.0042 ST	0.0040 ST	<0.0030
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00073	0.00059	0.00045	0.00041	<0.00020
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0513	0.0451	0.0106	0.0146	0.0058
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	0.00065	0.00063	0.00050	<0.00010	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00094	0.00092	0.00084	0.00077	0.00070
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0188	0.0190	0.0232	0.0186	0.0136
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.016	0.016	0.018	0.014	0.011
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000191	0.0000161	0.0000091	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	46.2	44.9	54.2	43.2	30.5
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00020	0.00021	0.00027	0.00020	<0.00010
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00247	0.00183	0.00128	0.00102	0.00091
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.370	0.358	0.219	0.418	0.090



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW24_SW_202 31205 SW	SW23_SW_202 31205 SW	SW03_SW_202 31205 SW	SW20_SW_202 31205 SW	SW28A_SW_20 231205 SW
Client sampling date / time					08-Dec-2023 16:00	08-Dec-2023 16:40	08-Dec-2023 16:45	09-Dec-2023 14:20	09-Dec-2023 14:40
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-001	TY2312874-003	TY2312874-004	TY2312874-005	TY2312874-006
					Result	Result	Result	Result	Result
Dissolved Metals									
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000077	0.000070	<0.000050	0.000050	<0.000050
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0068	0.0065	0.0081	0.0068	0.0039
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	17.0	16.5	20.0	17.4	13.1
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0627	0.0617	0.153	0.0757	0.00318
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000679	0.000649	0.000765	0.000257	0.000351
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00165	0.00161	0.00163	0.00129	0.00083
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	3.40	3.46	3.81	1.48	1.00
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00210	0.00207	0.00228	0.00143	0.00156
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000213	0.000196	0.000203	0.000159	0.000162
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	5.79	5.80	5.46	6.50	2.57
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	9.33	9.25	13.1	19.5	1.52
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.125	0.121	0.149	0.107	0.0661
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	8.66	8.69	9.92	3.77	0.77
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00250	0.00227	0.00112	0.00152	<0.00030
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000850	0.000823	0.00106	0.000542	0.000525
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00065	0.00060	<0.00050	<0.00050	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0051	0.0044	0.0022	0.0024	<0.0010
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00038	0.00037	<0.00030	0.00033	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory

Aggregate Organics



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	SW24_SW_202 31205 SW	SW23_SW_202 31205 SW	SW03_SW_202 31205 SW	SW20_SW_202 31205 SW	SW28A_SW_20 231205 SW
					Client sampling date / time	08-Dec-2023 16:00	08-Dec-2023 16:40	08-Dec-2023 16:45	09-Dec-2023 14:20	09-Dec-2023 14:40
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-001	TY2312874-003	TY2312874-004	TY2312874-005	TY2312874-006	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	98	100	76	77	79	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Radiological Parameters										
Radium-226	13982-63-3	Ra-226/2l	0.005	Bq/L	<0.005	<0.005	----	<0.005	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 31205 SW	FB_SW_202312 05 SW	SW06_SW_202 31205 SW	SW17_SW_202 31205 SW	SW02_SW_202 31205 SW
Client sampling date / time					09-Dec-2023 15:00	10-Dec-2023 12:00	10-Dec-2023 12:00	10-Dec-2023 13:10	10-Dec-2023 16:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-007	TY2312874-008	TY2312874-009	TY2312874-010	TY2312874-011
					Result	Result	Result	Result	Result
Field Tests									
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	7.69	----	6.49	12.39	6.49
pH, field	----	EF001/TY	0.10	pH units	7.54	----	6.79	7.91	6.79
Temperature, field	----	EF001/TY	0.10	°C	<0.10	----	-0.02	<0.10	-0.02
Physical Tests									
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	3.2	<2.0	6.9	3.1	7.2
Colour, true	----	E329-L/TY	2.0	CU	130	<2.0	190	52.7	190
Conductivity	----	E100/TY	1.0	µS/cm	356	1.6	157	96.3	160
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	165	<0.50	94.5	40.4	93.8
pH	----	E108/TY	0.10	pH units	7.88	5.80	7.38	7.51	7.41
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	266	<10	163	80	167
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	4.1	<3.0	<3.0	4.3	<3.0
Turbidity	----	E121/TY	0.10	NTU	7.20	<0.10	2.57	4.45	2.48
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	146	<2.0	84.6	37.6	84.8
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0364 ^{-T}	<0.0050	0.0773 ^{-T}	0.0087 ^{-T}	0.0747 ^{-T}
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	<0.0010	<0.0010	<0.0010
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	25.7	<0.10	0.56	2.94	0.56
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	0.027	<0.020	<0.020	<0.020	<0.020
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	1.11	<0.050	1.13	0.530	1.13
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	<0.020	0.047 ^{-T}	<0.020
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0115	<0.0010	<0.0010	0.0025	<0.0010
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	7.26	<0.30	0.54	5.15	0.53
Cyanides									
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	35.2	<0.50	41.9	17.8	41.5



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 31205 SW	FB_SW_202312 05 SW	SW06_SW_202 31205 SW	SW17_SW_202 31205 SW	SW02_SW_202 31205 SW
Client sampling date / time					09-Dec-2023 15:00	10-Dec-2023 12:00	10-Dec-2023 12:00	10-Dec-2023 13:10	10-Dec-2023 16:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-007	TY2312874-008	TY2312874-009	TY2312874-010	TY2312874-011
					Result	Result	Result	Result	Result
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	36.4	<0.50	41.0	17.9	42.0
Total Metals									
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.137	<0.0030	0.0871	0.157	0.0796
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00096 ^{*T}	<0.00010	0.00087 ^{*T}	0.00055 ^{*T}	0.00091 ^{*T}
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0201	0.00020 ^{RRV}	0.0132	0.0109	0.0129
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/TY	0.010	mg/L	0.016 ^{*T}	<0.010	<0.010	<0.010	<0.010
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000118 ^{*T}	<0.0000050	<0.0000050	0.0000078 ^{*T}	<0.0000050
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	40.0	0.052 ^{RRV}	22.1	10.9	21.9
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000015	<0.000010	<0.000010	0.000020	<0.000010
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	0.00073 ^{*T}	<0.00050	<0.00050	0.00056 ^{*T}	<0.00050
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00026 ^{*T}	<0.00010	0.00055 ^{*T}	0.00014 ^{*T}	0.00054 ^{*T}
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00111 ^{*T}	<0.00050	0.00068 ^{*T}	0.00133 ^{*T}	<0.00050
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.569	<0.010	0.926	0.289	0.930
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000153 ^{*T}	<0.000050	0.000164 ^{*T}	0.000167 ^{*T}	0.000156 ^{*T}
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0069 ^{*T}	<0.0010	0.0022 ^{*T}	0.0016 ^{*T}	0.0021 ^{*T}
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	17.0	0.0141 ^{*T, RRV}	9.03	3.54	9.02
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.0559	<0.00010	0.373	0.0159	0.369
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000384 ^{*T}	<0.000050	0.000067 ^{*T}	0.000197 ^{*T}	0.000058 ^{*T}
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00166 ^{*T}	<0.00050	0.00065 ^{*T}	0.00090 ^{*T}	0.00058 ^{*T}
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	1.64	<0.050	1.04	0.933	1.04
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00166	<0.00020	0.00225	0.00196	0.00225
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000144 ^{*T}	<0.000050	0.000106 ^{*T}	0.000100 ^{*T}	0.000104 ^{*T}
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	6.05	<0.10	7.35	2.53	7.40
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 31205 SW	FB_SW_202312 05 SW	SW06_SW_202 31205 SW	SW17_SW_202 31205 SW	SW02_SW_202 31205 SW
Client sampling date / time					09-Dec-2023 15:00	10-Dec-2023 12:00	10-Dec-2023 12:00	10-Dec-2023 13:10	10-Dec-2023 16:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-007	TY2312874-008	TY2312874-009	TY2312874-010	TY2312874-011
					Result	Result	Result	Result	Result
Total Metals									
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	11.9	0.119 ^{RRV}	1.09	3.76	1.09
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.115	<0.00020	0.0369	0.0314	0.0391
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	3.05	<0.50	0.71	2.18	0.67
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	0.00026 ^{RRV}	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00639 ^{DLM}	<0.00030	0.00208	0.00497	0.00204
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000796 ^{-T}	<0.000010	0.000055 ^{-T}	0.000117 ^{-T}	0.000053 ^{-T}
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00101	<0.00050	<0.00050	0.00081	0.00051
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	<0.0030	0.0037 ^{-T}	<0.0030	0.0032 ^{-T}
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	0.00038	<0.00020	<0.00020	0.00024	<0.00020
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0330	<0.0010	0.0368	0.0285	0.0360
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00089	<0.00010	0.00083	0.00046	0.00087
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0191	0.00020 ^{RRV}	0.0111	0.0101	0.0116
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	0.016	<0.010	<0.010	<0.010	<0.010
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	0.0000081	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	39.5	<0.050	23.2	10.5	23.1
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	0.00058	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00020	<0.00010	0.00023	<0.00010	0.00025
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00088	0.00048 ^{RRV}	0.00038	0.00092	0.00037
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.369	<0.010	0.639	0.102	0.644
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	0.000068	<0.000050	0.000052	<0.000050	0.000057



Analytical Results

Sub-Matrix: Surface Water

Client sample ID

(Matrix: Water)

					SW10_SW_202 31205 SW	FB_SW_202312 05 SW	SW06_SW_202 31205 SW	SW17_SW_202 31205 SW	SW02_SW_202 31205 SW
Client sampling date / time					09-Dec-2023 15:00	10-Dec-2023 12:00	10-Dec-2023 12:00	10-Dec-2023 13:10	10-Dec-2023 16:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-007	TY2312874-008	TY2312874-009	TY2312874-010	TY2312874-011
					Result	Result	Result	Result	Result
Dissolved Metals									
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0075	<0.0010	0.0020	0.0011	0.0019
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	16.2	0.0112 ^{RRV}	8.88	3.44	8.78
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0437	<0.00010	0.145	0.00559	0.161
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000346	<0.000050	<0.000050	0.000167	<0.000050
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00150	<0.00050	0.00052	0.00062	0.00050
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	1.60	<0.050	1.06	0.844	1.02
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00140	<0.00020	0.00218	0.00176	0.00211
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000186	<0.000050	0.000118	0.000111	0.000140
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	6.01	<0.050	7.24	2.25	7.19
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	11.5	0.118 ^{RRV}	1.10	3.72	1.07
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.114	<0.00020	0.0380	0.0295	0.0376
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	3.22	<0.50	0.57	2.06	0.53
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	0.00022 ^{RRV}	<0.00010	<0.00010	<0.00010
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00220	<0.00030	0.00100	0.00113	0.00097
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000730	<0.000010	0.000051	0.000101	0.000052
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	0.00059	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0035	<0.0010	0.0022	<0.0010	0.0022
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	0.00038	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved mercury filtration location	----	EP509/WT	-	-	Laboratory	Field	Laboratory	Laboratory	Laboratory
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	Laboratory	Laboratory	Laboratory	Laboratory
Aggregate Organics									
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	2.3	<2.0	2.4



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	SW10_SW_202 31205 SW	FB_SW_202312 05 SW	SW06_SW_202 31205 SW	SW17_SW_202 31205 SW	SW02_SW_202 31205 SW
					Client sampling date / time	09-Dec-2023 15:00	10-Dec-2023 12:00	10-Dec-2023 12:00	10-Dec-2023 13:10	10-Dec-2023 16:00
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-007	TY2312874-008	TY2312874-009	TY2312874-010	TY2312874-011	
					Result	Result	Result	Result	Result	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	96	<10	114	46	112	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	1.0	<1.0	1.2	<1.0	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Surface Water

(Matrix: Water)

					Client sample ID	TB_SW_20231 205 SW	SW25_SW_202 31205 SW	----	----	----
					Client sampling date / time	11-Dec-2023 12:00	10-Dec-2023 16:45	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-012	TY2312874-013	-----	-----	-----	
					Result	Result	----	----	----	
Field Tests										
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	----	11.64	----	----	----	
pH, field	----	EF001/TY	0.10	pH units	----	7.62	----	----	----	
Temperature, field	----	EF001/TY	0.10	°C	----	-0.09	----	----	----	
Physical Tests										
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	<2.0	2.3	----	----	----	
Colour, true	----	E329-L/TY	2.0	CU	<2.0	90.5	----	----	----	
Conductivity	----	E100/TY	1.0	µS/cm	1.3	351	----	----	----	
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	<0.50	179	----	----	----	
pH	----	E108/TY	0.10	pH units	5.41	8.02	----	----	----	
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	<10	257	----	----	----	
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	<3.0	14.7	----	----	----	
Turbidity	----	E121/TY	0.10	NTU	<0.10	15.9	----	----	----	
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	<2.0	158	----	----	----	
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	<0.0050	0.0090 ^{^T}	----	----	----	
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	----	<0.0010	----	----	----	
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	<0.10	16.8	----	----	----	
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	0.023	----	----	----	
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	<0.050	0.856	----	----	----	
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	<0.020	----	----	----	
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	<0.010	----	----	----	
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	<0.0010	0.0016	----	----	----	
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	<0.30	12.8	----	----	----	
Cyanides										
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	<0.0020	----	----	----	
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	<0.0020	----	----	----	
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	<0.0020	----	----	----	
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	<0.50	28.4	----	----	----	



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	TB_SW_20231 205 SW	SW25_SW_202 31205 SW	----	----	----
					Client sampling date / time	11-Dec-2023 12:00	10-Dec-2023 16:45	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-012	TY2312874-013	-----	-----	-----	
					Result	Result	----	----	----	
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	<0.50	28.6	----	----	----	
Total Metals										
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	<0.0030	0.463	----	----	----	
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	0.00011 ^{^T}	----	----	----	
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	<0.00010	0.00106 ^{^T}	----	----	----	
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	<0.00010	0.0237	----	----	----	
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	<0.000020	----	----	----	
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	<0.000050	----	----	----	
Boron, total	7440-42-8	E420/TY	0.010	mg/L	<0.010	0.014 ^{^T}	----	----	----	
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	<0.0000050	0.0000097 ^{^T}	----	----	----	
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	<0.050	48.8	----	----	----	
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	<0.000010	0.000079	----	----	----	
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	0.00096 ^{^T}	----	----	----	
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	<0.00010	0.00036 ^{^T}	----	----	----	
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	<0.00050	0.00242 ^{^T}	----	----	----	
Iron, total	7439-89-6	E420/TY	0.010	mg/L	<0.010	0.802	----	----	----	
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	<0.000050	0.000476 ^{^T}	----	----	----	
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	<0.0010	0.0053 ^{^T}	----	----	----	
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	<0.0050	16.6	----	----	----	
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	<0.00010	0.0465	----	----	----	
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	<0.0000050	----	----	----	
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	<0.000050	0.000462 ^{^T}	----	----	----	
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	<0.00050	0.00158 ^{^T}	----	----	----	
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	<0.050	----	----	----	
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	<0.050	2.18	----	----	----	
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	<0.00020	0.00298	----	----	----	
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	<0.000050	0.000157 ^{^T}	----	----	----	
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	<0.10	5.68	----	----	----	
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	TB_SW_20231 205 SW	SW25_SW_202 31205 SW	----	----	----
					Client sampling date / time	11-Dec-2023 12:00	10-Dec-2023 16:45	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-012	TY2312874-013	-----	-----	-----	
					Result	Result	----	----	----	
Total Metals										
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	<0.050	5.39	----	----	----	
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	<0.00020	0.114	----	----	----	
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	<0.50	5.12	----	----	----	
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	<0.00020	----	----	----	
Thallium, total	7440-28-0	E420/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	<0.00030	0.0166	----	----	----	
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	<0.000010	0.00132 ^{±T}	----	----	----	
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	<0.00050	0.00170	----	----	----	
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	0.0111	----	----	----	
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	0.00043	----	----	----	
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	<0.0010	0.0133	----	----	----	
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	<0.00010	0.00084	----	----	----	
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	<0.00010	0.0206	----	----	----	
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	<0.000020	----	----	----	
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	<0.000050	----	----	----	
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	<0.010	0.012	----	----	----	
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	<0.0000050	----	----	----	
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	<0.050	46.5	----	----	----	
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	<0.00050	----	----	----	
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	<0.00010	0.00012	----	----	----	
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	<0.00020	0.00120	----	----	----	
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	<0.010	0.213	----	----	----	
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	0.000082	----	----	----	



Analytical Results

Sub-Matrix: Surface Water
 (Matrix: Water)

					Client sample ID	TB_SW_20231 205 SW	SW25_SW_202 31205 SW	----	----	----
					Client sampling date / time	11-Dec-2023 12:00	10-Dec-2023 16:45	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-012	TY2312874-013	-----	-----	-----	
					Result	Result	----	----	----	
Dissolved Metals										
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	<0.0010	0.0048	----	----	----	
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	<0.0050	15.3	----	----	----	
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	<0.00010	0.0139	----	----	----	
Mercury, dissolved	7439-97-6	E509/WT	0.000050	mg/L	<0.000050	<0.000050	----	----	----	
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	<0.000050	0.000467	----	----	----	
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	<0.00050	0.00092	----	----	----	
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	<0.050	----	----	----	
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	<0.050	2.12	----	----	----	
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	<0.00020	0.00196	----	----	----	
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	<0.000050	0.000142	----	----	----	
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	<0.050	4.64	----	----	----	
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	<0.050	5.47	----	----	----	
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	<0.00020	0.113	----	----	----	
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	<0.50	4.88	----	----	----	
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	<0.00020	----	----	----	
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	<0.000010	----	----	----	
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	<0.00030	0.00190	----	----	----	
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	<0.000010	0.00123	----	----	----	
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	<0.00050	----	----	----	
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	<0.0010	0.0055	----	----	----	
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	<0.00030	----	----	----	
Dissolved mercury filtration location	----	EP509/WT	-	-	Field	Laboratory	----	----	----	
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	Laboratory	----	----	----	
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	<2.0	----	----	----	



Analytical Results

Sub-Matrix: **Surface Water**
 (Matrix: **Water**)

					<i>Client sample ID</i>	TB_SW_20231 205 SW	SW25_SW_202 31205 SW	----	----	----
					<i>Client sampling date / time</i>	11-Dec-2023 12:00	10-Dec-2023 16:45	----	----	----
<i>Analyte</i>	<i>CAS Number</i>	<i>Method/Lab</i>	<i>LOR</i>	<i>Unit</i>	TY2312874-012	TY2312874-013	-----	-----	-----	
					Result	Result	----	----	----	
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	<10	73	----	----	----	
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	<1.0	<1.0	----	----	----	

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

Please refer to the Accreditation section for an explanation of analyte accreditations.



Analytical Results

Sub-Matrix: Water					Client sample ID	SW29A_SW_20	----	----	----	----
(Matrix: Water)						231205				
					Client sampling date / time	08-Dec-2023	----	----	----	----
						16:30				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-002	-----	-----	-----	-----	-----
						Result	----	----	----	----
Field Tests										
Oxygen, dissolved, field	----	EF001/TY	0.01	mg/L	9.55	----	----	----	----	----
pH, field	----	EF001/TY	0.10	pH units	7.25	----	----	----	----	----
Temperature, field	----	EF001/TY	0.10	°C	0.31	----	----	----	----	----
Physical Tests										
Acidity (as CaCO3)	----	E283/TY	2.0	mg/L	4.9	----	----	----	----	----
Colour, true	----	E329-L/TY	2.0	CU	53.5	----	----	----	----	----
Conductivity	----	E100/TY	1.0	µS/cm	249	----	----	----	----	----
Hardness (as CaCO3), dissolved	----	EC100/TY	0.50	mg/L	135	----	----	----	----	----
pH	----	E108/TY	0.10	pH units	7.74	----	----	----	----	----
Solids, total dissolved [TDS]	----	E162/TY	10	mg/L	179	----	----	----	----	----
Solids, total suspended [TSS]	----	E160/TY	3.0	mg/L	<3.0	----	----	----	----	----
Turbidity	----	E121/TY	0.10	NTU	3.90	----	----	----	----	----
Alkalinity, total (as CaCO3)	----	E290/TY	2.0	mg/L	134	----	----	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/TY	0.0050	mg/L	0.0286	----	----	----	----	----
Ammonia, un-ionized (as N), field	7664-41-7	EC298A/TY	0.0010	mg/L	<0.0010	----	----	----	----	----
Chloride	16887-00-6	E235.Cl-L/TY	0.10	mg/L	0.82	----	----	----	----	----
Fluoride	16984-48-8	E235.F/TY	0.020	mg/L	<0.020	----	----	----	----	----
Kjeldahl nitrogen, total [TKN]	----	E318/TY	0.050	mg/L	0.838	----	----	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/TY	0.020	mg/L	<0.020	----	----	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/TY	0.010	mg/L	<0.010	----	----	----	----	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/TY	0.0010	mg/L	0.0058	----	----	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/TY	0.30	mg/L	3.38	----	----	----	----	----
Cyanides										
Cyanide, free	----	E339/WT	0.0020	mg/L	<0.0020	----	----	----	----	----
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	----	----	----	----	----
Cyanide, weak acid dissociable	----	E336/WT	0.0020	mg/L	<0.0020	----	----	----	----	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/WT	0.50	mg/L	23.9	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	SW29A_SW_20	----	----	----	----
(Matrix: Water)						231205				
					Client sampling date / time	08-Dec-2023	----	----	----	----
						16:30				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-002	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L	25.2	----	----	----	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/TY	0.0030	mg/L	0.0879	----	----	----	----	----
Antimony, total	7440-36-0	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Arsenic, total	7440-38-2	E420/TY	0.00010	mg/L	0.00066	----	----	----	----	----
Barium, total	7440-39-3	E420/TY	0.00010	mg/L	0.0122	----	----	----	----	----
Beryllium, total	7440-41-7	E420/TY	0.000020	mg/L	<0.000020	----	----	----	----	----
Bismuth, total	7440-69-9	E420/TY	0.000050	mg/L	<0.000050	----	----	----	----	----
Boron, total	7440-42-8	E420/TY	0.010	mg/L	<0.010	----	----	----	----	----
Cadmium, total	7440-43-9	E420/TY	0.0000050	mg/L	0.0000069	----	----	----	----	----
Calcium, total	7440-70-2	E420/TY	0.050	mg/L	30.7	----	----	----	----	----
Cesium, total	7440-46-2	E420/TY	0.000010	mg/L	0.000012	----	----	----	----	----
Chromium, total	7440-47-3	E420/TY	0.00050	mg/L	<0.00050	----	----	----	----	----
Cobalt, total	7440-48-4	E420/TY	0.00010	mg/L	0.00028	----	----	----	----	----
Copper, total	7440-50-8	E420/TY	0.00050	mg/L	0.00084	----	----	----	----	----
Iron, total	7439-89-6	E420/TY	0.010	mg/L	0.414	----	----	----	----	----
Lead, total	7439-92-1	E420/TY	0.000050	mg/L	0.000060	----	----	----	----	----
Lithium, total	7439-93-2	E420/TY	0.0010	mg/L	0.0037	----	----	----	----	----
Magnesium, total	7439-95-4	E420/TY	0.0050	mg/L	14.2	----	----	----	----	----
Manganese, total	7439-96-5	E420/TY	0.00010	mg/L	0.112	----	----	----	----	----
Mercury, total	7439-97-6	E508/WT	0.0000050	mg/L	<0.0000050	----	----	----	----	----
Molybdenum, total	7439-98-7	E420/TY	0.000050	mg/L	0.000190	----	----	----	----	----
Nickel, total	7440-02-0	E420/TY	0.00050	mg/L	0.00103	----	----	----	----	----
Phosphorus, total	7723-14-0	E420/TY	0.050	mg/L	<0.050	----	----	----	----	----
Potassium, total	7440-09-7	E420/TY	0.050	mg/L	0.925	----	----	----	----	----
Rubidium, total	7440-17-7	E420/TY	0.00020	mg/L	0.00131	----	----	----	----	----
Selenium, total	7782-49-2	E420/TY	0.000050	mg/L	0.000116	----	----	----	----	----
Silicon, total	7440-21-3	E420/TY	0.10	mg/L	5.82	----	----	----	----	----
Silver, total	7440-22-4	E420/TY	0.000010	mg/L	<0.000010	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	SW29A_SW_20	----	----	----	----
(Matrix: Water)						231205				
					Client sampling date / time	08-Dec-2023	----	----	----	----
						16:30				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-002	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Total Metals										
Sodium, total	7440-23-5	E420/TY	0.050	mg/L	2.10	----	----	----	----	----
Strontium, total	7440-24-6	E420/TY	0.00020	mg/L	0.0632	----	----	----	----	----
Sulfur, total	7704-34-9	E420/TY	0.50	mg/L	1.76	----	----	----	----	----
Tellurium, total	13494-80-9	E420/TY	0.00020	mg/L	<0.00020	----	----	----	----	----
Thallium, total	7440-28-0	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Thorium, total	7440-29-1	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Tin, total	7440-31-5	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Titanium, total	7440-32-6	E420/TY	0.00030	mg/L	0.00225	----	----	----	----	----
Tungsten, total	7440-33-7	E420/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Uranium, total	7440-61-1	E420/TY	0.000010	mg/L	0.000253	----	----	----	----	----
Vanadium, total	7440-62-2	E420/TY	0.00050	mg/L	0.00062	----	----	----	----	----
Zinc, total	7440-66-6	E420/TY	0.0030	mg/L	<0.0030	----	----	----	----	----
Zirconium, total	7440-67-7	E420/TY	0.00020	mg/L	<0.00020	----	----	----	----	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/TY	0.0010	mg/L	0.0075	----	----	----	----	----
Antimony, dissolved	7440-36-0	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Arsenic, dissolved	7440-38-2	E421/TY	0.00010	mg/L	0.00059	----	----	----	----	----
Barium, dissolved	7440-39-3	E421/TY	0.00010	mg/L	0.0114	----	----	----	----	----
Beryllium, dissolved	7440-41-7	E421/TY	0.000020	mg/L	<0.000020	----	----	----	----	----
Bismuth, dissolved	7440-69-9	E421/TY	0.000050	mg/L	<0.000050	----	----	----	----	----
Boron, dissolved	7440-42-8	E421/TY	0.010	mg/L	<0.010	----	----	----	----	----
Cadmium, dissolved	7440-43-9	E421/TY	0.0000050	mg/L	<0.0000050	----	----	----	----	----
Calcium, dissolved	7440-70-2	E421/TY	0.050	mg/L	32.2	----	----	----	----	----
Cesium, dissolved	7440-46-2	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----	----
Chromium, dissolved	7440-47-3	E421/TY	0.00050	mg/L	<0.00050	----	----	----	----	----
Cobalt, dissolved	7440-48-4	E421/TY	0.00010	mg/L	0.00012	----	----	----	----	----
Copper, dissolved	7440-50-8	E421/TY	0.00020	mg/L	0.00067	----	----	----	----	----
Iron, dissolved	7439-89-6	E421/TY	0.010	mg/L	0.229	----	----	----	----	----
Lead, dissolved	7439-92-1	E421/TY	0.000050	mg/L	<0.000050	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	SW29A_SW_20	----	----	----	----
(Matrix: Water)						231205				
					Client sampling date / time	08-Dec-2023	----	----	----	----
						16:30				
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-002	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Dissolved Metals										
Lithium, dissolved	7439-93-2	E421/TY	0.0010	mg/L	0.0041	----	----	----	----	----
Magnesium, dissolved	7439-95-4	E421/TY	0.0050	mg/L	13.3	----	----	----	----	----
Manganese, dissolved	7439-96-5	E421/TY	0.00010	mg/L	0.0482	----	----	----	----	----
Mercury, dissolved	7439-97-6	E509/WT	0.0000050	mg/L	<0.0000050	----	----	----	----	----
Molybdenum, dissolved	7439-98-7	E421/TY	0.000050	mg/L	0.000198	----	----	----	----	----
Nickel, dissolved	7440-02-0	E421/TY	0.00050	mg/L	0.00091	----	----	----	----	----
Phosphorus, dissolved	7723-14-0	E421/TY	0.050	mg/L	<0.050	----	----	----	----	----
Potassium, dissolved	7440-09-7	E421/TY	0.050	mg/L	0.880	----	----	----	----	----
Rubidium, dissolved	7440-17-7	E421/TY	0.00020	mg/L	0.00112	----	----	----	----	----
Selenium, dissolved	7782-49-2	E421/TY	0.000050	mg/L	0.000123	----	----	----	----	----
Silicon, dissolved	7440-21-3	E421/TY	0.050	mg/L	5.69	----	----	----	----	----
Silver, dissolved	7440-22-4	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----	----
Sodium, dissolved	7440-23-5	E421/TY	0.050	mg/L	2.11	----	----	----	----	----
Strontium, dissolved	7440-24-6	E421/TY	0.00020	mg/L	0.0676	----	----	----	----	----
Sulfur, dissolved	7704-34-9	E421/TY	0.50	mg/L	1.75	----	----	----	----	----
Tellurium, dissolved	13494-80-9	E421/TY	0.00020	mg/L	<0.00020	----	----	----	----	----
Thallium, dissolved	7440-28-0	E421/TY	0.000010	mg/L	<0.000010	----	----	----	----	----
Thorium, dissolved	7440-29-1	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Tin, dissolved	7440-31-5	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Titanium, dissolved	7440-32-6	E421/TY	0.00030	mg/L	0.00031	----	----	----	----	----
Tungsten, dissolved	7440-33-7	E421/TY	0.00010	mg/L	<0.00010	----	----	----	----	----
Uranium, dissolved	7440-61-1	E421/TY	0.000010	mg/L	0.000239	----	----	----	----	----
Vanadium, dissolved	7440-62-2	E421/TY	0.00050	mg/L	<0.00050	----	----	----	----	----
Zinc, dissolved	7440-66-6	E421/TY	0.0010	mg/L	0.0013	----	----	----	----	----
Zirconium, dissolved	7440-67-7	E421/TY	0.00030	mg/L	<0.00030	----	----	----	----	----
Dissolved mercury filtration location	----	EP509/WT	-	-	Laboratory	----	----	----	----	----
Dissolved metals filtration location	----	EP421/TY	-	-	Laboratory	----	----	----	----	----
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/TY	2.0	mg/L	<2.0	----	----	----	----	----



Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	SW29A_SW_20 231205 SW	----	----	----	----
					Client sampling date / time	08-Dec-2023 16:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	TY2312874-002	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Aggregate Organics										
Chemical oxygen demand [COD]	----	E559-L/TY	10	mg/L	62	----	----	----	----	----
Oil & grease (gravimetric)	----	E567-L/WT	1.0	mg/L	2.4	----	----	----	----	----

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

Please refer to the Accreditation section for an explanation of analyte accreditations.

SRC Group # 2023-16011

Dec 22, 2023

ALS
Thunder Bay Analytical
1081 Barton Street
Thunder Bay, ON P7B 5N3
Attn: Christine Paradis

Date Samples Received: Dec-15-2023

Client P.O.: TY2312874

All results have been reviewed and approved by a Qualified Person in accordance with the Saskatchewan Environmental Code, Corrective Action Plan Chapter, for the purposes of certifying a laboratory analysis

Results from Lab Section 4 approved by Snook, Vicky

-
- * Test methods and data are validated by the laboratory's Quality Assurance Program.
 - * Routine methods follow recognized procedures from sources such as
 - * Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF
 - * Environment Canada
 - * US EPA
 - * CANMET
 - * The results reported relate only to the test samples as provided by the client. Results apply to the sample as received, unless otherwise indicated.
 - * Data marked as "by Client" has been provided by the client and may affect the validity of results.
 - * Samples will be kept for 30 days after the final report is sent. Please contact the lab if you have any special requirements.
 - * Additional information is available upon request.
 - * Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

This is a final report.

SRC Group # 2023-16011

Dec 22, 2023

ALS, Thunder Bay Analytical
 1081 Barton Street
 Thunder Bay, ON P7B 5N3
 Attn: Christine Paradis

Sample #:	2023045464	Client PO #:	TY2312874
Date Sampled:	Dec 08, 2023	Date Received:	Dec 15, 2023
Sample Matrix:	WATER		
Description:	12/08/2023 15:00 SW24_SW_20231205 TY2312874-001		

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 10.3 °C upon receipt.

SRC Group # 2023-16011

Dec 22, 2023

ALS, Thunder Bay Analytical

Sample #: **2023045465** Client PO #: **TY2312874**
 Date Sampled: **Dec 08, 2023** Date Received: **Dec 15, 2023**
 Sample Matrix: **WATER**
 Description: **12/08/2023 15:40 SW23_SW_20231205 TY2312874-003**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 10.3 °C upon receipt.

SRC Group # 2023-16011

Dec 22, 2023

ALS, Thunder Bay Analytical

Sample #: **2023045466** Client PO #: **TY2312874**
 Date Sampled: **Dec 09, 2023** Date Received: **Dec 15, 2023**
 Sample Matrix: **WATER**
 Description: **12/09/2023 13:20 SW20_SW_20231205 TY2312874-005**

Analyte	Units	Result	DL
Lab Section 4			
Radium-226	Bq/L	<0.005	0.005

Symbol of "<" means "less than". This indicates that it was not detected at level stated above.

The temperature of the cooler was 10.3 °C upon receipt.

SRC Group # 2023-16011

Dec 22, 2023

ALS, Thunder Bay Analytical

Analyte Methods

Name	Units	Method
Radium-226	Bq/L	Rad-105

Project Name: Rainy River
 Location: Chapple
 Project Number:
 Project Manager:
 PO Number:
 Project:
 Turn Around Time (days): 10 Business Days
 Shipping Company:
 Shipping Date: 7/24/2023 8:26:00 AM
 COC Number: ALS-451203097

Sample Code	Field Dissolved Oxygen (mg/L)	Field pH (pH Units)	Field Temp (°C)	Date and Time	Matrix	Containers		Number of Containers	Comments	
						Filtered	Preservatives			
						SW Kits	Ra-226 Bottle			
FB_SW_20231205				2023-12-10 12:00	SW	X			11	
SW06_SW_20231205	6.49	6.79	-0.02	2023-12-10 12:00	SW	X			11	
SW17_SW_20231205	12.39	7.91	0.07	2023-12-10 13:10	SW	X			11	
SW02_SW_20231205	6.49	6.79	-0.02	2023-12-10 16:00	SW	X			11	
TB_SW_20231205				2023-12-11 12:00	SW	X			11	
SW25_SW_20231205	11.64	7.62	-0.09	2023-12-10 16:45	SW	X			11	

Drinking Water (DW) Samples (client use) Are samples taken from a Regulated DW System? Yes X No Are samples for human consumption / use? Yes X No Samples from a Regulated DW System require an Authorized DW COC form	Sample Receipt Details (ALS use only)	
	Cooling Method: <input type="checkbox"/> None <input type="checkbox"/> Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Frozen <input type="checkbox"/> Cooling Initiated	
	Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Cooler Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA Sample Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> NA	
Initial Cooler Temperatures °C		Final Cooler Temperatures °C

Signature	Date/Time	Shipping Details	ATTN	Special Instructions:
Shipped by	2023-07-24 8:26	Method of Shipment: Courier On Ice: yes / no Shipped: Air/Ground Lab Name: ALS Thunder Bay Lab Phone:		Email Invoice to: rainyriver.accounts1@newgold.com Email Report to: rainyriver.labresults@newgold.com
Received by	2/2			

4.6, 4.6, 4.1, 3.7, 5.3, 4.4
 to cooling Manitowish
 Dec. 12, 2023 9:12am BF

Intake and Login Verification Form

SAMPLE INTAKE				ACCOUNT INFO VERIFICATION			
Priority/Emergency Service Requested		YES	NO	Priority/Emergency Service Requested		YES	NO
Time Sensitive Hold Time		YES	NO	Confirmed all as accurate as per COC, Sample Remarks or PM			
Client:	New Gold			Client	Work Contact	Quote	
SAMPLE RECEIPT INFORMATION				RECEIPT DETAIL			
Mode of Delivery:		Courier	Drop Off	Project	PO	Site/LSD	
Courier		Manitowish		Overall Description Entered		Yes	NA
Waybill Number		33028 23556		Received date/time as per COC			
Temperature 4.6, 4.6, 4.1, 3.7, 5.3, 4.4		Cooler Count 6		Recipients match CoC or Sample Remarks		Yes	No
Cooling Method		None	Ice	Billing Instruction added to remarks		Yes	NA
		Ice Packs		Sample Remarks/Specification Doc checked			
SAMPLE MATRIX/BOTTLE INFORMATION				Submission Issues communicated			
Matrix:	Water	Soil	Air	Biota	Other	Yes	NA
DW Schedule 24 Bottles Correct?		Yes		No		Sample Info communicated via Remarks	
DW Metals pH Check <2		Yes		No		Yes	
Regulation Circled, Works # present		Yes		No - Reject?			
# of Bottles:	12	Sample Count		13			
Green/white	13 ratina, 13 BOD						
Purple/white	13 nit, 13 TOC, 13 DOC						
Warm red/white	13 tot met, 13 diss met, 3 medium						
Yellow/black	13 tot Hg, 13 diss Hg, 26 OGG						
Light blue/white							
Orange/black							
Others (detail)	13 cyanide						
Comments on Samples and Bottles:							
Samples Requiring Preservation or Filtering: DOC, diss met, diss Hg - AP@ Lab							
Layout Staff Initials							
Date and Time of Layout		12-12-23 11:00					
Login Staff Initials:							

2023 Annual Surface Water Report
Appendix E

Change of Sampling Location

2022-01-17

Jason Tittlemier
Senior Environment Officer, Kenora Area
Ministry of the Environment, Conservation and Parks
808 Robertson Street
Kenora, ON P9N 1X9
Via email; Jason.Tittlemier@ontario.ca

Dear Mr. Tittlemier,

SUBJECT: PROPOSAL OF SURFACE WATER SITE 29A, REPLACING SURFACE WATER SITE 29

Communication was received 2022-11-28 from Ministry of Environment, Conservation and Parks (MECP) supporting New Gold's (NG) request to discontinue sampling Surface Water Site SW29, located at 15U 5407018N 418294E. At the request of MECP, NG now proposes a new Surface Water Site (SW29A) be established. This proposed site is located at 15U 5413489N 418868E on McCallum Creek before it passes under HWY 600.

Safety: This new location (SW29A) offers easy access year-round as opposed to the difficult terrain and relative isolation of SW29. During winter sampling, SW29A is expected to freeze in a more predictable manner and it may be possible to collect samples from solid ground during both winter and summer conditions eliminating the need to sample from a canoe or traveling over ice. SW29A also happens to be located along the route taken to collect other samples and will reduce the 1.5-3 hours sampling that SW29 required.



Figure 1: Photo of Proposed SW29A Location



Figure 2: Close up Aerial Image of Proposed SW29A

Sample success rate: With ease of access comes a higher anticipated sample success rate. SW29A if approved, is in a more channelized type of stream which should lead to more representative samples free from undesired sample site influences as opposed to the floating bog/beaver pond conditions at SW29. It is expected that this location will also be less likely to freeze to the bottom as SW29 often did in winter.

Suitable replacement information: NG believes the original intent for proposing SW29 was to determine Tait Creeks influence on the Pinewood River. Between SW03 and SW23 there at two tributaries to the Pinewood River, Tait Creek, and McCallum Creek, these two creeks appear to pass through similar relatively untouched forest areas free from the Mines influence. SW29 is located on Tait Creek and has only been sampled 20 times in the last 5 years which gives us a limited database. McCallum Creek would be host to SW29A of which we have no historical data for, but it is NG's belief that this site would fulfil the same intent as the site on Tait Creek and provide a more reliable data set over time.

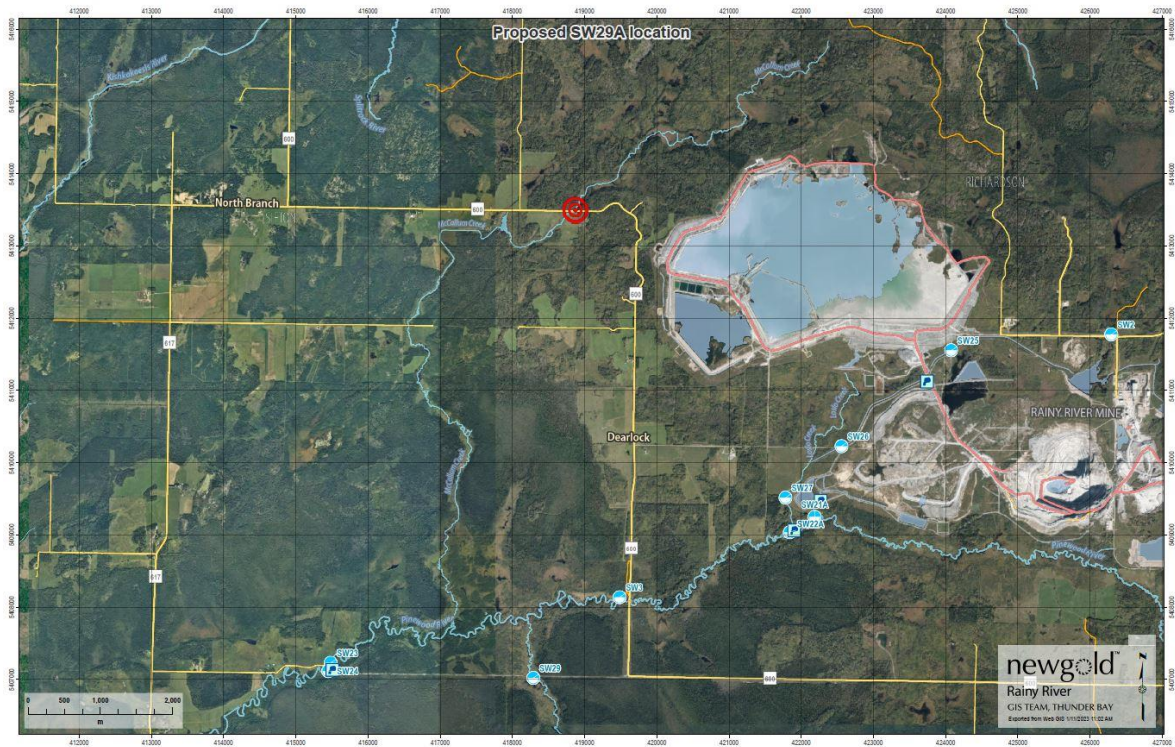


Figure 3: Location of Proposed SW29A as Red Target on McCallum Creek

In closing, NG would like to begin sampling SW29A as soon as possible, as the replacement to SW29, since the location in McCallum Creek is safer, easier to sample and meets the same intent as the location on Tait Creek in NG's opinion.

Once you have had the opportunity to review this, please contact the undersigned at Nathan.Baird@newgold.com, (807) 271-3190 via phone or Garnet Cornell at Garnet.Cornell@newgold.com, (807) 276-0106 via phone with any questions or concerns.

Regards,

A handwritten signature in black ink that reads 'Nathan Baird'.

Environmental Specialist